

7.0 Reading Comprehension

7.0 Reading Comprehension

Reading comprehension questions appear in the Verbal section of the GMAT® test. The Verbal section uses multiple-choice questions to measure your ability to read and comprehend written material, to reason and evaluate arguments, and to correct written material to conform to standard written English. Because the Verbal section includes content from a variety of topics, you may be generally familiar with some of the material; however, neither the passages nor the questions assume knowledge of the topics discussed. Reading comprehension questions are intermingled with critical reasoning and sentence correction questions throughout the Verbal section of the test.

You will have 75 minutes to complete the Verbal section, or an average of about $1\frac{3}{4}$ minutes to answer each question. Keep in mind, however, that you will need time to read the written passages—and that time is not factored into the $1\frac{3}{4}$ minute average. You should therefore plan to proceed more quickly through the reading comprehension questions in order to give yourself enough time to read the passages thoroughly.

Reading comprehension questions begin with written passages up to 350 words long. The passages discuss topics from the social sciences, humanities, the physical or biological sciences, and such business-related fields as marketing, economics, and human resource management. The passages are accompanied by questions that will ask you to interpret the passage, apply the information you gather from the reading, and make inferences (or informed assumptions) based on the reading. For these questions, you will see a split computer screen. The written passage will remain visible on the left side as each question associated with that passage appears in turn on the right side. You will see only one question at a time, however. The number of questions associated with each passage may vary.

As you move through the reading comprehension sample questions, try to determine a process that works best for you. You might begin by reading a passage carefully and thoroughly, though some test takers prefer to skim the passages the first time through, or even to read the first question before reading the passage. You may want to reread any sentences that present complicated ideas or introduce terms that are new to you. Read each question and series of answers carefully. Make sure you understand exactly what the question is asking and what the answer choices are.

If you need to, you may go back to the passage and read any parts that are relevant to answering the question. Specific portions of the passages may be highlighted in the related questions.

The following pages describe what reading comprehension questions are designed to measure; present the directions that will precede questions of this type; and describe the various question types. This chapter also provides test-taking strategies, sample questions, and detailed explanations of all the questions. The explanations further illustrate the ways in which reading comprehension questions evaluate basic reading skills.

7.1 What Is Measured

Reading comprehension questions measure your ability to understand, analyze, and apply information and concepts presented in written form. All questions are to be answered on the basis of what is stated or implied in the reading material, and no specific prior knowledge of the material is required.

The GMAT reading comprehension questions evaluate your ability to do the following:

- **Understand words and statements.**
Although the questions do not test your vocabulary (they will not ask you to define terms), they do test your ability to interpret special meanings of terms as they are used in the reading passages. The questions will also test your understanding of the English language. These questions may ask about the overall meaning of a passage.
- **Understand logical relationships between points and concepts.** This type of question may ask you to determine the strong and weak points of an argument or evaluate the relative importance of arguments and ideas in a passage.
- **Draw inferences from facts and statements.**
The inference questions will ask you to consider factual statements or information presented in a reading passage and, on the basis of that information, reach conclusions.
- **Understand and follow the development of quantitative concepts as they are presented in written material.**
This may involve the interpretation of numerical data or the use of simple arithmetic to reach conclusions about material in a passage.

There are six kinds of reading comprehension questions, each of which tests a different skill. The reading comprehension questions ask about the following areas:

Main idea

Each passage is a unified whole—that is, the individual sentences and paragraphs support and develop one main idea or central point. Sometimes you will be told the central point in the passage itself, and sometimes it will be necessary for you to determine the central point from the overall organization or development of the passage. You may be asked in this kind of question to

- recognize a correct restatement, or paraphrasing, of the main idea of a passage
- identify the author's primary purpose or objective in writing the passage
- assign a title that summarizes, briefly and pointedly, the main idea developed in the passage

Supporting ideas

These questions measure your ability to comprehend the supporting ideas in a passage and differentiate them from the main idea. The questions also measure your ability to differentiate ideas that are *explicitly stated* in a passage from ideas that are *implied* by the author but that are not explicitly stated. You may be asked about

- facts cited in a passage
- the specific content of arguments presented by the author in support of his or her views
- descriptive details used to support or elaborate on the main idea

Whereas questions about the main idea ask you to determine the meaning of a passage *as a whole*, questions about supporting ideas ask you to determine the meanings of individual sentences and paragraphs that *contribute* to the meaning of the passage as a whole. In other words, these questions ask for the main point of *one small part* of the passage.

Inferences

These questions ask about ideas that are not explicitly stated in a passage but are *implied* by the author. Unlike questions about supporting details, which ask about information that is directly stated in a passage, inference questions ask about ideas or meanings that must be inferred from information that is directly stated. Authors can make their points in indirect ways, suggesting ideas without actually stating them. Inference questions measure your ability to understand an author's intended meaning in parts of a passage where the meaning is only suggested. These questions do not ask about meanings or implications that are remote from the passage; rather, they ask about meanings that are developed indirectly or implications that are specifically suggested by the author.

To answer these questions, you may have to

- logically take statements made by the author one step beyond their literal meanings
- recognize an alternative interpretation of a statement made by the author
- identify the intended meaning of a word used figuratively in a passage

If a passage explicitly states an effect, for example, you may be asked to infer its cause. If the author compares two phenomena, you may be asked to infer the basis for the comparison. You may be asked to infer the characteristics of an old policy from an explicit description of a new one. When you read a passage, therefore, you should concentrate not only on the explicit meaning of the author's words, but also on the more subtle meaning implied by those words.

Applying information to a context outside the passage itself

These questions measure your ability to discern the relationships between situations or ideas presented by the author and other situations or ideas that might parallel those in the passage. In this kind of question, you may be asked to

- identify a hypothetical situation that is comparable to a situation presented in the passage
- select an example that is similar to an example provided in the passage
- apply ideas given in the passage to a situation not mentioned by the author
- recognize ideas that the author would probably agree or disagree with on the basis of statements made in the passage

Unlike inference questions, application questions use ideas or situations *not* taken from the passage. Ideas and situations given in a question are *like* those given in the passage, and they parallel ideas and situations in the passage; therefore, to answer the question, you must do more than recall what you read. You must recognize the essential attributes of ideas and situations presented in the passage when they appear in different words and in an entirely new context.

Logical structure

These questions require you to analyze and evaluate the organization and logic of a passage. They may ask you

- how a passage is constructed—for instance, does it define, compare or contrast, present a new idea, or refute an idea?
- how the author persuades readers to accept his or her assertions
- the reason behind the author’s use of any particular supporting detail
- to identify assumptions that the author is making
- to assess the strengths and weaknesses of the author’s arguments
- to recognize appropriate counterarguments

These questions measure your ability not only to comprehend a passage but also to evaluate it critically. However, it is important for you to realize that logical structure questions do not rely on any kind of formal logic, nor do they require you to be familiar with specific terms of logic or argumentation. You can answer these questions using only the information in the passage and careful reasoning.

About the style and tone

Style and tone questions ask about the expression of a passage and about the ideas in a passage that may be expressed through its diction—the author’s choice of words. You may be asked to deduce the author’s attitude to an idea, a fact, or a situation from the words that he or she uses to describe it. You may also be asked to select a word that accurately describes the tone of a passage—for instance, “critical,” “questioning,” “objective,” or “enthusiastic.”

To answer this type of question, you will have to consider the language of the passage as a whole. It takes more than one pointed, critical word to make the tone of an entire passage “critical.” Sometimes, style and tone questions ask what audience the passage was probably intended for or what type of publication it probably appeared in. Style and tone questions may apply to one small part of the passage or to the passage as a whole. To answer them, you must ask yourself what meanings are contained in the words of a passage beyond the literal meanings. Did the author use certain words because of their emotional content, or because a particular audience would expect to hear them? Remember, these questions measure your ability to discern meaning expressed by the author through his or her choice of words.

7.2 Test-Taking Strategies

1. Do not expect to be completely familiar with any of the material presented in reading comprehension passages.

You may find some passages easier to understand than others, but all passages are designed to present a challenge. If you have some familiarity with the material presented in a passage, do not let this knowledge influence your choice of answers to the questions. Answer all questions on the basis of what is *stated or implied* in the passage itself.

2. **Analyze each passage carefully, because the questions require you to have a specific and detailed understanding of the material.**

You may find it easier to do the analysis first, before moving to the questions. Or, you may find that you prefer to skim the passage the first time and read more carefully once you understand what a question asks. You may even want to read the question before reading the passage. You should choose the method most suitable for you.

3. **Focus on key words and phrases, and make every effort to avoid losing the sense of what is discussed in the passage.**

Keep the following in mind:

- Note how each fact relates to an idea or an argument.
- Note where the passage moves from one idea to the next.
- Separate main ideas from supporting ideas.
- Determine what conclusions are reached and why.

4. **Read the questions carefully, making certain that you understand what is asked.**

An answer choice that accurately restates information in the passage may be incorrect if it does not answer the question. If you need to, refer back to the passage for clarification.

5. **Read all the choices carefully.**

Never assume that you have selected the best answer without first reading all the choices.

6. **Select the choice that answers the question best in terms of the information given in the passage.**

Do not rely on outside knowledge of the material to help you answer the questions.

7. **Remember that comprehension—not speed—is the critical success factor when it comes to reading comprehension questions.**

7.3 The Directions

These are the directions that you will see for reading comprehension questions when you take the GMAT test. If you read them carefully and understand them clearly before going to sit for the test, you will not need to spend too much time reviewing them once you are at the test center and the test is under way.

The questions in this group are based on the content of a passage. After reading the passage, choose the best answer to each question. Answer all questions following the passage on the basis of what is *stated or implied in the passage*.

7.4 Sample Questions

Each of the **reading comprehension** questions is based on the content of a passage. After reading the passage answer all questions pertaining to it on the basis of what is stated or implied in the passage. For each question, select the best answer of the choices given.

- Line Ecoefficiency (measures to minimize environmental impact through the reduction or elimination of waste from production processes) has become a goal for companies worldwide, with many realizing significant
- (5) cost savings from such innovations. Peter Senge and Goran Carstedt see this development as laudable but suggest that simply adopting ecoefficiency innovations could actually worsen environmental stresses in the future. Such innovations reduce
- (10) production waste but do not alter the number of products manufactured nor the waste generated from their use and discard; indeed, most companies invest in ecoefficiency improvements in order to increase profits and growth. Moreover, there is no
- (15) guarantee that increased economic growth from ecoefficiency will come in similarly ecoefficient ways, since in today's global markets, greater profits may be turned into investment capital that could easily be reinvested in old-style eco-inefficient industries. Even
- (20) a vastly more ecoefficient industrial system could, were it to grow much larger, generate more total waste and destroy more habitat and species than would a smaller, less ecoefficient economy. Senge and Carstedt argue that to preserve the global
- (25) environment and sustain economic growth, businesses must develop a new systemic approach that reduces total material use and total accumulated waste. Focusing exclusively on ecoefficiency, which offers a compelling business case according to
- (30) established thinking, may distract companies from pursuing radically different products and business models.

Questions 1–3 refer to the passage above.

1. The primary purpose of the passage is to
 - (A) explain why a particular business strategy has been less successful than was once anticipated
 - (B) propose an alternative to a particular business strategy that has inadvertently caused ecological damage
 - (C) present a concern about the possible consequences of pursuing a particular business strategy
 - (D) make a case for applying a particular business strategy on a larger scale than is currently practiced
 - (E) suggest several possible outcomes of companies' failure to understand the economic impact of a particular business strategy
2. The passage mentions which of the following as a possible consequence of companies' realization of greater profits through ecoefficiency?
 - (A) The companies may be able to sell a greater number of products by lowering prices.
 - (B) The companies may be better able to attract investment capital in the global market.
 - (C) The profits may be reinvested to increase economic growth through ecoefficiency.
 - (D) The profits may be used as investment capital for industries that are not ecoefficient.
 - (E) The profits may encourage companies to make further innovations in reducing production waste.

3. The passage implies that which of the following is a possible consequence of a company's adoption of innovations that increase its ecoefficiency?
- (A) Company profits resulting from such innovations may be reinvested in that company with no guarantee that the company will continue to make further improvements in ecoefficiency.
 - (B) Company growth fostered by cost savings from such innovations may allow that company to manufacture a greater number of products that will be used and discarded, thus worsening environmental stress.
 - (C) A company that fails to realize significant cost savings from such innovations may have little incentive to continue to minimize the environmental impact of its production processes.
 - (D) A company that comes to depend on such innovations to increase its profits and growth may be vulnerable in the global market to competition from old-style eco-inefficient industries.
 - (E) A company that meets its ecoefficiency goals is unlikely to invest its increased profits in the development of new and innovative ecoefficiency measures.

- Line A recent study has provided clues to predator-prey dynamics in the late Pleistocene era. Researchers compared the number of tooth fractures in present-day carnivores with tooth
- (5) fractures in carnivores that lived 36,000 to 10,000 years ago and that were preserved in the Rancho La Brea tar pits in Los Angeles. The breakage frequencies in the extinct species were strikingly higher than those in the present-day species.
- (10) In considering possible explanations for this finding, the researchers dismissed demographic bias because older individuals were not overrepresented in the fossil samples. They rejected preservational bias because a total absence of breakage in two
- (15) extinct species demonstrated that the fractures were not the result of abrasion within the pits. They ruled out local bias because breakage data obtained from other Pleistocene sites were similar to the La Brea data. The explanation they consider
- (20) most plausible is behavioral differences between extinct and present-day carnivores—in particular, more contact between the teeth of predators and the bones of prey due to more thorough consumption of carcasses by the extinct species.
- (25) Such thorough carcass consumption implies to the researchers either that prey availability was low, at least seasonally, or that there was intense competition over kills and a high rate of carcass theft due to relatively high predator densities.

Questions 4–8 refer to the passage above.

4. The primary purpose of the passage is to
- (A) present several explanations for a well-known fact
 - (B) suggest alternative methods for resolving a debate
 - (C) argue in favor of a controversial theory
 - (D) question the methodology used in a study
 - (E) discuss the implications of a research finding
5. According to the passage, compared with Pleistocene carnivores in other areas, Pleistocene carnivores in the La Brea area
- (A) included the same species, in approximately the same proportions
 - (B) had a similar frequency of tooth fractures
 - (C) populated the La Brea area more densely
 - (D) consumed their prey more thoroughly
 - (E) found it harder to obtain sufficient prey
6. According to the passage, the researchers believe that the high frequency of tooth breakage in carnivores found at La Brea was caused primarily by
- (A) the aging process in individual carnivores
 - (B) contact between the fossils in the pits
 - (C) poor preservation of the fossils after they were removed from the pits
 - (D) the impact of carnivores' teeth against the bones of their prey
 - (E) the impact of carnivores' teeth against the bones of other carnivores during fights over kills

7. The researchers' conclusion concerning the absence of demographic bias would be most seriously undermined if it were found that
- (A) the older an individual carnivore is, the more likely it is to have a large number of tooth fractures
 - (B) the average age at death of a present-day carnivore is greater than was the average age at death of a Pleistocene carnivore
 - (C) in Pleistocene carnivore species, older individuals consumed carcasses as thoroughly as did younger individuals
 - (D) the methods used to determine animals' ages in fossil samples tend to misidentify many older individuals as younger individuals
 - (E) data concerning the ages of fossil samples cannot provide reliable information about behavioral differences between extinct carnivores and present-day carnivores
8. According to the passage, if the researchers had NOT found that two extinct carnivore species were free of tooth breakage, the researchers would have concluded that
- (A) the difference in breakage frequencies could have been the result of damage to the fossil remains in the La Brea pits
 - (B) the fossils in other Pleistocene sites could have higher breakage frequencies than do the fossils in the La Brea pits
 - (C) Pleistocene carnivore species probably behaved very similarly to one another with respect to consumption of carcasses
 - (D) all Pleistocene carnivore species differed behaviorally from present-day carnivore species
 - (E) predator densities during the Pleistocene era were extremely high

Line Archaeology as a profession faces two major problems. First, it is the poorest of the poor. Only paltry sums are available for excavating and even less is available for publishing the results

(5) and preserving the sites once excavated. Yet archaeologists deal with priceless objects every day. Second, there is the problem of illegal excavation, resulting in museum-quality pieces being sold to the highest bidder.

(10) I would like to make an outrageous suggestion that would at one stroke provide funds for archaeology and reduce the amount of illegal digging. I would propose that scientific archaeological expeditions and governmental

(15) authorities sell excavated artifacts on the open market. Such sales would provide substantial funds for the excavation and preservation of archaeological sites and the publication of results. At the same time, they would break the illegal

(20) excavator's grip on the market, thereby decreasing the inducement to engage in illegal activities.

You might object that professionals excavate to acquire knowledge, not money. Moreover, ancient artifacts are part of our global cultural heritage,

(25) which should be available for all to appreciate, not sold to the highest bidder. I agree. Sell nothing that has unique artistic merit or scientific value. But, you might reply, everything that comes out of the ground has scientific value. Here we part company.

(30) Theoretically, you may be correct in claiming that every artifact has potential scientific value. Practically, you are wrong.

I refer to the thousands of pottery vessels and ancient lamps that are essentially duplicates of

(35) one another. In one small excavation in Cyprus, archaeologists recently uncovered 2,000 virtually indistinguishable small jugs in a single courtyard. Even precious royal seal impressions known as l'melekh handles have been found in abundance

(40) —more than 4,000 examples so far.

The basements of museums are simply not large enough to store the artifacts that are likely to be discovered in the future. There is not enough money even to catalog the finds; as a result, they

(45) cannot be found again and become as inaccessible as if they had never been discovered. Indeed, with the help of a computer, sold artifacts could be more accessible than are the pieces stored in bulging museum basements. Prior to sale, each could be

(50) photographed and the list of the purchasers could be maintained on the computer. A purchaser could even be required to agree to return the piece if it should become needed for scientific purposes.

It would be unrealistic to suggest that illegal

(55) digging would stop if artifacts were sold on the open market. But the demand for the clandestine product would be substantially reduced. Who would want an unmarked pot when another was available whose provenance was known, and that was dated

(60) stratigraphically by the professional archaeologist who excavated it?

Questions 9–11 refer to the passage above.

9. The primary purpose of the passage is to propose
- (A) an alternative to museum display of artifacts
 - (B) a way to curb illegal digging while benefiting the archaeological profession
 - (C) a way to distinguish artifacts with scientific value from those that have no such value
 - (D) the governmental regulation of archaeological sites
 - (E) a new system for cataloging duplicate artifacts
10. The author implies that all of the following statements about duplicate artifacts are true EXCEPT
- (A) a market for such artifacts already exists
 - (B) such artifacts seldom have scientific value
 - (C) there is likely to be a continuing supply of such artifacts
 - (D) museums are well supplied with examples of such artifacts
 - (E) such artifacts frequently exceed in quality those already cataloged in museum collections
11. Which of the following is mentioned in the passage as a disadvantage of storing artifacts in museum basements?
- (A) Museum officials rarely allow scholars access to such artifacts.
 - (B) Space that could be better used for display is taken up for storage.
 - (C) Artifacts discovered in one excavation often become separated from each other.
 - (D) Such artifacts are often damaged by variations in temperature and humidity.
 - (E) Such artifacts often remain uncataloged and thus cannot be located once they are put in storage.

- Line Traditionally, the first firm to commercialize a
new technology has benefited from the unique
opportunity to shape product definitions, forcing
followers to adapt to a standard or invest in
(5) an unproven alternative. Today, however, the
largest payoffs may go to companies that lead in
developing integrated approaches for successful
mass production and distribution.
- Producers of the Beta format for videocassette
(10) recorders (VCRs), for example, were first to develop
the VCR commercially in 1975, but producers of the
rival VHS (Video Home System) format proved to be
more successful at forming strategic alliances with
other producers and distributors to manufacture
(15) and market their VCR format. Seeking to maintain
exclusive control over VCR distribution, Beta
producers were reluctant to form such alliances and
eventually lost ground to VHS in the competition for
the global VCR market.
- (20) Despite Beta's substantial technological head
start and the fact that VHS was neither technically
better nor cheaper than Beta, developers of VHS
quickly turned a slight early lead in sales into a
dominant position. Strategic alignments with
(25) producers of prerecorded tapes reinforced the VHS
advantage. The perception among consumers that
prerecorded tapes were more available in VHS
format further expanded VHS's share of the market.
By the end of the 1980s, Beta was no longer in
(30) production.

Questions 12–17 refer to the passage above.

12. The passage is primarily concerned with which of the following?
- (A) Evaluating two competing technologies
 - (B) Tracing the impact of a new technology by narrating a sequence of events
 - (C) Reinterpreting an event from contemporary business history
 - (D) Illustrating a business strategy by means of a case history
 - (E) Proposing an innovative approach to business planning
13. According to the passage, today's successful firms, unlike successful firms in the past, may earn the greatest profits by
- (A) investing in research to produce cheaper versions of existing technology
 - (B) being the first to market a competing technology
 - (C) adapting rapidly to a technological standard previously set by a competing firm
 - (D) establishing technological leadership in order to shape product definitions in advance of competing firms
 - (E) emphasizing the development of methods for the mass production and distribution of a new technology
14. According to the passage, consumers began to develop a preference for VCRs in the VHS format because they believed which of the following?
- (A) VCRs in the VHS format were technically better than competing format VCRs.
 - (B) VCRs in the VHS format were less expensive than competing format VCRs.
 - (C) VHS was the first standard format for VCRs.
 - (D) VHS prerecorded videotapes were more available than those in Beta format.
 - (E) VCRs in the Beta format would soon cease to be produced.

15. The author implies that one way that VHS producers won control over the VCR market was by
- (A) carefully restricting access to VCR technology
 - (B) giving up a slight early lead in VCR sales in order to improve long-term prospects
 - (C) retaining a strict monopoly on the production of prerecorded videotapes
 - (D) sharing control of the marketing of VHS format VCRs
 - (E) sacrificing technological superiority over Beta format VCRs in order to remain competitive in price
16. The alignment of producers of VHS format VCRs with producers of prerecorded videotapes is most similar to which of the following?
- (A) The alignment of an automobile manufacturer with another automobile manufacturer to adopt a standard design for automobile engines
 - (B) The alignment of an automobile manufacturer with an automotive glass company whereby the manufacturer agrees to purchase automobile windshields only from that one glass company
 - (C) The alignment of an automobile manufacturer with a petroleum company to ensure the widespread availability of the fuel required by a new type of engine developed by the manufacturer
 - (D) The alignment of an automobile manufacturer with its dealers to adopt a plan to improve automobile design
 - (E) The alignment of an automobile dealer with an automobile rental chain to adopt a strategy for an advertising campaign to promote a new type of automobile
17. Which of the following best describes the relation of the first paragraph to the passage as a whole?
- (A) It makes a general observation to be exemplified.
 - (B) It outlines a process to be analyzed.
 - (C) It poses a question to be answered.
 - (D) It advances an argument to be disputed.
 - (E) It introduces conflicting arguments to be reconciled.

Line In terrestrial environments, gravity places special demands on the cardiovascular systems of animals. Gravitational pressure can cause blood to pool in the lower regions of the body, making it

(5) difficult to circulate blood to critical organs such as the brain. Terrestrial snakes, in particular, exhibit adaptations that aid in circulating blood against the force of gravity.

The problem confronting terrestrial snakes is best

(10) illustrated by what happens to sea snakes when removed from their supportive medium. Because the vertical pressure gradients within the blood vessels are counteracted by similar pressure gradients in the surrounding water, the distribution of blood

(15) throughout the body of sea snakes remains about the same regardless of their orientation in space, provided they remain in the ocean. When removed from the water and tilted at various angles with the head up, however, blood pressure at their midpoint

(20) drops significantly, and at brain level falls to zero. That many terrestrial snakes in similar spatial orientations do not experience this kind of circulatory failure suggests that certain adaptations enable them to regulate blood pressure more effectively in those

(25) orientations.

One such adaptation is the closer proximity of the terrestrial snake's heart to its head, which helps to ensure circulation to the brain, regardless of the snake's orientation in space. The heart of sea snakes

(30) can be located near the middle of the body, a position that minimizes the work entailed in circulating blood to both extremities. In arboreal snakes, however, which dwell in trees and often assume a vertical posture, the average distance

(35) from the heart to the head can be as little as 15 percent of overall body length. Such a location requires that blood circulated to the tail of the snake travel a greater distance back to the heart, a problem solved by another adaptation. When

(40) climbing, arboreal snakes often pause momentarily to wiggle their bodies, causing waves of muscle contraction that advance from the lower torso to the head. By compressing the veins and forcing blood forward, these contractions

(45) apparently improve the flow of venous blood returning to the heart.

Questions 18–25 refer to the passage above.

18. The passage provides information in support of which of the following assertions?
- (A) The disadvantages of an adaptation to a particular feature of an environment often outweigh the advantages of such an adaptation.
 - (B) An organism's reaction to being placed in an environment to which it is not well adapted can sometimes illustrate the problems that have been solved by the adaptations of organisms indigenous to that environment.
 - (C) The effectiveness of an organism's adaptation to a particular feature of its environment can only be evaluated by examining the effectiveness with which organisms of other species have adapted to a similar feature of a different environment.
 - (D) Organisms of the same species that inhabit strikingly different environments will often adapt in remarkably similar ways to the few features of those environments that are common.
 - (E) Different species of organisms living in the same environment will seldom adapt to features of that environment in the same way.
19. According to the passage, one reason that the distribution of blood in the sea snake changes little while the creature remains in the ocean is that
- (A) the heart of the sea snake tends to be located near the center of its body
 - (B) pressure gradients in the water surrounding the sea snake counter the effects of vertical pressure gradients within its blood vessels
 - (C) the sea snake assumes a vertical posture less frequently than do the terrestrial and the arboreal snake
 - (D) the sea snake often relies on waves of muscle contractions to help move blood from the torso to the head
 - (E) the force of pressure gradients in the water surrounding the sea snake exceeds that of vertical pressure gradients within its circulatory system
20. It can be inferred from the passage that which of the following is true of species of terrestrial snakes that often need to assume a vertical posture?
- (A) They are more likely to be susceptible to circulatory failure in vertical postures than are sea snakes.
 - (B) Their hearts are less likely to be located at the midpoint of their bodies than is the case with sea snakes.
 - (C) They cannot counteract the pooling of blood in lower regions of their bodies as effectively as sea snakes can.
 - (D) The blood pressure at their midpoint decreases significantly when they are tilted with their heads up.
 - (E) They are unable to rely on muscle contractions to move venous blood from the lower torso to the head.

21. The author describes the behavior of the circulatory system of sea snakes when they are removed from the ocean (see lines 17–20) primarily in order to
- (A) illustrate what would occur in the circulatory system of terrestrial snakes without adaptations that enable them to regulate their blood pressure in vertical orientations
 - (B) explain why arboreal snakes in vertical orientations must rely on muscle contractions to restore blood pressure to the brain
 - (C) illustrate the effects of circulatory failure on the behavior of arboreal snakes
 - (D) illustrate the superiority of the circulatory system of the terrestrial snake to that of the sea snake
 - (E) explain how changes in spatial orientation can adversely affect the circulatory system of snakes with hearts located in relatively close proximity to their heads
22. It can be inferred from the passage that which of the following is a true statement about sea snakes?
- (A) They frequently rely on waves of muscle contractions from the lower torso to the head to supplement the work of the heart.
 - (B) They cannot effectively regulate their blood pressure when placed in seawater and tilted at an angle with the head pointed downward.
 - (C) They are more likely to have a heart located in close proximity to their heads than are arboreal snakes.
 - (D) They become acutely vulnerable to the effects of gravitational pressure on their circulatory system when they are placed in a terrestrial environment.
 - (E) Their cardiovascular system is not as complicated as that of arboreal snakes.
23. The author suggests that which of the following is a disadvantage that results from the location of a snake's heart in close proximity to its head?
- (A) A decrease in the efficiency with which the snake regulates the flow of blood to the brain
 - (B) A decrease in the number of orientations in space that a snake can assume without loss of blood flow to the brain
 - (C) A decrease in blood pressure at the snake's midpoint when it is tilted at various angles with its head up
 - (D) An increase in the tendency of blood to pool at the snake's head when the snake is tilted at various angles with its head down
 - (E) An increase in the amount of effort required to distribute blood to and from the snake's tail
24. The primary purpose of the third paragraph is to
- (A) introduce a topic that is not discussed earlier in the passage
 - (B) describe a more efficient method of achieving an effect discussed in the previous paragraph
 - (C) draw a conclusion based on information elaborated in the previous paragraph
 - (D) discuss two specific examples of phenomena mentioned at the end of the previous paragraph
 - (E) introduce evidence that undermines a view reported earlier in the passage

25. In the passage, the author is primarily concerned with doing which of the following?
- (A) Explaining adaptations that enable the terrestrial snake to cope with the effects of gravitational pressure on its circulatory system
 - (B) Comparing the circulatory system of the sea snake with that of the terrestrial snake
 - (C) Explaining why the circulatory system of the terrestrial snake is different from that of the sea snake
 - (D) Pointing out features of the terrestrial snake's cardiovascular system that make it superior to that of the sea snake
 - (E) Explaining how the sea snake is able to neutralize the effects of gravitational pressure on its circulatory system

Line During the 1960s and 1970s, the primary
economic development strategy of local
governments in the United States was to attract
manufacturing industries. Unfortunately, this
(5) strategy was usually implemented at another
community's expense: many manufacturing facilities
were lured away from their moorings elsewhere
through tax incentives and slick promotional efforts.
Through the transfer of jobs and related revenues
(10) that resulted from this practice, one town's triumph
could become another town's tragedy.

In the 1980s the strategy shifted from this
zero-sum game to one called "high-technology
development," in which local governments
(15) competed to attract newly formed high-technology
manufacturing firms. Although this approach was
preferable to victimizing other geographical areas
by taking their jobs, it also had its shortcomings:
high-tech manufacturing firms employ only a
(20) specially trained fraction of the manufacturing
workforce, and there simply are not enough
high-tech firms to satisfy all geographic areas.

Recently, local governments have increasingly
come to recognize the advantages of yet a third
(25) strategy: the promotion of homegrown small
businesses. Small indigenous businesses are
created by a nearly ubiquitous resource, local
entrepreneurs. With roots in their communities,
these individuals are less likely to be enticed away
(30) by incentives offered by another community.
Indigenous industry and talent are kept at home,
creating an environment that both provides jobs
and fosters further entrepreneurship.

Questions 26–30 refer to the passage above.

26. The primary purpose of the passage is to
- (A) advocate more effective strategies for encouraging the development of high-technology enterprises in the United States
 - (B) contrast the incentives for economic development offered by local governments with those offered by the private sector
 - (C) acknowledge and counter adverse criticism of programs being used to stimulate local economic development
 - (D) define and explore promotional efforts used by local governments to attract new industry
 - (E) review and evaluate strategies and programs that have been used to stimulate economic development
27. The passage suggests which of the following about the majority of United States manufacturing industries before the high-technology development era of the 1980s?
- (A) They lost many of their most innovative personnel to small entrepreneurial enterprises.
 - (B) They experienced a major decline in profits during the 1960s and 1970s.
 - (C) They could provide real economic benefits to the areas in which they were located.
 - (D) They employed workers who had no specialized skills.
 - (E) They actively interfered with local entrepreneurial ventures.
28. The tone of the passage suggests that the author is most optimistic about the economic development potential of which of the following groups?
- (A) Local governments
 - (B) High-technology promoters
 - (C) Local entrepreneurs
 - (D) Manufacturing industry managers
 - (E) Economic development strategists

29. The passage does NOT state which of the following about local entrepreneurs?
- (A) They are found nearly everywhere.
 - (B) They encourage further entrepreneurship.
 - (C) They attract out-of-town investors.
 - (D) They employ local workers.
 - (E) They are established in their communities.
30. The author of the passage mentions which of the following as an advantage of high-technology development?
- (A) It encourages the modernization of existing manufacturing facilities.
 - (B) It promotes healthy competition between rival industries.
 - (C) It encourages the growth of related industries.
 - (D) It takes full advantage of the existing workforce.
 - (E) It does not advantage one local workforce at the expense of another.

Line In 1988 services moved ahead of
 manufacturing as the main product of the United
 States economy. But what is meant by “services”?
 Some economists define a service as something
 (5) that is produced and consumed simultaneously, for
 example, a haircut. The broader, classical definition
 is that a service is an intangible something that
 cannot be touched or stored. Yet electric utilities
 can store energy, and computer programmers
 (10) save information electronically. Thus, the classical
 definition is hard to sustain.

The United States government’s definition is
 more practical: services are the residual category
 that includes everything that is not agriculture or
 (15) industry. Under this definition, services includes
 activities as diverse as engineering and driving a
 bus. However, besides lacking a strong conceptual
 framework, this definition fails to recognize the
 distinction between service industries and service
 (20) occupations. It categorizes workers based on their
 company’s final product rather than on the actual
 work the employees perform. Thus, the many
 service workers employed by manufacturers—
 bookkeepers or janitors, for example—would
 (25) fall under the industrial rather than the services
 category. Such ambiguities reveal the arbitrariness
 of this definition and suggest that, although
 practical for government purposes, it does not
 accurately reflect the composition of the current
 (30) United States economy.

Questions 31–35 refer to the passage above.

31. The author of the passage is primarily concerned with
 - (A) discussing research data underlying several definitions
 - (B) arguing for the adoption of a particular definition
 - (C) exploring definitions of a concept
 - (D) comparing the advantages of several definitions
 - (E) clarifying some ambiguous definitions
32. In comparing the United States government’s definition of services with the classical definition, the author suggests that the classical definition is
 - (A) more pragmatic
 - (B) more difficult to apply
 - (C) less ambiguous
 - (D) more widely used
 - (E) more arbitrary
33. The passage suggests which of the following about service workers in the United States?
 - (A) The number of service workers may be underestimated by the definition of services used by the government.
 - (B) There were fewer service workers than agricultural workers before 1988.
 - (C) The number of service workers was almost equal to the number of workers employed in manufacturing until 1988.
 - (D) Most service workers are employed in service occupations rather than in service industries.
 - (E) Most service workers are employed in occupations where they provide services that do not fall under the classical definition of services.

34. The author of the passage mentions which of the following as one disadvantage of the United States government's definition of services?
- (A) It is less useful than the other definitions mentioned in the passage.
 - (B) It is narrower in scope than the other definitions mentioned in the passage.
 - (C) It is based on the final product produced rather than on the type of work performed.
 - (D) It does not recognize the diversity of occupations within the service industries.
 - (E) It misclassifies many workers who are employed in service industries.
35. The author refers to "service workers employed by manufacturers" (line 23) primarily in order to point out
- (A) a type of worker not covered by the United States government's system of classifying occupations
 - (B) a flaw in the United States government's definition of services
 - (C) a factor that has influenced the growth of the service economy in the United States
 - (D) a type of worker who is classified on the basis of work performed rather than on the basis of the company's final product
 - (E) the diversity of the workers who are referred to as service workers

Line Current feminist theory, in validating women's own
stories of their experience, has encouraged scholars
of women's history to view the use of women's oral
narratives as the methodology, next to the use of
(5) women's written autobiography, that brings historians
closest to the "reality" of women's lives. Such
narratives, unlike most standard histories, represent
experience from the perspective of women, affirm
the importance of women's contributions, and furnish
(10) present-day women with historical continuity that is
essential to their identity, individually and collectively.

Scholars of women's history should, however, be
as cautious about accepting oral narratives at face
value as they already are about written memories.

(15) Oral narratives are no more likely than are written
narratives to provide a disinterested commentary on
events or people. Moreover, the stories people tell to
explain themselves are shaped by narrative devices
and storytelling conventions, as well as by other
(20) cultural and historical factors, in ways that the
storytellers may be unaware of. The political rhetoric
of a particular era, for example, may influence
women's interpretations of the significance of their
experience. Thus a woman who views the Second
(25) World War as pivotal in increasing the social
acceptance of women's paid work outside the home
may reach that conclusion partly and unwittingly
because of wartime rhetoric encouraging a positive
view of women's participation in such work.

Questions 36–41 refer to the passage above.

36. The passage is primarily concerned with
- (A) contrasting the benefits of one methodology with the benefits of another
 - (B) describing the historical origins and inherent drawbacks of a particular methodology
 - (C) discussing the appeal of a particular methodology and some concerns about its use
 - (D) showing that some historians' adoption of a particular methodology has led to criticism of recent historical scholarship
 - (E) analyzing the influence of current feminist views on women's interpretations of their experience
37. According to the passage, which of the following shapes the oral narratives of women storytellers?
- (A) The conventions for standard histories in the culture in which a woman storyteller lives
 - (B) The conventions of storytelling in the culture in which a woman storyteller lives
 - (C) A woman storyteller's experience with distinctive traditions of storytelling developed by the women in her family of origin
 - (D) The cultural expectations and experiences of those who listen to oral narratives
 - (E) A woman storyteller's familiarity with the stories that members of other groups in her culture tell to explain themselves

38. The author of the passage would be most likely to make which of the following recommendations to scholars of women's history?
- (A) They should take into account their own life experiences when interpreting the oral accounts of women's historical experiences.
 - (B) They should assume that the observations made in women's oral narratives are believed by the intended audience of the story.
 - (C) They should treat skeptically observations reported in oral narratives unless the observations can be confirmed in standard histories.
 - (D) They should consider the cultural and historical context in which an oral narrative was created before arriving at an interpretation of such a narrative.
 - (E) They should rely on information gathered from oral narratives only when equivalent information is not available in standard histories.
39. Which of the following best describes the function of the last sentence of the passage?
- (A) It describes an event that historians view as crucial in recent women's history.
 - (B) It provides an example of how political rhetoric may influence the interpretations of experience reported in women's oral narratives.
 - (C) It provides an example of an oral narrative that inaccurately describes women's experience during a particular historical period.
 - (D) It illustrates the point that some women are more aware than others of the social forces that shape their oral narratives.
 - (E) It identifies the historical conditions that led to the social acceptance of women's paid work outside the home.
40. According to the passage, scholars of women's history should refrain from doing which of the following?
- (A) Relying on traditional historical sources when women's oral narratives are unavailable
 - (B) Focusing on the influence of political rhetoric on women's perceptions to the exclusion of other equally important factors
 - (C) Attempting to discover the cultural and historical factors that influence the stories women tell
 - (D) Assuming that the conventions of women's written autobiographies are similar to the conventions of women's oral narratives
 - (E) Accepting women's oral narratives less critically than they accept women's written histories
41. According to the passage, each of the following is a difference between women's oral narratives and most standard histories EXCEPT:
- (A) Women's oral histories validate the significance of women's achievements.
 - (B) Women's oral histories depict experience from the point of view of women.
 - (C) Women's oral histories acknowledge the influence of well-known women.
 - (D) Women's oral histories present today's women with a sense of their historical relationship to women of the past.
 - (E) Women's oral histories are crucial to the collective identity of today's women.

- Line In recent years, teachers of introductory
courses in Asian American studies have been facing
a dilemma nonexistent a few decades ago, when
hardly any texts in that field were available. Today,
- (5) excellent anthologies and other introductory texts
exist, and books on individual Asian American
nationality groups and on general issues important
for Asian Americans are published almost weekly.
Even professors who are experts in the field find
- (10) it difficult to decide which of these to assign to
students; nonexperts who teach in related areas
and are looking for writings for and by Asian
Americans to include in survey courses are in an
even worse position.
- (15) A complicating factor has been the continuing
lack of specialized one-volume reference works on
Asian Americans, such as biographical dictionaries
or desktop encyclopedias. Such works would
enable students taking Asian American studies
- (20) courses (and professors in related fields) to look
up basic information on Asian American individuals,
institutions, history, and culture without having
to wade through mountains of primary source
material. In addition, given such works, Asian
- (25) American studies professors might feel more free to
include more challenging Asian American material in
their introductory reading lists, since good reference
works allow students to acquire on their own the
background information necessary to interpret
- (30) difficult or unfamiliar material.

Questions 42–46 refer to the passage above.

42. The author of the passage is primarily concerned with doing which of the following?
- (A) Recommending a methodology
 - (B) Describing a course of study
 - (C) Discussing a problem
 - (D) Evaluating a past course of action
 - (E) Responding to a criticism
43. The “dilemma” mentioned in line 3 can best be characterized as being caused by the necessity to make a choice when faced with a
- (A) lack of acceptable alternatives
 - (B) lack of strict standards for evaluating alternatives
 - (C) preponderance of bad alternatives as compared to good
 - (D) multitude of different alternatives
 - (E) large number of alternatives that are nearly identical in content

44. The passage suggests that the factor mentioned in lines 15–18 complicates professors' attempts to construct introductory reading lists for courses in Asian American studies in which of the following ways?
- (A) By making it difficult for professors to identify primary source material and to obtain standard information on Asian American history and culture
 - (B) By preventing professors from identifying excellent anthologies and introductory texts in the field that are both recent and understandable to students
 - (C) By preventing professors from adequately evaluating the quality of the numerous texts currently being published in the field
 - (D) By making it more necessary for professors to select readings for their courses that are not too challenging for students unfamiliar with Asian American history and culture
 - (E) By making it more likely that the readings professors assign to students in their courses will be drawn solely from primary sources
45. The passage implies that which of the following was true of introductory courses in Asian American studies a few decades ago?
- (A) The range of different textbooks that could be assigned for such courses was extremely limited.
 - (B) The texts assigned as readings in such courses were often not very challenging for students.
 - (C) Students often complained about the texts assigned to them in such courses.
 - (D) Such courses were offered only at schools whose libraries were rich in primary sources.
 - (E) Such courses were the only means then available by which people in the United States could acquire knowledge of the field.
46. According to the passage, the existence of good one-volume reference works about Asian Americans could result in
- (A) increased agreement among professors of Asian American studies regarding the quality of the sources available in their field
 - (B) an increase in the number of students signing up for introductory courses in Asian American studies
 - (C) increased accuracy in writings that concern Asian American history and culture
 - (D) the use of introductory texts about Asian American history and culture in courses outside the field of Asian American studies
 - (E) the inclusion of a wider range of Asian American material in introductory reading lists in Asian American studies

Line In the seventeenth-century Florentine textile
industry, women were employed primarily in low-
paying, low-skill jobs. To explain this segregation
of labor by gender, economists have relied on
(5) the useful theory of human capital. According
to this theory, investment in human capital—the
acquisition of difficult job-related skills—generally
benefits individuals by making them eligible to
engage in well-paid occupations. Women's role as
(10) child bearers, however, results in interruptions in
their participation in the job market (as compared
with men's) and thus reduces their opportunities
to acquire training for highly skilled work. In
addition, the human capital theory explains why
(15) there was a high concentration of women workers
in certain low-skill jobs, such as weaving, but not
in others, such as combing or carding, by positing
that because of their primary responsibility in child
rearing women took occupations that could be
(20) carried out in the home.

There were, however, differences in pay scales
that cannot be explained by the human capital
theory. For example, male construction workers
were paid significantly higher wages than female
(25) taffeta weavers. The wage difference between
these two low-skill occupations stems from the
segregation of labor by gender: because a limited
number of occupations were open to women, there
was a large supply of workers in their fields, and
(30) this "overcrowding" resulted in women receiving
lower wages and men receiving higher wages.

Questions 47–49 refer to the passage above.

47. The passage suggests that combing and carding differ from weaving in that combing and carding were
- (A) low-skill jobs performed primarily by women employees
 - (B) low-skill jobs that were not performed in the home
 - (C) low-skill jobs performed by both male and female employees
 - (D) high-skill jobs performed outside the home
 - (E) high-skill jobs performed by both male and female employees
48. Which of the following, if true, would most weaken the explanation provided by the human capital theory for women's concentration in certain occupations in seventeenth-century Florence?
- (A) Women were unlikely to work outside the home even in occupations whose hours were flexible enough to allow women to accommodate domestic tasks as well as paid labor.
 - (B) Parents were less likely to teach occupational skills to their daughters than they were to their sons.
 - (C) Women's participation in the Florentine paid labor force grew steadily throughout the sixteenth and seventeenth centuries.
 - (D) The vast majority of female weavers in the Florentine wool industry had children.
 - (E) Few women worked as weavers in the Florentine silk industry, which was devoted to making cloths that required a high degree of skill to produce.

49. The author of the passage would be most likely to describe the explanation provided by the human capital theory for the high concentration of women in certain occupations in the seventeenth-century Florentine textile industry as
- (A) well founded though incomplete
 - (B) difficult to articulate
 - (C) plausible but poorly substantiated
 - (D) seriously flawed
 - (E) contrary to recent research

(This passage was adapted from an article written in 1992.)

- Line Some observers have attributed the dramatic growth in temporary employment that occurred in the United States during the 1980s to increased participation in the workforce by certain groups,
- (5) such as first-time or reentering workers, who supposedly prefer such arrangements. However, statistical analyses reveal that demographic changes in the workforce did not correlate with variations in the total number of temporary
- (10) workers. Instead, these analyses suggest that factors affecting employers account for the rise in temporary employment. One factor is product demand: temporary employment is favored by employers who are adapting to fluctuating demand
- (15) for products while at the same time seeking to reduce overall labor costs. Another factor is labor's reduced bargaining strength, which allows employers more control over the terms of employment. Given the analyses, which reveal that
- (20) growth in temporary employment now far exceeds the level explainable by recent workforce entry rates of groups said to prefer temporary jobs, firms should be discouraged from creating excessive numbers of temporary positions. Government
- (25) policymakers should consider mandating benefit coverage for temporary employees, promoting pay equity between temporary and permanent workers, assisting labor unions in organizing temporary workers, and encouraging firms to assign temporary
- (30) jobs primarily to employees who explicitly indicate that preference.

Questions 50–56 refer to the passage above.

50. The primary purpose of the passage is to
- (A) present the results of statistical analyses and propose further studies
 - (B) explain a recent development and predict its eventual consequences
 - (C) identify the reasons for a trend and recommend measures to address it
 - (D) outline several theories about a phenomenon and advocate one of them
 - (E) describe the potential consequences of implementing a new policy and argue in favor of that policy
51. According to the passage, which of the following is true of the “factors affecting employers” that are mentioned in lines 10–19?
- (A) Most experts cite them as having initiated the growth in temporary employment that occurred during the 1980s.
 - (B) They may account for the increase in the total number of temporary workers during the 1980s.
 - (C) They were less important than demographic change in accounting for the increase of temporary employment during the 1980s.
 - (D) They included a sharp increase in the cost of labor during the 1980s.
 - (E) They are more difficult to account for than are other factors involved in the growth of temporary employment during the 1980s.

52. The passage suggests which of the following about the use of temporary employment by firms during the 1980s?
- (A) It enabled firms to deal with fluctuating product demand far more efficiently than they did before the 1980s.
 - (B) It increased as a result of increased participation in the workforce by certain demographic groups.
 - (C) It was discouraged by government-mandated policies.
 - (D) It was a response to preferences indicated by certain employees for more flexible working arrangements.
 - (E) It increased partly as a result of workers' reduced ability to control the terms of their employment.
53. The passage suggests which of the following about the workers who took temporary jobs during the 1980s?
- (A) Their jobs frequently led to permanent positions within firms.
 - (B) They constituted a less demographically diverse group than has been suggested.
 - (C) They were occasionally involved in actions organized by labor unions.
 - (D) Their pay declined during the decade in comparison with the pay of permanent employees.
 - (E) They did not necessarily prefer temporary employment to permanent employment.
54. The first sentence in the passage suggests that the "observers" mentioned in line 1 would be most likely to predict which of the following?
- (A) That the number of new temporary positions would decline as fewer workers who preferred temporary employment entered the workforce
 - (B) That the total number of temporary positions would increase as fewer workers were able to find permanent positions
 - (C) That employers would have less control over the terms of workers' employment as workers increased their bargaining strength
 - (D) That more workers would be hired for temporary positions as product demand increased
 - (E) That the number of workers taking temporary positions would increase as more workers in any given demographic group entered the workforce
55. In the context of the passage, the word "excessive" (line 23) most closely corresponds to which of the following phrases?
- (A) Far more than can be justified by worker preferences
 - (B) Far more than can be explained by fluctuations in product demand
 - (C) Far more than can be beneficial to the success of the firms themselves
 - (D) Far more than can be accounted for by an expanding national economy
 - (E) Far more than can be attributed to increases in the total number of people in the workforce
56. The passage mentions each of the following as an appropriate kind of governmental action EXCEPT
- (A) getting firms to offer temporary employment primarily to a certain group of people
 - (B) encouraging equitable pay for temporary and permanent employees
 - (C) facilitating the organization of temporary workers by labor unions
 - (D) establishing guidelines on the proportion of temporary workers that firms should employ
 - (E) ensuring that temporary workers obtain benefits from their employers

Line In *Winters v. United States* (1908), the Supreme Court held that the right to use waters flowing through or adjacent to the Fort Belknap Indian Reservation was reserved to American Indians by the treaty

(5) establishing the reservation. Although this treaty did not mention water rights, the Court ruled that the federal government, when it created the reservation, intended to deal fairly with American Indians by reserving for them the waters without which their

(10) lands would have been useless. Later decisions, citing *Winters*, established that courts can find federal rights to reserve water for particular purposes if (1) the land in question lies within an enclave under exclusive federal jurisdiction, (2) the land has been formally

(15) withdrawn from federal public lands—i.e., withdrawn from the stock of federal lands available for private use under federal land use laws—and set aside or reserved, and (3) the circumstances reveal the government intended to reserve water as well as land

(20) when establishing the reservation.

Some American Indian tribes have also established water rights through the courts based on their traditional diversion and use of certain waters prior to the United States' acquisition of sovereignty. For

(25) example, the Rio Grande pueblos already existed when the United States acquired sovereignty over New Mexico in 1848. Although they at that time became part of the United States, the pueblo lands never formally constituted a part of federal public lands; in

(30) any event, no treaty, statute, or executive order has ever designated or withdrawn the pueblos from public lands as American Indian reservations. This fact, however, has not barred application of the *Winters* doctrine. What constitutes an American Indian

(35) reservation is a question of practice, not of legal definition, and the pueblos have always been treated as reservations by the United States. This pragmatic approach is buttressed by *Arizona v. California* (1963), wherein the Supreme Court indicated that the manner

(40) in which any type of federal reservation is created does not affect the application to it of the *Winters* doctrine. Therefore, the reserved water rights of Pueblo Indians have priority over other citizens' water rights as of 1848, the year in which pueblos must be

(45) considered to have become reservations.

Questions 57–63 refer to the passage above.

57. According to the passage, which of the following was true of the treaty establishing the Fort Belknap Indian Reservation?
- (A) It was challenged in the Supreme Court a number of times.
 - (B) It was rescinded by the federal government, an action that gave rise to the *Winters* case.
 - (C) It cited American Indians' traditional use of the land's resources.
 - (D) It failed to mention water rights to be enjoyed by the reservation's inhabitants.
 - (E) It was modified by the Supreme Court in *Arizona v. California*.
58. The passage suggests that, if the criteria discussed in lines 10–20 were the only criteria for establishing a reservation's water rights, which of the following would be true?
- (A) The water rights of the inhabitants of the Fort Belknap Indian Reservation would not take precedence over those of other citizens.
 - (B) Reservations established before 1848 would be judged to have no water rights.
 - (C) There would be no legal basis for the water rights of the Rio Grande pueblos.
 - (D) Reservations other than American Indian reservations could not be created with reserved water rights.
 - (E) Treaties establishing reservations would have to mention water rights explicitly in order to reserve water for a particular purpose.

59. Which of the following most accurately summarizes the relationship between *Arizona v. California* in lines 38–42, and the criteria citing the *Winters* doctrine in lines 10–20?
- (A) *Arizona v. California* abolishes these criteria and establishes a competing set of criteria for applying the *Winters* doctrine.
 - (B) *Arizona v. California* establishes that the *Winters* doctrine applies to a broader range of situations than those defined by these criteria.
 - (C) *Arizona v. California* represents the sole example of an exception to the criteria as they were set forth in the *Winters* doctrine.
 - (D) *Arizona v. California* does not refer to the *Winters* doctrine to justify water rights, whereas these criteria do rely on the *Winters* doctrine.
 - (E) *Arizona v. California* applies the criteria derived from the *Winters* doctrine only to federal lands other than American Indian reservations.
60. The “pragmatic approach” mentioned in lines 37–38 of the passage is best defined as one that
- (A) grants recognition to reservations that were never formally established but that have traditionally been treated as such
 - (B) determines the water rights of all citizens in a particular region by examining the actual history of water usage in that region
 - (C) gives federal courts the right to reserve water along with land even when it is clear that the government originally intended to reserve only the land
 - (D) bases the decision to recognize the legal rights of a group on the practical effect such a recognition is likely to have on other citizens
 - (E) dictates that courts ignore precedents set by such cases as *Winters v. United States* in deciding what water rights belong to reserved land
61. The author cites the fact that the Rio Grande pueblos were never formally withdrawn from public lands primarily in order to do which of the following?
- (A) Suggest why it might have been argued that the *Winters* doctrine ought not to apply to pueblo lands
 - (B) Imply that the United States never really acquired sovereignty over pueblo lands
 - (C) Argue that the pueblo lands ought still to be considered part of federal public lands
 - (D) Support the argument that the water rights of citizens other than American Indians are limited by the *Winters* doctrine
 - (E) Suggest that federal courts cannot claim jurisdiction over cases disputing the traditional diversion and use of water by Pueblo Indians
62. The primary purpose of the passage is to
- (A) trace the development of laws establishing American Indian reservations
 - (B) explain the legal bases for the water rights of American Indian tribes
 - (C) question the legal criteria often used to determine the water rights of American Indian tribes
 - (D) discuss evidence establishing the earliest date at which the federal government recognized the water rights of American Indians
 - (E) point out a legal distinction between different types of American Indian reservations
63. The passage suggests that the legal rights of citizens other than American Indians to the use of water flowing into the Rio Grande pueblos are
- (A) guaranteed by the precedent set in *Arizona v. California*
 - (B) abolished by the *Winters* doctrine
 - (C) deferred to the Pueblo Indians whenever treaties explicitly require this
 - (D) guaranteed by federal land-use laws
 - (E) limited by the prior claims of the Pueblo Indians

- Line Many United States companies have, unfortunately, made the search for legal protection from import competition into a major line of work. Since 1980 the United States International
- (5) Trade Commission (ITC) has received about 280 complaints alleging damage from imports that benefit from subsidies by foreign governments. Another 340 charge that foreign companies “dumped” their products in the United States at
- (10) “less than fair value.” Even when no unfair practices are alleged, the simple claim that an industry has been injured by imports is sufficient grounds to seek relief.
- Contrary to the general impression, this quest
- (15) for import relief has hurt more companies than it has helped. As corporations begin to function globally, they develop an intricate web of marketing, production, and research relationships. The complexity of these relationships makes it unlikely that a system
- (20) of import relief laws will meet the strategic needs of all the units under the same parent company.
- Internationalization increases the danger that foreign companies will use import relief laws against the very companies the laws were designed to
- (25) protect. Suppose a United States–owned company establishes an overseas plant to manufacture a product while its competitor makes the same product in the United States. If the competitor can prove injury from the imports—and that the United
- (30) States company received a subsidy from a foreign government to build its plant abroad—the United States company’s products will be uncompetitive in the United States, since they would be subject to duties.
- (35) Perhaps the most brazen case occurred when the ITC investigated allegations that Canadian companies were injuring the United States salt industry by dumping rock salt, used to de-ice roads. The bizarre aspect of the complaint was that a
- (40) foreign conglomerate with United States operations was crying for help against a United States company with foreign operations. The “United States” company claiming injury was a subsidiary of a Dutch conglomerate, while the “Canadian”
- (45) companies included a subsidiary of a Chicago firm that was the second-largest domestic producer of rock salt.

Questions 64–69 refer to the passage above.

64. The passage is chiefly concerned with
- (A) arguing against the increased internationalization of United States corporations
- (B) warning that the application of laws affecting trade frequently has unintended consequences
- (C) demonstrating that foreign-based firms receive more subsidies from their governments than United States firms receive from the United States government
- (D) advocating the use of trade restrictions for “dumped” products but not for other imports
- (E) recommending a uniform method for handling claims of unfair trade practices
65. It can be inferred from the passage that the minimal basis for a complaint to the International Trade Commission is which of the following?
- (A) A foreign competitor has received a subsidy from a foreign government.
- (B) A foreign competitor has substantially increased the volume of products shipped to the United States.
- (C) A foreign competitor is selling products in the United States at less than fair market value.
- (D) The company requesting import relief has been injured by the sale of imports in the United States.
- (E) The company requesting import relief has been barred from exporting products to the country of its foreign competitor.

66. The last paragraph performs which of the following functions in the passage?
- (A) It summarizes the discussion thus far and suggests additional areas for research.
 - (B) It presents a recommendation based on the evidence presented earlier.
 - (C) It discusses an exceptional case in which the results expected by the author of the passage were not obtained.
 - (D) It introduces an additional area of concern not mentioned earlier.
 - (E) It cites a specific case that illustrates a problem presented more generally in the previous paragraph.
67. The passage warns of which of the following dangers?
- (A) Companies in the United States may receive no protection from imports unless they actively seek protection from import competition.
 - (B) Companies that seek legal protection from import competition may incur legal costs that far exceed any possible gain.
 - (C) Companies that are United States owned but operate internationally may not be eligible for protection from import competition under the laws of the countries in which their plants operate.
 - (D) Companies that are not United States owned may seek legal protection from import competition under United States import relief laws.
 - (E) Companies in the United States that import raw materials may have to pay duties on those materials.
68. The passage suggests that which of the following is most likely to be true of United States trade laws?
- (A) They will eliminate the practice of “dumping” products in the United States.
 - (B) They will enable manufacturers in the United States to compete more profitably outside the United States.
 - (C) They will affect United States trade with Canada more negatively than trade with other nations.
 - (D) Those that help one unit within a parent company will not necessarily help other units in the company.
 - (E) Those that are applied to international companies will accomplish their intended result.
69. It can be inferred from the passage that the author believes which of the following about the complaint mentioned in the last paragraph?
- (A) The ITC acted unfairly toward the complainant in its investigation.
 - (B) The complaint violated the intent of import relief laws.
 - (C) The response of the ITC to the complaint provided suitable relief from unfair trade practices to the complainant.
 - (D) The ITC did not have access to appropriate information concerning the case.
 - (E) Each of the companies involved in the complaint acted in its own best interest.

Line Milankovitch proposed in the early twentieth century that the ice ages were caused by variations in the Earth's orbit around the Sun. For some time this theory was considered untestable,

(5) largely because there was no sufficiently precise chronology of the ice ages with which the orbital variations could be matched.

To establish such a chronology it is necessary to determine the relative amounts of land ice that

(10) existed at various times in the Earth's past. A recent discovery makes such a determination possible: relative land-ice volume for a given period can be deduced from the ratio of two oxygen isotopes, 16 and 18, found in ocean sediments. Almost

(15) all the oxygen in water is oxygen 16, but a few molecules out of every thousand incorporate the heavier isotope 18. When an ice age begins, the continental ice sheets grow, steadily reducing the amount of water evaporated from the ocean that

(20) will eventually return to it. Because heavier isotopes tend to be left behind when water evaporates from the ocean surfaces, the remaining ocean water becomes progressively enriched in oxygen 18. The degree of enrichment can be determined

(25) by analyzing ocean sediments of the period, because these sediments are composed of calcium carbonate shells of marine organisms, shells that were constructed with oxygen atoms drawn from the surrounding ocean. The higher the ratio of

(30) oxygen 18 to oxygen 16 in a sedimentary specimen, the more land ice there was when the sediment was laid down.

As an indicator of shifts in the Earth's climate, the isotope record has two advantages. First, it is

(35) a global record: there is remarkably little variation in isotope ratios in sedimentary specimens taken from different continental locations. Second, it is a more continuous record than that taken from rocks on land. Because of these advantages,

(40) sedimentary evidence can be dated with sufficient accuracy by radiometric methods to establish a precise chronology of the ice ages. The dated isotope record shows that the fluctuations in global ice volume over the past several hundred

(45) thousand years have a pattern: an ice age occurs roughly once every 100,000 years. These data have established a strong connection between variations in the Earth's orbit and the periodicity of the ice ages.

(50) However, it is important to note that other factors, such as volcanic particulates or variations in the amount of sunlight received by the Earth, could potentially have affected the climate. The advantage of the Milankovitch theory is that it

(55) is testable; changes in the Earth's orbit can be calculated and dated by applying Newton's laws of gravity to progressively earlier configurations of the bodies in the solar system. Yet the lack of information about other possible factors affecting

(60) global climate does not make them unimportant.

Questions 70–75 refer to the passage above.

70. In the passage, the author is primarily interested in

- (A) suggesting an alternative to an outdated research method
- (B) introducing a new research method that calls an accepted theory into question
- (C) emphasizing the instability of data gathered from the application of a new scientific method
- (D) presenting a theory and describing a new method to test that theory
- (E) initiating a debate about a widely accepted theory

71. The author of the passage would be most likely to agree with which of the following statements about the Milankovitch theory?

- (A) It is the only possible explanation for the ice ages.
- (B) It is too limited to provide a plausible explanation for the ice ages, despite recent research findings.
- (C) It cannot be tested and confirmed until further research on volcanic activity is done.
- (D) It is one plausible explanation, though not the only one, for the ice ages.
- (E) It is not a plausible explanation for the ice ages, although it has opened up promising possibilities for future research.

72. It can be inferred from the passage that the isotope record taken from ocean sediments would be less useful to researchers if which of the following were true?
- (A) It indicated that lighter isotopes of oxygen predominated at certain times.
 - (B) It had far more gaps in its sequence than the record taken from rocks on land.
 - (C) It indicated that climate shifts did not occur every 100,000 years.
 - (D) It indicated that the ratios of oxygen 16 and oxygen 18 in ocean water were not consistent with those found in fresh water.
 - (E) It stretched back for only a million years.
73. According to the passage, which of the following is true of the ratios of oxygen isotopes in ocean sediments?
- (A) They indicate that sediments found during an ice age contain more calcium carbonate than sediments formed at other times.
 - (B) They are less reliable than the evidence from rocks on land in determining the volume of land ice.
 - (C) They can be used to deduce the relative volume of land ice that was present when the sediment was laid down.
 - (D) They are more unpredictable during an ice age than in other climatic conditions.
 - (E) They can be used to determine atmospheric conditions at various times in the past.
74. It can be inferred from the passage that precipitation formed from evaporated ocean water has
- (A) the same isotopic ratio as ocean water
 - (B) less oxygen 18 than does ocean water
 - (C) less oxygen 18 than has the ice contained in continental ice sheets
 - (D) a different isotopic composition than has precipitation formed from water on land
 - (E) more oxygen 16 than has precipitation formed from fresh water
75. It can be inferred from the passage that calcium carbonate shells
- (A) are not as susceptible to deterioration as rocks
 - (B) are less common in sediments formed during an ice age
 - (C) are found only in areas that were once covered by land ice
 - (D) contain radioactive material that can be used to determine a sediment's isotopic composition
 - (E) reflect the isotopic composition of the water at the time the shells were formed

- Line Two works published in 1984 demonstrate contrasting approaches to writing the history of United States women. Buel and Buel's biography of Mary Fish (1736–1818) makes little effort to place
- (5) her story in the context of recent historiography on women. Lebsock, meanwhile, attempts not only to write the history of women in one southern community, but also to redirect two decades of historiographical debate as to whether women
- (10) gained or lost status in the nineteenth century as compared with the eighteenth century. Although both books offer the reader the opportunity to assess this controversy regarding women's status, only Lebsock's deals with it directly. She examines
- (15) several different aspects of women's status, helping to refine and resolve the issues. She concludes that while women gained autonomy in some areas, especially in the private sphere, they lost it in many aspects of the economic sphere. More importantly,
- (20) she shows that the debate itself depends on frame of reference: in many respects, women lost power in relation to men, for example, as certain jobs (delivering babies, supervising schools) were taken over by men. Yet women also gained power in
- (25) comparison with their previous status, owning a higher proportion of real estate, for example. In contrast, Buel and Buel's biography provides ample raw material for questioning the myth, fostered by some historians, of a colonial golden age in the
- (30) eighteenth century but does not give the reader much guidance in analyzing the controversy over women's status.

Questions 76–81 refer to the passage above.

76. The primary purpose of the passage is to
- (A) examine two sides of a historiographical debate
 - (B) call into question an author's approach to a historiographical debate
 - (C) examine one author's approach to a historiographical debate
 - (D) discuss two authors' works in relationship to a historiographical debate
 - (E) explain the prevalent perspective on a historiographical debate
77. The author of the passage mentions the supervision of schools primarily in order to
- (A) remind readers of the role education played in the cultural changes of the nineteenth century in the United States
 - (B) suggest an area in which nineteenth-century American women were relatively free to exercise power
 - (C) provide an example of an occupation for which accurate data about women's participation are difficult to obtain
 - (D) speculate about which occupations were considered suitable for United States women of the nineteenth century
 - (E) illustrate how the answers to questions about women's status depend on particular contexts

78. With which of the following characterizations of Lebsock's contribution to the controversy concerning women's status in the nineteenth-century United States would the author of the passage be most likely to agree?
- (A) Lebsock has studied women from a formerly neglected region and time period.
 - (B) Lebsock has demonstrated the importance of frame of reference in answering questions about women's status.
 - (C) Lebsock has addressed the controversy by using women's current status as a frame of reference.
 - (D) Lebsock has analyzed statistics about occupations and property that were previously ignored.
 - (E) Lebsock has applied recent historiographical methods to the biography of a nineteenth-century woman.
79. According to the passage, Lebsock's work differs from Buel and Buel's work in that Lebsock's work
- (A) uses a large number of primary sources
 - (B) ignores issues of women's legal status
 - (C) refuses to take a position on women's status in the eighteenth century
 - (D) addresses larger historiographical issues
 - (E) fails to provide sufficient material to support its claims
80. The passage suggests that Lebsock believes that compared to nineteenth-century American women, eighteenth-century American women were
- (A) in many respects less powerful in relation to men
 - (B) more likely to own real estate
 - (C) generally more economically independent
 - (D) more independent in conducting their private lives
 - (E) less likely to work as school superintendents
81. The passage suggests that Buel and Buel's biography of Mary Fish provides evidence for which of the following views of women's history?
- (A) Women have lost power in relation to men since the colonial era.
 - (B) Women of the colonial era were not as likely to be concerned with their status as were women in the nineteenth century.
 - (C) The colonial era was not as favorable for women as some historians have believed.
 - (D) Women had more economic autonomy in the colonial era than in the nineteenth century.
 - (E) Women's occupations were generally more respected in the colonial era than in the nineteenth century.

Line It was once believed that the brain was
independent of metabolic processes occurring
elsewhere in the body. In recent studies, however,
we have discovered that the production and release
(5) in brain neurons of the neurotransmitter serotonin
(neurotransmitters are compounds that neurons use
to transmit signals to other cells) depend directly on
the food that the body processes.

Our first studies sought to determine whether
(10) the increase in serotonin observed in rats given
a large injection of the amino acid tryptophan
might also occur after rats ate meals that change
tryptophan levels in the blood. We found that,
immediately after the rats began to eat, parallel
(15) elevations occurred in blood tryptophan, brain
tryptophan, and brain serotonin levels. These
findings suggested that the production and release
of serotonin in brain neurons were normally coupled
with blood-tryptophan increases. In later studies we
(20) found that injecting insulin into a rat's bloodstream
also caused parallel elevations in blood and brain
tryptophan levels and in serotonin levels. We then
decided to see whether the secretion of the animal's
own insulin similarly affected serotonin production.
(25) We gave the rats a carbohydrate-containing meal
that we knew would elicit insulin secretion. As we
had hypothesized, the blood tryptophan level and
the concentrations of tryptophan and of serotonin
in the brain increased after the meal.
(30) Surprisingly, however, when we added a large
amount of protein to the meal, brain tryptophan
and serotonin levels fell. Since protein contains
tryptophan, why should it depress brain tryptophan
levels? The answer lies in the mechanism that
(35) provides blood tryptophan to the brain cells. This
same mechanism also provides the brain cells with
other amino acids found in protein, such as tyrosine
and leucine. The consumption of protein increases
blood concentration of the other amino acids much
(40) more, proportionately, than it does that of tryptophan.
The more protein is in a meal, the lower is the ratio
of the resulting blood-tryptophan concentration to
the concentration of competing amino acids, and
the more slowly is tryptophan provided to the brain.
(45) Thus the more protein in a meal, the less serotonin
subsequently produced and released.

Questions 82–90 refer to the passage above.

82. Which of the following titles best summarizes the contents of the passage?
- (A) Neurotransmitters: Their Crucial Function in Cellular Communication
 - (B) Diet and Survival: An Old Relationship Reexamined
 - (C) The Blood Supply and the Brain: A Reciprocal Dependence
 - (D) Amino Acids and Neurotransmitters: The Connection between Serotonin Levels and Tyrosine
 - (E) The Effects of Food Intake on the Production and Release of Serotonin: Some Recent Findings
83. According to the passage, the speed with which tryptophan is provided to the brain cells of a rat varies with the
- (A) amount of protein present in a meal
 - (B) concentration of serotonin in the brain before a meal
 - (C) concentration of leucine in the blood rather than with the concentration of tyrosine in the blood after a meal
 - (D) concentration of tryptophan in the brain before a meal
 - (E) number of serotonin-containing neurons
84. According to the passage, when the authors began their first studies, they were aware that
- (A) they would eventually need to design experiments that involved feeding rats high concentrations of protein
 - (B) tryptophan levels in the blood were difficult to monitor with accuracy
 - (C) serotonin levels increased after rats were fed meals rich in tryptophan
 - (D) there were many neurotransmitters whose production was dependent on metabolic processes elsewhere in the body
 - (E) serotonin levels increased after rats were injected with a large amount of tryptophan

85. According to the passage, one reason that the authors gave rats carbohydrates was to
- (A) depress the rats' tryptophan levels
 - (B) prevent the rats from contracting diseases
 - (C) cause the rats to produce insulin
 - (D) demonstrate that insulin is the most important substance secreted by the body
 - (E) compare the effect of carbohydrates with the effect of proteins
86. According to the passage, the more protein a rat consumes, the lower will be the
- (A) ratio of the rat's blood-tryptophan concentration to the amount of serotonin produced and released in the rat's brain
 - (B) ratio of the rat's blood-tryptophan concentration to the concentration in its blood of the other amino acids contained in the protein
 - (C) ratio of the rat's blood-tyrosine concentration to its blood-leucine concentration
 - (D) number of neurotransmitters of any kind that the rat will produce and release
 - (E) number of amino acids the rat's blood will contain
87. The authors' discussion of the "mechanism that provides blood tryptophan to the brain cells" (lines 34–35) is meant to
- (A) stimulate further research studies
 - (B) summarize an area of scientific investigation
 - (C) help explain why a particular research finding was obtained
 - (D) provide supporting evidence for a controversial scientific theory
 - (E) refute the conclusions of a previously mentioned research study
88. According to the passage, an injection of insulin was most similar in its effect on rats to an injection of
- (A) tyrosine
 - (B) leucine
 - (C) blood
 - (D) tryptophan
 - (E) protein
89. It can be inferred from the passage that which of the following would be LEAST likely to be a potential source of aid to a patient who was not adequately producing and releasing serotonin?
- (A) Meals consisting almost exclusively of protein
 - (B) Meals consisting almost exclusively of carbohydrates
 - (C) Meals that would elicit insulin secretion
 - (D) Meals that had very low concentrations of tyrosine
 - (E) Meals that had very low concentrations of leucine
90. It can be inferred from the passage that the authors initially held which of the following hypotheses about what would happen when they fed large amounts of protein to rats?
- (A) The rats' brain serotonin levels would not decrease.
 - (B) The rats' brain tryptophan levels would decrease.
 - (C) The rats' tyrosine levels would increase less quickly than would their leucine levels.
 - (D) The rats would produce more insulin.
 - (E) The rats would produce neurotransmitters other than serotonin.

Line In 1955 Maurice Duverger published *The*
Political Role of Women, the first behavioralist,
 multinational comparison of women's electoral
 participation ever to use election data and survey
 (5) data together. His study analyzed women's patterns
 of voting, political candidacy, and political activism
 in four European countries during the first half of
 the twentieth century. Duverger's research findings
 were that women voted somewhat less frequently
 (10) than men (the difference narrowing the longer
 women had the vote) and were slightly more
 conservative.

Duverger's work set an early standard for the
 sensitive analysis of women's electoral activities.
 (15) Moreover, to Duverger's credit, he placed his
 findings in the context of many of the historical
 processes that had shaped these activities.
 However, since these contexts have changed
 over time, Duverger's approach has proved more
 (20) durable than his actual findings. In addition,
 Duverger's discussion of his findings was hampered
 by his failure to consider certain specific factors
 important to women's electoral participation
 at the time he collected his data: the influence
 (25) of political regimes, the effects of economic
 factors, and the ramifications of political and
 social relations between women and men. Given
 this failure, Duverger's study foreshadowed the
 enduring limitations of the behavioralist approach
 (30) to the multinational study of women's political
 participation.

Questions 91–96 refer to the passage above.

91. The primary purpose of the passage is to
- (A) evaluate a research study
 - (B) summarize the history of a research area
 - (C) report new research findings
 - (D) reinterpret old research findings
 - (E) reconcile conflicting research findings
92. According to the passage, Duverger's study was unique in 1955 in that it
- (A) included both election data and survey data
 - (B) gathered data from sources never before used in political studies
 - (C) included an analysis of historical processes
 - (D) examined the influence on voting behavior of the relationships between women and men
 - (E) analyzed not only voting and political candidacy but also other political activities
93. Which of the following characteristics of a country is most clearly an example of a factor that Duverger, as described in the passage, failed to consider in his study?
- (A) A large population
 - (B) A predominantly Protestant population
 - (C) A predominantly urban population
 - (D) A one-party government
 - (E) Location in the heart of Europe

94. The author implies that Duverger's actual findings are
- (A) limited because they focus on only four countries
 - (B) inaccurate in their description of the four countries in the early 1950s
 - (C) out-of-date in that they are inapplicable in the four countries today
 - (D) flawed because they are based on unsound data
 - (E) biased by Duverger's political beliefs
95. The passage implies that, in comparing four European countries, Duverger found that the voting rates of women and men were most different in the country in which women
- (A) were most politically active
 - (B) ran for office most often
 - (C) held the most conservative political views
 - (D) had the most egalitarian relations with men
 - (E) had possessed the right to vote for the shortest time
96. The author implies that some behavioralist research involving the multinational study of women's political participation that followed Duverger's study did which of the following?
- (A) Ignored Duverger's approach
 - (B) Suffered from faults similar to those in Duverger's study
 - (C) Focused on political activism
 - (D) Focused on the influences of political regimes
 - (E) Focused on the political and social relations between women and men

Line The majority of successful senior managers do not closely follow the classical rational model of first clarifying goals, assessing the problem, formulating options, estimating likelihoods of success, making a
(5) decision, and only then taking action to implement the decision. Rather, in their day-by-day tactical maneuvers, these senior executives rely on what is vaguely termed “intuition” to manage a network of interrelated problems that require them to deal with
(10) ambiguity, inconsistency, novelty, and surprise; and to integrate action into the process of thinking.

Generations of writers on management have recognized that some practicing managers rely heavily on intuition. In general, however, such
(15) writers display a poor grasp of what intuition is. Some see it as the opposite of rationality; others view it as an excuse for capriciousness.

Isenberg’s recent research on the cognitive processes of senior managers reveals that
(20) managers’ intuition is neither of these. Rather, senior managers use intuition in at least five distinct ways. First, they intuitively sense when a problem exists. Second, managers rely on intuition to perform well-learned behavior patterns rapidly. This
(25) intuition is not arbitrary or irrational, but is based on years of painstaking practice and hands-on experience that build skills. A third function of intuition is to synthesize isolated bits of data and practice into an integrated picture, often in
(30) an “Aha!” experience. Fourth, some managers use intuition as a check on the results of more rational analysis. Most senior executives are familiar with the formal decision analysis models and tools, and those who use such systematic methods
(35) for reaching decisions are occasionally leery of solutions suggested by these methods which run counter to their sense of the correct course of action. Finally, managers can use intuition to bypass in-depth analysis and move rapidly to engender a
(40) plausible solution. Used in this way, intuition is an almost instantaneous cognitive process in which a manager recognizes familiar patterns.

One of the implications of the intuitive style of executive management is that “thinking” is
(45) inseparable from acting. Since managers often “know” what is right before they can analyze and explain it, they frequently act first and explain later. Analysis is inextricably tied to action in thinking/acting cycles, in which managers develop thoughts about their

(50) companies and organizations not by analyzing a problematic situation and then acting, but by acting and analyzing in close concert. Given the great uncertainty of many of the management issues that they face, senior managers often instigate a course
(55) of action simply to learn more about an issue. They then use the results of the action to develop a more complete understanding of the issue. One implication of thinking/acting cycles is that action is often part of defining the problem, not just of
(60) implementing the solution.

Questions 97–102 refer to the passage above.

97. According to the passage, senior managers use intuition in all of the following ways EXCEPT to
- (A) speed up the creation of a solution to a problem
 - (B) identify a problem
 - (C) bring together disparate facts
 - (D) stipulate clear goals
 - (E) evaluate possible solutions to a problem
98. The passage suggests which of the following about the “writers on management” mentioned in line 12?
- (A) They have criticized managers for not following the classical rational model of decision analysis.
 - (B) They have not based their analyses on a sufficiently large sample of actual managers.
 - (C) They have relied in drawing their conclusions on what managers say rather than on what managers do.
 - (D) They have misunderstood how managers use intuition in making business decisions.
 - (E) They have not acknowledged the role of intuition in managerial practice.

99. Which of the following best exemplifies “an ‘Aha!’ experience” (line 30) as it is presented in the passage?
- (A) A manager risks taking an action whose outcome is unpredictable to discover whether the action changes the problem at hand.
 - (B) A manager performs well-learned and familiar behavior patterns in creative and uncharacteristic ways to solve a problem.
 - (C) A manager suddenly connects seemingly unrelated facts and experiences to create a pattern relevant to the problem at hand.
 - (D) A manager rapidly identifies the methodology used to compile data yielded by systematic analysis.
 - (E) A manager swiftly decides which of several sets of tactics to implement in order to deal with the contingencies suggested by a problem.
100. According to the passage, the classical model of decision analysis includes all of the following EXCEPT
- (A) evaluation of a problem
 - (B) creation of possible solutions to a problem
 - (C) establishment of clear goals to be reached by the decision
 - (D) action undertaken in order to discover more information about a problem
 - (E) comparison of the probable effects of different solutions to a problem
101. It can be inferred from the passage that which of the following would most probably be one major difference in behavior between Manager X, who uses intuition to reach decisions, and Manager Y, who uses only formal decision analysis?
- (A) Manager X analyzes first and then acts; Manager Y does not.
 - (B) Manager X checks possible solutions to a problem by systematic analysis; Manager Y does not.
 - (C) Manager X takes action in order to arrive at the solution to a problem; Manager Y does not.
 - (D) Manager Y draws on years of hands-on experience in creating a solution to a problem; Manager X does not.
 - (E) Manager Y depends on day-to-day tactical maneuvering; Manager X does not.
102. The passage provides support for which of the following statements?
- (A) Managers who rely on intuition are more successful than those who rely on formal decision analysis.
 - (B) Managers cannot justify their intuitive decisions.
 - (C) Managers’ intuition works contrary to their rational and analytical skills.
 - (D) Logical analysis of a problem increases the number of possible solutions.
 - (E) Intuition enables managers to employ their practical experience more efficiently.

Line Frazier and Mosteller assert that medical research could be improved by a move toward larger, simpler clinical trials of medical treatments. Currently, researchers collect far more background
(5) information on patients than is strictly required for their trials—substantially more than hospitals collect—thereby escalating costs of data collection, storage, and analysis. Although limiting information collection could increase the risk that
(10) researchers will overlook facts relevant to a study, Frazier and Mosteller contend that such risk, never entirely eliminable from research, would still be small in most studies. Only in research on entirely new treatments are new and unexpected variables
(15) likely to arise.

Frazier and Mosteller propose not only that researchers limit data collection on individual patients but also that researchers enroll more patients in clinical trials, thereby obtaining a more
(20) representative sample of the total population with the disease under study. Often researchers restrict study participation to patients who have no ailments besides those being studied. A treatment judged successful under these ideal conditions can
(25) then be evaluated under normal conditions. Broadening the range of trial participants, Frazier and Mosteller suggest, would enable researchers to evaluate a treatment's efficacy for diverse patients under various conditions and to evaluate its
(30) effectiveness for different patient subgroups. For example, the value of a treatment for a progressive disease may vary according to a patient's stage of disease. Patients' ages may also affect a treatment's efficacy.

Questions 103–107 refer to the passage above.

103. The passage is primarily concerned with
- (A) identifying two practices in medical research that may affect the accuracy of clinical trials
 - (B) describing aspects of medical research that tend to drive up costs
 - (C) evaluating an analysis of certain shortcomings of current medical research practices
 - (D) describing proposed changes to the ways in which clinical trials are conducted
 - (E) explaining how medical researchers have traditionally conducted clinical trials and how such trials are likely to change
104. Which of the following can be inferred from the passage about a study of the category of patients referred to in lines 21–23?
- (A) Its findings might have limited applicability.
 - (B) It would be prohibitively expensive in its attempt to create ideal conditions.
 - (C) It would be the best way to sample the total population of potential patients.
 - (D) It would allow researchers to limit information collection without increasing the risk that important variables could be overlooked.
 - (E) Its findings would be more accurate if it concerned treatments for a progressive disease than if it concerned treatments for a nonprogressive disease.

105. It can be inferred from the passage that a study limited to patients like those mentioned in lines 21–23 would have which of the following advantages over the kind of study proposed by Frazier and Mosteller?
- (A) It would yield more data and its findings would be more accurate.
 - (B) It would cost less in the long term, though it would be more expensive in its initial stages.
 - (C) It would limit the number of variables researchers would need to consider when evaluating the treatment under study.
 - (D) It would help researchers to identify subgroups of patients with secondary conditions that might also be treatable.
 - (E) It would enable researchers to assess the value of an experimental treatment for the average patient.
106. The author mentions patients' ages (line 33) primarily in order to
- (A) identify the most critical variable differentiating subgroups of patients
 - (B) cast doubt on the advisability of implementing Frazier and Mosteller's proposals about medical research
 - (C) indicate why progressive diseases may require different treatments at different stages
 - (D) illustrate a point about the value of enrolling a wide range of patients in clinical trials
 - (E) substantiate an argument about the problems inherent in enrolling large numbers of patients in clinical trials
107. According to the passage, which of the following describes a result of the way in which researchers generally conduct clinical trials?
- (A) They expend resources on the storage of information likely to be irrelevant to the study they are conducting.
 - (B) They sometimes compromise the accuracy of their findings by collecting and analyzing more information than is strictly required for their trials.
 - (C) They avoid the risk of overlooking variables that might affect their findings, even though doing so raises their research costs.
 - (D) Because they attempt to analyze too much information, they overlook facts that could emerge as relevant to their studies.
 - (E) In order to approximate the conditions typical of medical treatment, they base their methods of information collection on those used by hospitals.

- Line According to a recent theory, Archean-age gold-quartz vein systems were formed more than two billion years ago from magmatic fluids that originated from molten granite-like bodies deep
- (5) beneath the surface of the Earth. This theory is contrary to the widely held view that the systems were deposited from metamorphic fluids, that is, from fluids that formed during the dehydration of wet sedimentary rocks.
- (10) The recently developed theory has considerable practical importance. Most of the gold deposits discovered during the original gold rushes were exposed at the Earth's surface and were found because they had shed trails of alluvial gold
- (15) that were easily traced by simple prospecting methods. Although these same methods still lead to an occasional discovery, most deposits not yet discovered have gone undetected because they are buried and have no surface expression.
- (20) The challenge in exploration is therefore to unravel the subsurface geology of an area and pinpoint the position of buried minerals. Methods widely used today include analysis of aerial images that yield a broad geological overview; geophysical
- (25) techniques that provide data on the magnetic, electrical, and mineralogical properties of the rocks being investigated; and sensitive chemical tests that are able to detect the subtle chemical halos that often envelop mineralization. However,
- (30) none of these high-technology methods are of any value if the sites to which they are applied have never mineralized, and to maximize the chances of discovery the explorer must therefore pay particular attention to selecting the ground formations most
- (35) likely to be mineralized. Such ground selection relies to varying degrees on conceptual models, which take into account theoretical studies of relevant factors.
- These models are constructed primarily from
- (40) empirical observations of known mineral deposits and from theories of ore-forming processes. The explorer uses the models to identify those geological features that are critical to the formation of the mineralization being modeled, and then tries
- (45) to select areas for exploration that exhibit as many of the critical features as possible.

Questions 108–114 refer to the passage above.

108. The author is primarily concerned with
- (A) advocating a return to an older methodology
 - (B) explaining the importance of a recent theory
 - (C) enumerating differences between two widely used methods
 - (D) describing events leading to a discovery
 - (E) challenging the assumptions on which a theory is based
109. According to the passage, the widely held view of Archean-age gold-quartz vein systems is that such systems
- (A) were formed from metamorphic fluids
 - (B) originated in molten granite-like bodies
 - (C) were formed from alluvial deposits
 - (D) generally have surface expression
 - (E) are not discoverable through chemical tests
110. The passage implies that which of the following steps would be the first performed by explorers who wish to maximize their chances of discovering gold?
- (A) Surveying several sites known to have been formed more than two billion years ago
 - (B) Limiting exploration to sites known to have been formed from metamorphic fluid
 - (C) Using an appropriate conceptual model to select a site for further exploration
 - (D) Using geophysical methods to analyze rocks over a broad area
 - (E) Limiting exploration to sites where alluvial gold has previously been found

111. Which of the following statements about discoveries of gold deposits is supported by information in the passage?
- (A) The number of gold discoveries made annually has increased between the time of the original gold rushes and the present.
 - (B) New discoveries of gold deposits are likely to be the result of exploration techniques designed to locate buried mineralization.
 - (C) It is unlikely that newly discovered gold deposits will ever yield as much as did those deposits discovered during the original gold rushes.
 - (D) Modern explorers are divided on the question of the utility of simple prospecting methods as a source of new discoveries of gold deposits.
 - (E) Models based on the theory that gold originated from magmatic fluids have already led to new discoveries of gold deposits.
112. It can be inferred from the passage that which of the following is easiest to detect?
- (A) A gold-quartz vein system originating in magmatic fluids
 - (B) A gold-quartz vein system originating in metamorphic fluids
 - (C) A gold deposit that is mixed with granite
 - (D) A gold deposit that has shed alluvial gold
 - (E) A gold deposit that exhibits chemical halos
113. The theory mentioned in lines 1–5 relates to the conceptual models discussed in the passage in which of the following ways?
- (A) It may furnish a valid account of ore-forming processes, and, hence, can support conceptual models that have great practical significance.
 - (B) It suggests that certain geological formations, long believed to be mineralized, are in fact mineralized, thus confirming current conceptual models.
 - (C) It suggests that there may not be enough similarity across Archean-age gold-quartz vein systems to warrant the formulation of conceptual models.
 - (D) It corrects existing theories about the chemical halos of gold deposits, and thus provides a basis for correcting current conceptual models.
 - (E) It suggests that simple prospecting methods still have a higher success rate in the discovery of gold deposits than do more modern methods.
114. According to the passage, methods of exploring for gold that are widely used today are based on which of the following facts?
- (A) Most of the Earth's remaining gold deposits are still molten.
 - (B) Most of the Earth's remaining gold deposits are exposed at the surface.
 - (C) Most of the Earth's remaining gold deposits are buried and have no surface expression.
 - (D) Only one type of gold deposit warrants exploration, since the other types of gold deposits are found in regions difficult to reach.
 - (E) Only one type of gold deposit warrants exploration, since the other types of gold deposits are unlikely to yield concentrated quantities of gold.

Line After evidence was obtained in the 1920s that
the universe is expanding, it became reasonable
to ask: Will the universe continue to expand
indefinitely, or is there enough mass in it for the
(5) mutual attraction of its constituents to bring this
expansion to a halt? It can be calculated that
the critical density of matter needed to brake the
expansion and “close” the universe is equivalent
to three hydrogen atoms per cubic meter. But the
(10) density of the observable universe—luminous matter
in the form of galaxies—comes to only a fraction
of this. If the expansion of the universe is to stop,
there must be enough invisible matter in the
universe to exceed the luminous matter in density
(15) by a factor of roughly 70.

Our contribution to the search for this “missing
matter” has been to study the rotational velocity
of galaxies at various distances from their center
of rotation. It has been known for some time that
(20) outside the bright nucleus of a typical spiral galaxy
luminosity falls off rapidly with distance from the
center. If luminosity were a true indicator of mass,
most of the mass would be concentrated toward
the center. Outside the nucleus the rotational
(25) velocity would decrease geometrically with distance
from the center, in conformity with Kepler’s law.
Instead we have found that the rotational velocity
in spiral galaxies either remains constant with
increasing distance from the center or increases
(30) slightly. This unexpected result indicates that the
falloff in luminous mass with distance from the
center is balanced by an increase in nonluminous
mass.

Our findings suggest that as much as 90
(35) percent of the mass of the universe is not radiating
at any wavelength with enough intensity to be
detected on the Earth. Such dark matter could be
in the form of extremely dim stars of low mass,
of large planets like Jupiter, or of black holes,
(40) either small or massive. While it has not yet been
determined whether this mass is sufficient to
close the universe, some physicists consider it
significant that estimates are converging on the
critical value.

Questions 115–119 refer to the passage above.

115. The passage is primarily concerned with
- (A) defending a controversial approach
 - (B) criticizing an accepted view
 - (C) summarizing research findings
 - (D) contrasting competing theories
 - (E) describing an innovative technique
116. The authors’ study indicates that, in comparison with the outermost regions of a typical spiral galaxy, the region just outside the nucleus can be characterized as having
- (A) higher rotational velocity and higher luminosity
 - (B) lower rotational velocity and higher luminosity
 - (C) lower rotational velocity and lower luminosity
 - (D) similar rotational velocity and higher luminosity
 - (E) similar rotational velocity and similar luminosity
117. The authors’ suggestion that “as much as 90 percent of the mass of the universe is not radiating at any wavelength with enough intensity to be detected on the Earth” (lines 34–37) would be most weakened if which of the following were discovered to be true?
- (A) Spiral galaxies are less common than types of galaxies that contain little nonluminous matter.
 - (B) Luminous and nonluminous matter are composed of the same basic elements.
 - (C) The bright nucleus of a typical spiral galaxy also contains some nonluminous matter.
 - (D) The density of the observable universe is greater than most previous estimates have suggested.
 - (E) Some galaxies do not rotate or rotate too slowly for their rotational velocity to be measured.

118. It can be inferred from information presented in the passage that if the density of the universe were equivalent to significantly less than three hydrogen atoms per cubic meter, which of the following would be true as a consequence?
- (A) Luminosity would be a true indicator of mass.
 - (B) Different regions in spiral galaxies would rotate at the same velocity.
 - (C) The universe would continue to expand indefinitely.
 - (D) The density of the invisible matter in the universe would have to be more than 70 times the density of the luminous matter.
 - (E) More of the invisible matter in spiral galaxies would have to be located in their nuclei than in their outer regions.
119. The authors propose all of the following as possibly contributing to the “missing matter” in spiral galaxies EXCEPT
- (A) massive black holes
 - (B) small black holes
 - (C) small, dim stars
 - (D) massive stars
 - (E) large planets

Line Jon Clark's study of the effect of the
modernization of a telephone exchange on exchange
maintenance work and workers is a solid
contribution to a debate that encompasses two
(5) lively issues in the history and sociology of
technology: technological determinism and social
constructivism.

Clark makes the point that the characteristics of a
technology have a decisive influence on job skills
(10) and work organization. Put more strongly,
technology can be a primary determinant of social
and managerial organization. Clark believes this
possibility has been obscured by the recent
sociological fashion, exemplified by Braverman's
(15) analysis, that emphasizes the way machinery
reflects social choices. For Braverman, the shape of
a technological system is subordinate to the
manager's desire to wrest control of the labor
process from the workers. Technological change is
(20) construed as the outcome of negotiations among
interested parties who seek to incorporate their own
interests into the design and configuration of the
machinery. This position represents the new
mainstream called social constructivism.

(25) The constructivists gain acceptance by
misrepresenting technological determinism:
technological determinists are supposed to believe,
for example, that machinery imposes appropriate
forms of order on society. The alternative to
(30) constructivism, in other words, is to view technology
as existing outside society, capable of directly
influencing skills and work organization.

Clark refutes the extremes of the constructivists
by both theoretical and empirical arguments.
(35) Theoretically he defines "technology" in terms of
relationships between social and technical variables.
Attempts to reduce the meaning of technology to
cold, hard metal are bound to fail, for machinery is
just scrap unless it is organized functionally and
(40) supported by appropriate systems of operation and
maintenance. At the empirical level Clark shows how
a change at the telephone exchange from
maintenance-intensive electromechanical switches
to semielectronic switching systems altered work
(45) tasks, skills, training opportunities, administration,
and organization of workers. Some changes Clark
attributes to the particular way management and
labor unions negotiated the introduction of the
technology, whereas others are seen as arising from

(50) the capabilities and nature of the technology itself.
Thus Clark helps answer the question: "When is
social choice decisive and when are the concrete
characteristics of technology more important?"

Questions 120–127 refer to the passage above.

120. The primary purpose of the passage is to
- (A) advocate a more positive attitude toward technological change
 - (B) discuss the implications for employees of the modernization of a telephone exchange
 - (C) consider a successful challenge to the constructivist view of technological change
 - (D) challenge the position of advocates of technological determinism
 - (E) suggest that the social causes of technological change should be studied in real situations
121. Which of the following statements about the modernization of the telephone exchange is supported by information in the passage?
- (A) The new technology reduced the role of managers in labor negotiations.
 - (B) The modernization was implemented without the consent of the employees directly affected by it.
 - (C) The modernization had an impact that went significantly beyond maintenance routines.
 - (D) Some of the maintenance workers felt victimized by the new technology.
 - (E) The modernization gave credence to the view of advocates of social constructivism.
122. Which of the following most accurately describes Clark's opinion of Braverman's position?
- (A) He respects its wide-ranging popularity.
 - (B) He disapproves of its misplaced emphasis on the influence of managers.
 - (C) He admires the consideration it gives to the attitudes of the workers affected.
 - (D) He is concerned about its potential to impede the implementation of new technologies.
 - (E) He is sympathetic to its concern about the impact of modern technology on workers.

123. The information in the passage suggests that which of the following statements from hypothetical sociological studies of change in industry most clearly exemplifies the social constructivists' version of technological determinism?
- (A) It is the available technology that determines workers' skills, rather than workers' skills influencing the application of technology.
 - (B) All progress in industrial technology grows out of a continuing negotiation between technological possibility and human need.
 - (C) Some organizational change is caused by people; some is caused by computer chips.
 - (D) Most major technological advances in industry have been generated through research and development.
 - (E) Some industrial technology eliminates jobs, but educated workers can create whole new skills areas by the adaptation of the technology.
124. The information in the passage suggests that Clark believes that which of the following would be true if social constructivism had not gained widespread acceptance?
- (A) Businesses would be more likely to modernize without considering the social consequences of their actions.
 - (B) There would be greater understanding of the role played by technology in producing social change.
 - (C) Businesses would be less likely to understand the attitudes of employees affected by modernization.
 - (D) Modernization would have occurred at a slower rate.
 - (E) Technology would have played a greater part in determining the role of business in society.
125. According to the passage, constructivists employed which of the following to promote their argument?
- (A) Empirical studies of business situations involving technological change
 - (B) Citation of managers supportive of their position
 - (C) Construction of hypothetical situations that support their view
 - (D) Contrasts of their view with a misstatement of an opposing view
 - (E) Descriptions of the breadth of impact of technological change
126. The author of the passage uses the expression "are supposed to" in line 27 primarily in order to
- (A) suggest that a contention made by constructivists regarding determinists is inaccurate
 - (B) define the generally accepted position of determinists regarding the implementation of technology
 - (C) engage in speculation about the motivation of determinists
 - (D) lend support to a comment critical of the position of determinists
 - (E) contrast the historical position of determinists with their position regarding the exchange modernization
127. Which of the following statements about Clark's study of the telephone exchange can be inferred from information in the passage?
- (A) Clark's reason for undertaking the study was to undermine Braverman's analysis of the function of technology.
 - (B) Clark's study suggests that the implementation of technology should be discussed in the context of conflict between labor and management.
 - (C) Clark examined the impact of changes in the technology of switching at the exchange in terms of overall operations and organization.
 - (D) Clark concluded that the implementation of new switching technology was equally beneficial to management and labor.
 - (E) Clark's analysis of the change in switching systems applies only narrowly to the situation at the particular exchange that he studied.

Line All the cells in a particular plant start out with the same complement of genes. How then can these cells differentiate and form structures as different as roots, stems, leaves, and fruits? The

(5) answer is that only a small subset of the genes in a particular kind of cell are expressed, or turned on, at a given time. This is accomplished by a complex system of chemical messengers that in plants include hormones and other regulatory molecules.

(10) Five major hormones have been identified: auxin, abscisic acid, cytokinin, ethylene, and gibberellin. Studies of plants have now identified a new class of regulatory molecules called oligosaccharins.

Unlike the oligosaccharins, the five well-known

(15) plant hormones are pleiotropic rather than specific; that is, each has more than one effect on the growth and development of plants. The five have so many simultaneous effects that they are not very useful in artificially controlling the growth of

(20) crops. Auxin, for instance, stimulates the rate of cell elongation, causes shoots to grow up and roots to grow down, and inhibits the growth of lateral shoots. Auxin also causes the plant to develop a vascular system, to form lateral roots, and to

(25) produce ethylene.

The pleiotropy of the five well-studied plant hormones is somewhat analogous to that of certain hormones in animals. For example, hormones from the hypothalamus in the brain stimulate the anterior

(30) lobe of the pituitary gland to synthesize and release many different hormones, one of which stimulates the release of hormones from the adrenal cortex. These hormones have specific effects on target organs all over the body. One hormone stimulates

(35) the thyroid gland, for example, another the ovarian follicle cells, and so forth. In other words, there is a hierarchy of hormones.

Such a hierarchy may also exist in plants. Oligosaccharins are fragments of the cell wall released

(40) by enzymes: different enzymes release different oligosaccharins. There are indications that pleiotropic plant hormones may actually function by activating the enzymes that release these other, more specific chemical messengers from the cell wall.

Questions 128–133 refer to the passage above.

128. According to the passage, the five well-known plant hormones are not useful in controlling the growth of crops because
- (A) it is not known exactly what functions the hormones perform
 - (B) each hormone has various effects on plants
 - (C) none of the hormones can function without the others
 - (D) each hormone has different effects on different kinds of plants
 - (E) each hormone works on only a small subset of a cell's genes at any particular time
129. The passage suggests that the place of hypothalamic hormones in the hormonal hierarchies of animals is similar to the place of which of the following in plants?
- (A) Plant cell walls
 - (B) The complement of genes in each plant cell
 - (C) A subset of a plant cell's gene complement
 - (D) The five major hormones
 - (E) The oligosaccharins
130. The passage suggests that which of the following is a function likely to be performed by an oligosaccharin?
- (A) To stimulate a particular plant cell to become part of a plant's root system
 - (B) To stimulate the walls of a particular cell to produce other oligosaccharins
 - (C) To activate enzymes that release specific chemical messengers from plant cell walls
 - (D) To duplicate the gene complement in a particular plant cell
 - (E) To produce multiple effects on a particular subsystem of plant cells

131. The author mentions specific effects that auxin has on plant development in order to illustrate the
- (A) point that some of the effects of plant hormones can be harmful
 - (B) way in which hormones are produced by plants
 - (C) hierarchical nature of the functioning of plant hormones
 - (D) differences among the best-known plant hormones
 - (E) concept of pleiotropy as it is exhibited by plant hormones
132. According to the passage, which of the following best describes a function performed by oligosaccharins?
- (A) Regulating the daily functioning of a plant's cells
 - (B) Interacting with one another to produce different chemicals
 - (C) Releasing specific chemical messengers from a plant's cell walls
 - (D) Producing the hormones that cause plant cells to differentiate to perform different functions
 - (E) Influencing the development of a plant's cells by controlling the expression of the cells' genes
133. The passage suggests that, unlike the pleiotropic hormones, oligosaccharins could be used effectively to
- (A) trace the passage of chemicals through the walls of cells
 - (B) pinpoint functions of other plant hormones
 - (C) artificially control specific aspects of the development of crops
 - (D) alter the complement of genes in the cells of plants
 - (E) alter the effects of the five major hormones on plant development

- Line In the two decades between 1910 and 1930,
more than ten percent of the black population
of the United States left the South, where the
preponderance of the black population had been
(5) located, and migrated to northern states, with the
largest number moving, it is claimed, between 1916
and 1918. It has been frequently assumed, but not
proved, that the majority of the migrants in
(10) what has come to be called the Great Migration
came from rural areas and were motivated by two
concurrent factors: the collapse of the cotton
industry following the boll weevil infestation, which
began in 1898, and increased demand in the North
for labor following the cessation of European
(15) immigration caused by the outbreak of the First
World War in 1914. This assumption has led to
the conclusion that the migrants' subsequent lack
of economic mobility in the North is tied to rural
background, a background that implies unfamiliarity
(20) with urban living and a lack of industrial skills.

- But the question of who actually left the South
has never been rigorously investigated. Although
numerous investigations document an exodus from
rural southern areas to southern cities prior to the
(25) Great Migration, no one has considered whether the
same migrants then moved on to northern cities.
In 1910 more than 600,000 black workers, or ten
percent of the black workforce, reported themselves
to be engaged in "manufacturing and mechanical
(30) pursuits," the federal census category roughly
encompassing the entire industrial sector. The Great
Migration could easily have been made up entirely
of this group and their families. It is perhaps
surprising to argue that an employed population
(35) could be enticed to move, but an explanation lies in
the labor conditions then prevalent in the South.

- About thirty-five percent of the urban black
population in the South was engaged in skilled
trades. Some were from the old artisan class of
(40) slavery—blacksmiths, masons, carpenters—which
had had a monopoly of certain trades, but they
were gradually being pushed out by competition,
mechanization, and obsolescence. The remaining
sixty-five percent, more recently urbanized, worked in
(45) newly developed industries—tobacco, lumber, coal
and iron manufacture, and railroads. Wages in
the South, however, were low, and black workers
were aware, through labor recruiters and the black
press, that they could earn more even as unskilled

- (50) workers in the North than they could as artisans
in the South. After the boll weevil infestation,
urban black workers faced competition from the
continuing influx of both black and white rural
workers, who were driven to undercut the wages
(55) formerly paid for industrial jobs. Thus, a move north
would be seen as advantageous to a group that was
already urbanized and steadily employed, and the
easy conclusion tying their subsequent economic
problems in the North to their rural background
(60) comes into question.

Questions 134–139 refer to the passage above.

134. The author indicates explicitly that which of the
following records has been a source of information in
her investigation?
- (A) United States Immigration Service reports from
1914 to 1930
 - (B) Payrolls of southern manufacturing firms
between 1910 and 1930
 - (C) The volume of cotton exports between 1898
and 1910
 - (D) The federal census of 1910
 - (E) Advertisements of labor recruiters appearing in
southern newspapers after 1910
135. In the passage, the author anticipates which of the
following as a possible objection to her argument?
- (A) It is uncertain how many people actually
migrated during the Great Migration.
 - (B) The eventual economic status of the Great
Migration migrants has not been adequately
traced.
 - (C) It is not likely that people with steady jobs would
have reason to move to another area of the
country.
 - (D) It is not true that the term "manufacturing and
mechanical pursuits" actually encompasses the
entire industrial sector.
 - (E) Of the African American workers living in
southern cities, only those in a small number of
trades were threatened by obsolescence.

136. According to the passage, which of the following is true of wages in southern cities in 1910?
- (A) They were being pushed lower as a result of increased competition.
 - (B) They had begun to rise so that southern industry could attract rural workers.
 - (C) They had increased for skilled workers but decreased for unskilled workers.
 - (D) They had increased in large southern cities but decreased in small southern cities.
 - (E) They had increased in newly developed industries but decreased in the older trades.
137. The author cites each of the following as possible influences in an African American worker's decision to migrate north in the Great Migration EXCEPT
- (A) wage levels in northern cities
 - (B) labor recruiters
 - (C) competition from rural workers
 - (D) voting rights in northern states
 - (E) the African American press
138. It can be inferred from the passage that the "easy conclusion" mentioned in line 58 is based on which of the following assumptions?
- (A) People who migrate from rural areas to large cities usually do so for economic reasons.
 - (B) Most people who leave rural areas to take jobs in cities return to rural areas as soon as it is financially possible for them to do so.
 - (C) People with rural backgrounds are less likely to succeed economically in cities than are those with urban backgrounds.
 - (D) Most people who were once skilled workers are not willing to work as unskilled workers.
 - (E) People who migrate from their birthplaces to other regions of a country seldom undertake a second migration.
139. The primary purpose of the passage is to
- (A) support an alternative to an accepted methodology
 - (B) present evidence that resolves a contradiction
 - (C) introduce a recently discovered source of information
 - (D) challenge a widely accepted explanation
 - (E) argue that a discarded theory deserves new attention

7.5 Answer Key

1. C	29. C	57. D	85. C	113. A
2. D	30. E	58. C	86. B	114. C
3. B	31. C	59. B	87. C	115. C
4. E	32. B	60. A	88. D	116. D
5. B	33. A	61. A	89. A	117. A
6. D	34. C	62. B	90. A	118. C
7. D	35. B	63. E	91. A	119. D
8. A	36. C	64. B	92. A	120. C
9. B	37. B	65. D	93. D	121. C
10. E	38. D	66. E	94. C	122. B
11. E	39. B	67. D	95. E	123. A
12. D	40. E	68. D	96. B	124. B
13. E	41. C	69. B	97. D	125. D
14. D	42. C	70. D	98. D	126. A
15. D	43. D	71. D	99. C	127. C
16. C	44. D	72. B	100. D	128. B
17. A	45. A	73. C	101. C	129. D
18. B	46. E	74. B	102. E	130. A
19. B	47. B	75. E	103. D	131. E
20. B	48. A	76. D	104. A	132. E
21. A	49. A	77. E	105. C	133. C
22. D	50. C	78. B	106. D	134. D
23. E	51. B	79. D	107. A	135. C
24. D	52. E	80. C	108. B	136. A
25. A	53. E	81. C	109. A	137. D
26. E	54. A	82. E	110. C	138. C
27. C	55. A	83. A	111. B	139. D
28. C	56. D	84. E	112. D	

7.6 Answer Explanations

The following discussion of reading comprehension is intended to familiarize you with the most efficient and effective approaches to the kinds of problems common to reading comprehension. The particular questions in this chapter are generally representative of the kinds of reading comprehension questions you will encounter on the GMAT. Remember that it is the problem solving strategy that is important, not the specific details of a particular question.

Questions 1–3 refer to the passage on page 358.

1. The primary purpose of the passage is to
 - (A) explain why a particular business strategy has been less successful than was once anticipated
 - (B) propose an alternative to a particular business strategy that has inadvertently caused ecological damage
 - (C) present a concern about the possible consequences of pursuing a particular business strategy
 - (D) make a case for applying a particular business strategy on a larger scale than is currently practiced
 - (E) suggest several possible outcomes of companies' failure to understand the economic impact of a particular business strategy

Main idea

This question requires understanding the passage as a whole. The passage starts out defining a goal—ecoefficiency—that has become popular among companies throughout the world and that would be expected to bring overall ecological benefits. It then immediately introduces Senge and Carstedt, who have concerns about this idea. The rest of the passage is devoted to explaining their concerns, though the passage does not present a particular alternative strategy.

- A The passage never discusses whether ecoefficiency is or is not successful but only the possible consequences of it.
- B Lines 26–28 state that Senge and Carstedt believe that a *new systematic approach* must be found, but a particular alternative strategy is never offered.

- C **Correct.** After defining ecoefficiency, the rest of the passage is devoted to describing the concerns Senge and Carstedt have about it as a goal for companies.
- D The passage reports on particular concerns about the strategy and does not advocate expanding its adoption.
- E The passage is concerned with environmental impact, not economic impact.

The correct answer is C.

2. The passage mentions which of the following as a possible consequence of companies' realization of greater profits through ecoefficiency?
 - (A) The companies may be able to sell a greater number of products by lowering prices.
 - (B) The companies may be better able to attract investment capital in the global market.
 - (C) The profits may be reinvested to increase economic growth through ecoefficiency.
 - (D) The profits may be used as investment capital for industries that are not ecoefficient.
 - (E) The profits may encourage companies to make further innovations in reducing production waste.

Supporting ideas

This question asks for identification of an example given in the passage of what could result from the greater profits that may come with ecoefficiency. Such profits are specifically mentioned only in lines 14 and 17. The increased growth and profits referred to in line 14 are associated with increased waste generated indirectly by ecoefficient companies. The growth and profits referred to in line 17 are associated with investment of this capital in industries that may not be ecoefficient.

- A The prices of companies' products are not mentioned in the passage.
- B Greater investment in ecoefficient companies by outside sources is not mentioned in the passage.
- C The passage mentions increased profits from ecoefficiency but not the use of these profits to then increase growth through further ecoefficiency.
- D **Correct.** Lines 14–19 state explicitly that company profits from ecoefficiency may be invested in eco-inefficient industries.
- E The passage does not discuss whether companies will use increased profits from ecoefficiency to become more ecoefficient.

The correct answer is D.

3. The passage implies that which of the following is a possible consequence of a company's adoption of innovations that increase its ecoefficiency?
- (A) Company profits resulting from such innovations may be reinvested in that company with no guarantee that the company will continue to make further improvements in ecoefficiency.
 - (B) Company growth fostered by cost savings from such innovations may allow that company to manufacture a greater number of products that will be used and discarded, thus worsening environmental stress.
 - (C) A company that fails to realize significant cost savings from such innovations may have little incentive to continue to minimize the environmental impact of its production processes.
 - (D) A company that comes to depend on such innovations to increase its profits and growth may be vulnerable in the global market to competition from old-style eco-inefficient industries.
 - (E) A company that meets its ecoefficiency goals is unlikely to invest its increased profits in the development of new and innovative ecoefficiency measures.

Inference

The answer to this question will be an inference about what may result from a company's increased ecoefficiency. The passage suggests several outcomes from such an increase: a general worsening of the environment; a tendency for companies to manufacture more of particular products, which will then be thrown away by consumers; the possibility that increased profits will result in greater investment in industries that are not ecoefficient; and even the possibility that ecoefficiency might allow so much growth that more total waste will be produced and more overall wildlife habitat destroyed.

- A The passage suggests generally that ecoefficiency will increase companies' profits, but there is no suggestion that these companies will therefore then abandon ecoefficiency as a goal.
- B **Correct.** Lines 6–12 strongly suggest that it is possible that the increased growth that may come from ecoefficiency may result in more products being manufactured, which may result in more waste as those products are discarded by consumers.
- C The passage does not suggest that ecoefficiency may fail to increase a company's profits.
- D The passage suggests that ecoefficiency has allowed many companies to increase profits, but it does not suggest that eco-inefficient companies are more profitable or competitive in the global marketplace.
- E As with option (A), there is no suggestion that companies are likely to abandon ecoefficient strategies once they have realized increased profits from such strategies.

The correct answer is B.

Questions 4–8 refer to the passage on page 360.

4. The primary purpose of the passage is to
- (A) present several explanations for a well-known fact
 - (B) suggest alternative methods for resolving a debate
 - (C) argue in favor of a controversial theory
 - (D) question the methodology used in a study
 - (E) discuss the implications of a research finding

Main idea

This question depends on understanding the passage as a whole. The first paragraph reports the findings of a recent study. The second paragraph examines possible explanations for the findings, ruling out all but one of them. It then suggests some inferences that researchers have drawn based on the findings and the explanation.

- A Several explanations are entertained, but only to be dismissed; the number of tooth fractures is not presented as a well-known fact.
- B The passage does not mention alternative methods or a debate.
- C The likely explanation for the tooth fractures is not shown to be controversial.
- D The passage does not question the methodology of the study.
- E **Correct.** The passage explores possible explanations for a recent research finding and some tentative inferences that it might support.

The correct answer is E.

5. According to the passage, compared with Pleistocene carnivores in other areas, Pleistocene carnivores in the La Brea area
- (A) included the same species, in approximately the same proportions
 - (B) had a similar frequency of tooth fractures
 - (C) populated the La Brea area more densely
 - (D) consumed their prey more thoroughly
 - (E) found it harder to obtain sufficient prey

Supporting ideas

Skim the passage to find a comparison of La Brea area carnivores with those from other areas. In lines 17–19, the numbers of tooth fractures, or *breakage data*, of Pleistocene carnivores at the La Brea site are compared with those at other sites. The carnivores at the La Brea site had about the same frequency of tooth fractures as the carnivores at other sites.

- A Particular species are not compared in the passage.
- B **Correct.** Tooth-fracture evidence at the La Brea site and other sites is similar.
- C Population density at different sites is not compared.
- D Thorough consumption is the most likely explanation of tooth fractures, but there is no evidence of any difference between La Brea and other Pleistocene sites.
- E Difficulty of finding prey is implicated in the final sentence, but the La Brea site is not distinguished from other Pleistocene sites.

The correct answer is B.

6. According to the passage, the researchers believe that the high frequency of tooth breakage in carnivores found at La Brea was caused primarily by
- (A) the aging process in individual carnivores
 - (B) contact between the fossils in the pits
 - (C) poor preservation of the fossils after they were removed from the pits
 - (D) the impact of carnivores' teeth against the bones of their prey
 - (E) the impact of carnivores' teeth against the bones of other carnivores during fights over kills

Supporting ideas

As indicated by the phrase *according to the passage*, this question asks about ideas mentioned or expressed in the passage. After dismissing three possible causes of the tooth fractures, the author turns to the explanation researchers find *most plausible*: *more contact between the teeth of predators and the bones of prey due to more thorough consumption of carcasses* (lines 20–24).

- A Lines 11–12 dismiss aging as the cause.
- B Lines 13–16 rule out poor preservation within the pits.
- C Preservation after removal from the pits is not discussed.
- D Correct.** Carnivores' tooth fractures were most likely caused by contact with the bones of their prey.
- E Line 28 mentions *competition over kills*, but does not link it to tooth fractures.

The correct answer is D.

7. The researchers' conclusion concerning the absence of demographic bias would be most seriously undermined if it were found that
- (A) the older an individual carnivore is, the more likely it is to have a large number of tooth fractures
 - (B) the average age at death of a present-day carnivore is greater than was the average age at death of a Pleistocene carnivore
 - (C) in Pleistocene carnivore species, older individuals consumed carcasses as thoroughly as did younger individuals
 - (D) the methods used to determine animals' ages in fossil samples tend to misidentify many older individuals as younger individuals
 - (E) data concerning the ages of fossil samples cannot provide reliable information about behavioral differences between extinct carnivores and present-day carnivores

Logical structure

Begin by looking at the section on demographic bias. Lines 11–13 state that demographic bias has been ruled out as an explanation because *older individuals were not overrepresented in the fossil samples*. This implies that older carnivores would be expected to have more tooth fractures than younger ones. To answer this question, read each answer choice to find the one statement that undermines the researchers' conclusion. If the method to determine age in the fossil samples is faulty and older carnivores are misidentified as younger ones, then demographic bias cannot be dismissed.

- A This statement supports rather than undermines the researchers' conclusion.
- B This comparison between present-day and Pleistocene carnivores has no bearing on whether older Pleistocene individuals were overrepresented or not.
- C The comparison between older and younger individuals is irrelevant to the researchers' conclusion.
- D Correct.** If older individuals have been misidentified as younger ones, then a higher proportion of older individuals undermines the researchers' conclusion.
- E Neither the differences nor the data are relevant to the researchers' conclusion about the proportion of older Pleistocene carnivores.

The correct answer is D.

8. According to the passage, if the researchers had NOT found that two extinct carnivore species were free of tooth breakage, the researchers would have concluded that
- (A) the difference in breakage frequencies could have been the result of damage to the fossil remains in the La Brea pits
 - (B) the fossils in other Pleistocene sites could have higher breakage frequencies than do the fossils in the La Brea pits
 - (C) Pleistocene carnivore species probably behaved very similarly to one another with respect to consumption of carcasses
 - (D) all Pleistocene carnivore species differed behaviorally from present-day carnivore species
 - (E) predator densities during the Pleistocene era were extremely high

Logical structure

This question refers to the preservational bias explanation that the researchers reject (lines 13–16). Two extinct species had no tooth fractures. Thus, the breakage was almost certainly NOT caused by abrasion in the pits because the teeth of those two species would have showed fractures as well. If the researchers had not discovered the exception of the two species, then they could not have ruled out the possibility that the tooth breakage was caused by damage within the pits.

- A **Correct.** If all species showed tooth fractures, then the breakage might have been caused by abrasion in the pits.
- B The extinct species evidence was relevant to the issue of preservational bias, not local bias.
- C Without the extinct species evidence, preservational bias is a strong explanation, and there is little need for the behavioral explanation.
- D The passage does not say that all Pleistocene carnivore species were found in the La Brea pits; consequently no universal conclusion about all species can be made.
- E The researchers cannot make a conclusion about the whole era based on one site.

The correct answer is A.

Questions 9–11 refer to the passage on page 362.

- 9. The primary purpose of the passage is to propose
 - (A) an alternative to museum display of artifacts
 - (B) a way to curb illegal digging while benefiting the archaeological profession
 - (C) a way to distinguish artifacts with scientific value from those that have no such value
 - (D) the governmental regulation of archaeological sites
 - (E) a new system for cataloging duplicate artifacts

Main idea

After identifying in the first paragraph two problems that the field of archaeology faces, the author begins the second paragraph by explicitly stating the purpose of the essay: *I would propose that scientific archaeological expeditions and governmental authorities sell excavated artifacts on the open market.* According to the author, this proposal would both benefit the field of archaeology (line 12) and reduce illegal digging for antiquities (lines 12–13).

- A While explaining in paragraph 5 that museums often store countless artifacts unseen in their basements, the author proposes no alternative for museum display of these artifacts.
- B **Correct.** The author argues that selling some antiquities would help archaeology and reduce illegal digging.
- C No proposal for the grading of the artifacts is made in the passage.
- D The author does not discuss governmental regulation of the sites.
- E While the author supports one part of the proposal for selling antiquities by noting that sold artifacts could be cataloged on a computer, this is a detail rather than the main purpose of the passage.

The correct answer is B.

- 10. The author implies that all of the following statements about duplicate artifacts are true EXCEPT
 - (A) a market for such artifacts already exists
 - (B) such artifacts seldom have scientific value
 - (C) there is likely to be a continuing supply of such artifacts
 - (D) museums are well supplied with examples of such artifacts
 - (E) such artifacts frequently exceed in quality those already cataloged in museum collections

Inference

Duplicate artifacts are discussed throughout the passage. Because this question asks the reader to find the one statement that is NOT stated or implied in the passage, the best approach is to eliminate the four statements that are supported by the passage.

- A In the closing sentence of the passage, the author implies that the market already exists.
- B In lines 27–32, the author suggests selling artifacts that do not have *unique artistic merit or scientific value* and then states that while theoretically every artifact may have potential scientific value, in practice this is not the case. Paragraph 4 illustrates this by mentioning the many thousands of artifacts that are *essentially duplicates of one another*. Lines 51–53 imply that there are rare instances when duplicates do *become needed for scientific purposes*, so duplicates *seldom have scientific value*.
- C This statement is implied in lines 41–43, where the author notes that museum basements are *simply not large enough to store the artifacts that are likely to be discovered in the future*.
- D It can be inferred that if the duplicates cited in paragraph 4 are typical of the kinds of artifacts *stored in bulging museum basements* (lines 48–49), then museums are well supplied with such artifacts.
- E **Correct.** The passage does not support the assertion that the quality of duplicate objects is higher than that of museum pieces.

The correct answer is E.

11. Which of the following is mentioned in the passage as a disadvantage of storing artifacts in museum basements?
- (A) Museum officials rarely allow scholars access to such artifacts.
 - (B) Space that could be better used for display is taken up for storage.
 - (C) Artifacts discovered in one excavation often become separated from each other.

- (D) Such artifacts are often damaged by variations in temperature and humidity.
- (E) Such artifacts often remain uncataloged and thus cannot be located once they are put in storage.

Supporting ideas

This question asks for specific information stated in the passage, so begin by finding the discussion of museum storage in the fifth paragraph. There, the author exposes the problems museums face: too little room and too little money. Not enough funding exists to catalog artifacts, so the artifacts *become as inaccessible as if they had never been discovered* (lines 45–46).

- A Restrictions on scholars' access to the museums' artifacts are not mentioned in the passage.
- B The author does not argue that museums should use space differently.
- C No mention is made of the separation of objects from the same excavation.
- D The author does not discuss the conditions of storage.
- E **Correct.** The author contends that many artifacts are left uncataloged and so, once shelved in the basements, they cannot be found.

The correct answer is E.

Questions 12–17 refer to the passage on page 364.

12. The passage is primarily concerned with which of the following?
- (A) Evaluating two competing technologies
 - (B) Tracing the impact of a new technology by narrating a sequence of events
 - (C) Reinterpreting an event from contemporary business history
 - (D) Illustrating a business strategy by means of a case history
 - (E) Proposing an innovative approach to business planning

Main idea

To figure out the primary concern of the passage, consider the passage as a whole. The first paragraph draws a contrast between past and present conditions and puts forward a beneficial strategy for businesses, *developing integrated approaches for successful mass production and distribution*. The second and third paragraphs then use a specific case to illustrate the benefits of this strategy.

- A The evaluation of VHS and Beta is used only as an example to illustrate the thesis stated in the first paragraph.
- B The passage does not discuss the impact of video recording technology in general.
- C *To reinterpret* an event implies that the author disagrees with an original interpretation, but no evidence indicates such a disagreement.
- D Correct.** The first paragraph announces the business strategy, and the two subsequent paragraphs illustrate it with a particular case.
- E The author is observing, not proposing; no specific plan of action is proposed.

The correct answer is D.

13. According to the passage, today's successful firms, unlike successful firms in the past, may earn the greatest profits by
- (A) investing in research to produce cheaper versions of existing technology
 - (B) being the first to market a competing technology
 - (C) adapting rapidly to a technological standard previously set by a competing firm
 - (D) establishing technological leadership in order to shape product definitions in advance of competing firms
 - (E) emphasizing the development of methods for the mass production and distribution of a new technology

Supporting ideas

The phrase *according to the passage* indicates that the answer is a claim made, explicitly or implicitly, in the passage. The question requires finishing a statement about firms in general; this is a clue to look at the first paragraph, the only place where firms in general are discussed. A contrast is drawn between past (lines 1–5) and present (lines 5–8) conditions. The companies that earn the greatest profits may be those *that lead in developing integrated approaches for successful mass production and distribution*.

- A Looking for ways to make cheaper versions is not discussed in the passage.
- B Being first was successful in the past, but might not be so now, the author argues.
- C The passage does not examine the advantage of rapid adaptation.
- D The author believes this method was successful in the past but might not be so in the present.
- E Correct.** Developing the ways to get a new technology to the greatest number of consumers, through mass production and distribution, may lead to the greatest profits.

The correct answer is E.

14. According to the passage, consumers began to develop a preference for VCRs in the VHS format because they believed which of the following?
- (A) VCRs in the VHS format were technically better than competing format VCRs.
 - (B) VCRs in the VHS format were less expensive than competing format VCRs.
 - (C) VHS was the first standard format for VCRs.
 - (D) VHS prerecorded videotapes were more available than those in Beta format.
 - (E) VCRs in the Beta format would soon cease to be produced.

Supporting ideas

The question's use of the phrase *according to the passage* means that the answer is a claim made, explicitly or implicitly, in the passage. Consumers' perceptions about the two formats are discussed in lines 26–28; consumers believed *that prerecorded tapes were more available in VHS format*.

- A The passage does not claim that consumers believed in the technical superiority of the VHS format.
- B The passage does not claim that consumers believed the VHS format was less expensive.
- C The passage does not claim that consumers thought that VHS was the first format.
- D **Correct.** The passage says that consumers believed prerecorded tapes were more available in the VHS format than in Beta.
- E The passage does not claim that consumers believed the Beta format would stop being produced.

The correct answer is D.

15. The author implies that one way that VHS producers won control over the VCR market was by
- (A) carefully restricting access to VCR technology
 - (B) giving up a slight early lead in VCR sales in order to improve long-term prospects
 - (C) retaining a strict monopoly on the production of prerecorded videotapes
 - (D) sharing control of the marketing of VHS format VCRs
 - (E) sacrificing technological superiority over Beta format VCRs in order to remain competitive in price

Inference

By using the verb *implies*, this question indicates that the answer is not explicitly stated in the passage. The second paragraph contrasts the two approaches to marketing: Producers of the VHS format formed *strategic alliances with other producers and distributors to manufacture and market their VCR format*. The producers of Beta, on the other hand, did not form such alliances because they wanted *to maintain exclusive control over VCR distribution*. Taken together, these statements imply that the VHS producers shared control of marketing.

- A Restricting access to VCR technology was the unsuccessful strategy of Beta producers.
- B Lines 22–24 show that the VHS producers did not yield their *slight early lead in sales* but instead quickly turned it *into a dominant position*.
- C Lines 24–26 show just the reverse situation: VHS producers developed *strategic alignments with producers of prerecorded tapes*.
- D **Correct.** VHS producers shared control of marketing with other producers and distributors.
- E The passage does not suggest that VHS producers sacrificed technological superiority to remain competitive in price.

The correct answer is D.

16. The alignment of producers of VHS format VCRs with producers of prerecorded videotapes is most similar to which of the following?
- (A) The alignment of an automobile manufacturer with another automobile manufacturer to adopt a standard design for automobile engines
 - (B) The alignment of an automobile manufacturer with an automotive glass company whereby the manufacturer agrees to purchase automobile windshields only from that one glass company
 - (C) The alignment of an automobile manufacturer with a petroleum company to ensure the widespread availability of the fuel required by a new type of engine developed by the manufacturer
 - (D) The alignment of an automobile manufacturer with its dealers to adopt a plan to improve automobile design
 - (E) The alignment of an automobile dealer with an automobile rental chain to adopt a strategy for an advertising campaign to promote a new type of automobile

Application

This question tests the reader's understanding of the relationship between the producers of VHS-format VCRs and the producers of prerecorded tapes by asking about an analogous relationship. The VHS machines and the tapes are mutually dependent products; a continual and widespread supply of tapes is necessary for a consumer's continuing use and enjoyment of the VHS equipment. In a similar way, a continual and widespread supply of fuel is necessary to a consumer's ongoing use and enjoyment of a car. The best parallel is an alignment of manufacturers to ensure the availability of mutually dependent products.

- A The alignment between producers of competing, rather than mutually dependent, products is not analogous.
- B This exclusive alignment would instead be analogous to one between a manufacturer of VHS-format VCRs and a manufacturer of one of the parts of the machine.
- C **Correct.** Prerecorded tapes are clearly analogous to fuel: both are products necessary to the consumer's successful utilization of the machines that depend on them. The alignment of the auto manufacturer with a petroleum company to ensure the availability of a specific fuel is analogous to the alignment of the producers of VHS-format VCRs and the producers of prerecorded tapes to ensure the availability of that entertainment medium.
- D This alignment would be analogous to one between manufacturers of VHS-format VCRs and distributors, not prerecorded tape producers.
- E This alignment between an equipment dealer and an equipment-rental business regarding adoption of an advertising strategy is not analogous.

The correct answer is C.

17. Which of the following best describes the relation of the first paragraph to the passage as a whole?

- (A) It makes a general observation to be exemplified.
- (B) It outlines a process to be analyzed.
- (C) It poses a question to be answered.
- (D) It advances an argument to be disputed.
- (E) It introduces conflicting arguments to be reconciled.

Logical structure

To answer this question, look at the structure of the author's argument. The first paragraph takes a position about firms in general. The second and third paragraphs illustrate that position with a specific example.

- A **Correct.** The first paragraph offers a general statement about all firms, and the subsequent paragraphs use an extended example to illustrate that statement.
- B The passage does not describe a process or invite further analysis.
- C The author is making a declaration (lines 5–8) rather than posing a question.
- D The position advanced in the first paragraph is supported, not disputed, by the rest of the passage.
- E The first paragraph contrasts past and present conditions, but does not show conflicting arguments.

The correct answer is A.

Questions 18–25 refer to the passage on page 366.

18. The passage provides information in support of which of the following assertions?
- (A) The disadvantages of an adaptation to a particular feature of an environment often outweigh the advantages of such an adaptation.
 - (B) An organism's reaction to being placed in an environment to which it is not well adapted can sometimes illustrate the problems that have been solved by the adaptations of organisms indigenous to that environment.
 - (C) The effectiveness of an organism's adaptation to a particular feature of its environment can only be evaluated by examining the effectiveness with which organisms of other species have adapted to a similar feature of a different environment.
 - (D) Organisms of the same species that inhabit strikingly different environments will often adapt in remarkably similar ways to the few features of those environments that are common.
 - (E) Different species of organisms living in the same environment will seldom adapt to features of that environment in the same way.

Application

This question requires recognizing a principle underlying the passage's overall discussion. The passage makes a general claim about terrestrial animals' need to overcome the effect of gravity on their blood circulation systems, and it then uses the specific example of terrestrial snakes to illustrate this claim. To help identify the adaptations used by terrestrial snakes, the passage describes what happens to sea snakes, which are aquatic and less affected by gravity's influence, when they are subjected to a terrestrial environment. The specific problems faced by these snakes strongly suggest that terrestrial snakes have developed ways to overcome these problems. The passage then identifies specific physiological differences between sea snakes and terrestrial snakes that demonstrate how terrestrial snakes overcome gravity's influence.

- A The passage discusses how species have successfully adapted to their specific environments and does not mention that these adaptations create disadvantages in that environment.
- B Correct.** The passage discusses the problems faced by sea snakes when they are subjected to a terrestrial environment and then examines terrestrial snakes to illustrate how certain adaptations solved these problems.
- C The passage is not concerned with evaluating the effectiveness of species' adaptations to their environments; it takes for granted that these adaptations are effective.
- D The passage is concerned with how species adapt differently to different environments and not with how adaptations to different environments are similar.
- E The passage discusses how different environments affect how species have adapted, not how different species adapt to a similar environment.

The correct answer is B.

19. According to the passage, one reason that the distribution of blood in the sea snake changes little while the creature remains in the ocean is that
- (A) the heart of the sea snake tends to be located near the center of its body
 - (B) pressure gradients in the water surrounding the sea snake counter the effects of vertical pressure gradients within its blood vessels
 - (C) the sea snake assumes a vertical posture less frequently than do the terrestrial and the arboreal snake
 - (D) the sea snake often relies on waves of muscle contractions to help move blood from the torso to the head
 - (E) the force of pressure gradients in the water surrounding the sea snake exceeds that of vertical pressure gradients within its circulatory system

Supporting ideas

This question asks for an identification of factual information in the passage. Given that the contrast between sea snakes and terrestrial snakes is being used to identify adaptations used by terrestrial animals to overcome the effect of gravity on their circulation systems, the passage needs initially to illustrate why it is that sea snakes are not confronted with the same problems that gravity causes for terrestrial snakes. This information therefore needs to come fairly early in the passage.

- A The passage identifies the location of a sea snake's heart as a factor that minimizes the effort required to pump blood to both extremities but not as a cause of the even distribution of blood in sea snakes.
- B Correct.** The passage states explicitly in lines 11–17 that while sea snakes are in the ocean, the vertical pressure gradients in their blood vessels are counteracted by the pressure gradients in the water.
- C The passage does not discuss the frequency with which any snakes assume certain postures.
- D The passage discusses muscle contractions only in relation to arboreal snakes.
- E The passage states that the vertical pressures within sea snakes' blood vessels are *counteracted* (line 13) by the water's pressure, which suggests that the pressures are equalized, not that one force exceeds the other.

The correct answer is B.

20. It can be inferred from the passage that which of the following is true of species of terrestrial snakes that often need to assume a vertical posture?
- (A) They are more likely to be susceptible to circulatory failure in vertical postures than are sea snakes.
 - (B) Their hearts are less likely to be located at the midpoint of their bodies than is the case with sea snakes.
 - (C) They cannot counteract the pooling of blood in lower regions of their bodies as effectively as sea snakes can.

- (D) The blood pressure at their midpoint decreases significantly when they are tilted with their heads up.
- (E) They are unable to rely on muscle contractions to move venous blood from the lower torso to the head.

Inference

This question requires using information given about how arboreal snakes, which are frequently in vertical postures, have adapted to gravity's influence to make an assumption that other terrestrial snakes that are frequently in these postures are likely to have similar adaptations. The passage implies that sea snakes have hearts at the midpoint of their bodies because the water's pressure gradients help distribute blood evenly. It then illustrates that arboreal snakes have hearts closer to their heads to help keep blood flowing to their brain when they are in vertical postures.

- A The passage does not suggest that any of the snakes mentioned are ill-adapted to their particular environments.
- B Correct.** The passage states that arboreal snakes have hearts close to their heads and not at the midpoints of their bodies, so it is reasonable to conclude that any terrestrial snake that frequently assumes vertical postures would be unlikely to have hearts at their bodies' midpoint.
- C As with option (A), the passage does not suggest that any species of snake is ill-adapted to its environment.
- D The passage states that sea snakes lose pressure at their midpoints when they are tilted on land with heads up but that terrestrial snakes do not have this problem.
- E Because arboreal snakes use muscle contractions to circulate blood when they are vertical, it is likely that most terrestrial snakes that frequently assume vertical postures also have this capability.

The correct answer is B.

21. The author describes the behavior of the circulatory system of sea snakes when they are removed from the ocean (see lines 17–20) primarily in order to
- (A) illustrate what would occur in the circulatory system of terrestrial snakes without adaptations that enable them to regulate their blood pressure in vertical orientations
 - (B) explain why arboreal snakes in vertical orientations must rely on muscle contractions to restore blood pressure to the brain
 - (C) illustrate the effects of circulatory failure on the behavior of arboreal snakes
 - (D) illustrate the superiority of the circulatory system of the terrestrial snake to that of the sea snake
 - (E) explain how changes in spatial orientation can adversely affect the circulatory system of snakes with hearts located in relatively close proximity to their heads

Evaluation

Answering this question requires understanding why sea snakes have been brought into the passage's overall discussion about how terrestrial animals have overcome the influence of gravity on their blood circulation. The passage uses the effects that gravity has on sea snakes when they are taken out of water to identify problems that terrestrial snakes must have adapted to in order to survive.

- A Correct.** The passage uses the problems sea snakes have when taken out of water to illustrate that without certain adaptations, terrestrial snakes would likely have similar problems.
- B The passage discusses sea snakes to illustrate problems faced by terrestrial snakes, not to explain how terrestrial snakes have adapted to gravity's influence.
- C The passage does not discuss the effects of circulatory failure on arboreal snakes.
- D The passage does not compare or contrast the effectiveness of the various adaptations used by different snakes.
- E The passage does not imply that snakes with hearts close to their heads are adversely affected by spatial positions.

The correct answer is A.

22. It can be inferred from the passage that which of the following is a true statement about sea snakes?
- (A) They frequently rely on waves of muscle contractions from the lower torso to the head to supplement the work of the heart.
 - (B) They cannot effectively regulate their blood pressure when placed in seawater and tilted at an angle with the head pointed downward.
 - (C) They are more likely to have a heart located in close proximity to their heads than are arboreal snakes.
 - (D) They become acutely vulnerable to the effects of gravitational pressure on their circulatory system when they are placed in a terrestrial environment.
 - (E) Their cardiovascular system is not as complicated as that of arboreal snakes.

Inference

Answering this question requires understanding why sea snakes are discussed in the passage and what happens to them when they are taken out of water and subjected to the force of gravity. The second paragraph implies strongly that sea snakes will not survive certain terrestrial situations for which they are not adapted.

- A The passage associates muscle contractions to circulate blood with arboreal snakes only.
- B According to the passage, sea snakes' inability to regulate blood pressure occurs only when they are taken out of water.
- C The passage states clearly that arboreal snakes have hearts closer to their heads than do sea snakes.
- D Correct.** The passage states that in certain postures, sea snakes placed in a terrestrial environment will lose all blood pressure at their brains, which is an acute vulnerability.
- E The passage does not provide the information needed to compare the complexity of the various snakes discussed.

The correct answer is D.

23. The author suggests that which of the following is a disadvantage that results from the location of a snake's heart in close proximity to its head?
- (A) A decrease in the efficiency with which the snake regulates the flow of blood to the brain
 - (B) A decrease in the number of orientations in space that a snake can assume without loss of blood flow to the brain
 - (C) A decrease in blood pressure at the snake's midpoint when it is tilted at various angles with its head up
 - (D) An increase in the tendency of blood to pool at the snake's head when the snake is tilted at various angles with its head down
 - (E) An increase in the amount of effort required to distribute blood to and from the snake's tail

Inference

This question asks for an inference about the location of a snake's heart being closer to the brain than to the midpoint of its body. In the third paragraph, the passage states that in terrestrial snakes, which must fight the influence of gravity, the closer proximity of the heart to the head ensures blood circulation to the brain. The passage notes, however, that this makes it more difficult for such snakes to maintain blood circulation to the tail.

- A The passage states that snakes have brains closer to their heads to more efficiently circulate blood to the brain.
- B The passage suggests that having the heart close to the head increases the spatial orientations a snake can assume without losing blood flow to the brain, rather than decreases the number of orientations.
- C The passage indicates that this is true only of sea snakes with hearts near their body's midpoint.
- D The passage mentions blood pooling in the lower portions of a terrestrial organism's body but does not imply that blood can pool at a snake's head.
- E **Correct.** Because, as the passage states, it is more difficult for a snake with its heart close to its head to circulate blood to the tail, and therefore its body is likely to put more effort into circulating blood to the tail.

The correct answer is E.

24. The primary purpose of the third paragraph is to
- (A) introduce a topic that is not discussed earlier in the passage
 - (B) describe a more efficient method of achieving an effect discussed in the previous paragraph
 - (C) draw a conclusion based on information elaborated in the previous paragraph
 - (D) discuss two specific examples of phenomena mentioned at the end of the previous paragraph
 - (E) introduce evidence that undermines a view reported earlier in the passage

Evaluation

Answering this question requires recognizing how the passage develops its main point. The first paragraph sets up a general claim about gravity's influence on terrestrial organisms. The second paragraph then describes the ill effects that gravity has on sea snakes to identify problems that terrestrial snakes have had to adapt to. The third paragraph then uses examples to illustrate how terrestrial snakes have adapted to gravity's influence.

- A The topic of the third paragraph is the adaptations developed by terrestrial snakes to survive gravity's influence, which is part of the discussion in both the first and second paragraphs.
- B There is no comparison in the passage of the efficiency of the different methods used by snakes to adapt to gravity's influence.
- C The third paragraph is concerned with illustrating certain adaptations used by snakes and offers no conclusions about the problems terrestrial snakes have had to adapt to, which is the topic of the second paragraph.
- D **Correct.** The end of the second paragraph refers to *certain adaptations* (line 23) that the third paragraph then goes on to identify and discuss.
- E The third paragraph supports the main idea of the passage and is not used to counter any claim made earlier.

The correct answer is D.

25. In the passage, the author is primarily concerned with doing which of the following?
- (A) Explaining adaptations that enable the terrestrial snake to cope with the effects of gravitational pressure on its circulatory system
 - (B) Comparing the circulatory system of the sea snake with that of the terrestrial snake
 - (C) Explaining why the circulatory system of the terrestrial snake is different from that of the sea snake
 - (D) Pointing out features of the terrestrial snake's cardiovascular system that make it superior to that of the sea snake
 - (E) Explaining how the sea snake is able to neutralize the effects of gravitational pressure on its circulatory system

Main idea

Answering this question involves assessing what the passage as a whole is attempting to do. While the passage begins by making a general claim about gravity's influence on the cardiovascular systems of terrestrial animals, it immediately points to terrestrial snakes as a good example supporting this claim. The rest of the passage is then devoted to illustrating, using the observations involving sea snakes, how gravity's influence has shaped the cardiovascular systems of terrestrial snakes.

- A **Correct.** The entire passage is devoted to an explanation of how terrestrial snakes have adapted to gravity's influence.
- B While the passage does compare the systems of the two snakes, it does so for the larger purpose of demonstrating gravity's influence on terrestrial snakes.
- C The passage is more concerned with *how* the systems of the two snakes are different, rather than *why*, in order to identify how terrestrial snakes have adapted to gravity's influence.
- D There is no judgment in the passage as to the superiority of one snake's system over the other.
- E While the passage does explain how sea snakes do this, it does so only for the larger purpose of identifying how terrestrial snakes have adapted to gravity's influence.

The correct answer is A.

Questions 26–30 refer to the passage on page 370.

26. The primary purpose of the passage is to
- (A) advocate more effective strategies for encouraging the development of high-technology enterprises in the United States
 - (B) contrast the incentives for economic development offered by local governments with those offered by the private sector
 - (C) acknowledge and counter adverse criticism of programs being used to stimulate local economic development
 - (D) define and explore promotional efforts used by local governments to attract new industry
 - (E) review and evaluate strategies and programs that have been used to stimulate economic development

Main idea

To find the primary purpose, analyze the passage in its entirety. The passage discusses three different strategies or programs that local governments use to stimulate economic development, so the statement of the primary purpose must embrace all three strategies rather than focus on just one. The first paragraph describes how local governments attracted manufacturing industries in the 1960s and 1970s, with the result that one town prospered at another's expense. The second paragraph turns to the growth of high-technology manufacturing firms in the 1980s, which required a specialized workforce. The final paragraph shows the advantages of promoting local entrepreneurship.

- A High-technology development is only one of three kinds of economic development the passage discusses.
- B The private sector is not mentioned in the passage.
- C The passage acknowledges problems but does not counter criticism.
- D The passage examines the efforts to attract new industry in the first two paragraphs, but not in the third.
- E **Correct.** The passage describes and evaluates strategies and programs used by local governments to stimulate economic growth in their areas.

The correct answer is E.

27. The passage suggests which of the following about the majority of United States manufacturing industries before the high-technology development era of the 1980s?
- (A) They lost many of their most innovative personnel to small entrepreneurial enterprises.
 - (B) They experienced a major decline in profits during the 1960s and 1970s.
 - (C) They could provide real economic benefits to the areas in which they were located.
 - (D) They employed workers who had no specialized skills.
 - (E) They actively interfered with local entrepreneurial ventures.

Inference

This question directs attention to the manufacturing industries discussed in the first paragraph and asks for an inference about these industries. Because of *the transfer of jobs and related revenues*, attracting a manufacturer to a town was a *triumph*; losing such an industry was a *tragedy* (lines 9–11). In order for this conclusion to be true, it is logical to infer that these industries must have had a significant economic impact on the towns in which they were located.

- A No information in the passage supports such a loss of personnel.
- B The passage does not describe the industries' loss of profits.
- C **Correct.** Transfer of jobs and related revenues to a community clearly provide real economic benefits to that community.
- D The second paragraph mentions the *specially trained fraction of the manufacturing workforce* (lines 20–21) suitable for high-tech jobs, but that does not imply that workers in manufacturing industries were unskilled.
- E The passage makes no suggestion that there was such interference.

The correct answer is C.

28. The tone of the passage suggests that the author is most optimistic about the economic development potential of which of the following groups?
- (A) Local governments
 - (B) High-technology promoters
 - (C) Local entrepreneurs
 - (D) Manufacturing industry managers
 - (E) Economic development strategists

Tone

To answer this question about the author's attitude, look at what the author says when evaluating the ways local governments try to stimulate economic growth. In the first two paragraphs, the author points out serious disadvantages in attracting manufacturing (lines 4–11) and high-technology industries (lines 19–22). The final paragraph, however, offers only advantages to promoting local entrepreneurship. The author does not mention any disadvantages here, which implies that the author is most optimistic about this third strategy, which *both provides jobs and fosters further entrepreneurship*.

- A The local governments are part of the discussion of all three strategies, not just the one about which the author is most optimistic.
- B In lines 18–22, the author points out the *shortcomings* of high-technology development.
- C **Correct.** The author has only good things to say about local entrepreneurs.
- D The author does not discuss managers of manufacturing industries.
- E Other than local governments, the author does not mention economic development strategists.

The correct answer is C.

29. The passage does NOT state which of the following about local entrepreneurs?
- (A) They are found nearly everywhere.
 - (B) They encourage further entrepreneurship.
 - (C) They attract out-of-town investors.
 - (D) They employ local workers.
 - (E) They are established in their communities.

Supporting ideas

Use the process of elimination to discover the only characteristic of local entrepreneurs that is NOT explicitly stated in the passage. To do this, check each answer choice against the description of local entrepreneurs found in lines 28–33 of the passage.

- A Line 27 does identify them as *a nearly ubiquitous resource*, meaning that they are found in most places.
- B Line 33 says they create an environment that *fosters further entrepreneurship*.
- C **Correct.** Out-of-town investors are not mentioned in the passage.
- D Lines 31–32 say that *industry and talent are kept at home* and that they create an environment that *provides jobs*.
- E Line 28 describes them as having *roots in their communities*.

The correct answer is C.

30. The author of the passage mentions which of the following as an advantage of high-technology development?
- (A) It encourages the modernization of existing manufacturing facilities.
 - (B) It promotes healthy competition between rival industries.
 - (C) It encourages the growth of related industries.
 - (D) It takes full advantage of the existing workforce.
 - (E) It does not advantage one local workforce at the expense of another.

Supporting ideas

To answer this question, look for an advantage of high-technology development that is explicitly mentioned in the passage. In the second paragraph, the efforts of local governments to attract new high-technology firms are judged *preferable* to previous efforts to entice established manufacturing industries from another town to their own. Thus, the introduction of high technology made it possible for local governments to stop *victimizing other geographical areas by taking their jobs* (lines 17–18).

- A The passage does not describe modernization of facilities.
- B Competition between rival industries is not mentioned in the passage.
- C The growth of related industries is not cited as an advantage.
- D Lines 19–21 explain that high-tech manufacturing firms employ only a fraction of the workforce.
- E **Correct.** The introduction of a new high-technology firm creates jobs for the local community without causing jobs to be lost elsewhere.

The correct answer is E.

Questions 31–35 refer to the passage on page 372.

31. The author of the passage is primarily concerned with
- (A) discussing research data underlying several definitions
 - (B) arguing for the adoption of a particular definition
 - (C) exploring definitions of a concept
 - (D) comparing the advantages of several definitions
 - (E) clarifying some ambiguous definitions

Main idea

The author's primary concern is found by considering the passage as a whole. In the first paragraph, the author raises the central question regarding the meaning of *services* and then examines two definitions. The second paragraph analyzes the United States government's definition of *services* in more detail. The author is primarily interested in exploring different definitions of *services*.

- A No research data are presented.
- B The author points out the weakness of several definitions rather than giving reasons to adopt a particular one.
- C **Correct.** The author considers several definitions of *services*.
- D The author largely analyzes the disadvantages of the definitions.
- E The author points out problems in the definitions rather than providing clarifications of the definitions themselves.

The correct answer is C.

32. In comparing the United States government's definition of services with the classical definition, the author suggests that the classical definition is

(A) more pragmatic
 (B) more difficult to apply
 (C) less ambiguous
 (D) more widely used
 (E) more arbitrary

Inference

This question asks the reader to find information that is suggested but not directly stated in the passage. The author discusses the classical definition at the end of the first paragraph, pointing out two examples in which it does not apply and concluding that this definition is *hard to sustain*. By comparison, the government's definition is *more practical* because it is easy to apply; everything that is not agriculture or industry is defined as a service. An examination of the analysis of both definitions reveals that, according to the author, the classical definition is harder to apply.

- A The author describes the United States government's definition as *more practical* or pragmatic.
B Correct. Citing two cases in which the classical definition does not apply, the author implies that this definition is harder to apply than the government's.
 C Although the United States government's definition is said to lead to *ambiguities*, the examples given to suggest difficulties with the classical definition indicate that it may be at least as ambiguous.
 D The author does not say that the classical definition is more widely used.
 E The author calls the government's definition arbitrary.

The correct answer is B.

33. The passage suggests which of the following about service workers in the United States?

(A) The number of service workers may be underestimated by the definition of services used by the government.
 (B) There were fewer service workers than agricultural workers before 1988.
 (C) The number of service workers was almost equal to the number of workers employed in manufacturing until 1988.
 (D) Most service workers are employed in service occupations rather than in service industries.
 (E) Most service workers are employed in occupations where they provide services that do not fall under the classical definition of services.

Inference

The question's use of the word *suggests* means that the answer depends on making an inference. According to the author, one of the failures of the government's definition of services is that *the many service workers employed by manufacturers—bookkeepers or janitors, for example—would fall under the industrial rather than the services category* (lines 22–26). This example shows that the number of service workers is likely to be underestimated.

- A Correct.** Because some service workers are included in the industrial category, it is possible that the total number of service workers may be underestimated.
 B The passage does not provide the information to support this statement.
 C The author says that services moved ahead of manufacturing as the *main product* in 1988 but does not discuss the number of workers in either area.
 D The passage does not provide the information to support this statement.
 E The passage does not provide the information to support this statement.

The correct answer is A.

34. The author of the passage mentions which of the following as one disadvantage of the United States government's definition of services?
- (A) It is less useful than the other definitions mentioned in the passage.
 - (B) It is narrower in scope than the other definitions mentioned in the passage.
 - (C) It is based on the final product produced rather than on the type of work performed.
 - (D) It does not recognize the diversity of occupations within the service industries.
 - (E) It misclassifies many workers who are employed in service industries.

Supporting ideas

This question is based on specific information explicitly stated in the passage. According to the author, the government's definition fails because *it categorizes workers based on their company's final product rather than on the actual work the employees perform* (lines 20–22).

- A The author calls this definition *practical for government purposes*, so for the government it is more useful than other definitions.
- B The definition *includes everything that is not agriculture or industry*, while the classical definition does not include occupations that are clearly services; the government's definition is thus not narrower.
- C **Correct.** Workers are categorized by the final product of their company rather than by the type of work they perform at that company.
- D Diversity of occupations within the service industries is not discussed.
- E The definition misclassifies service workers employed in manufacturing, not service industries.

The correct answer is C.

35. The author refers to “service workers employed by manufacturers” (line 23) primarily in order to point out
- (A) a type of worker not covered by the United States government's system of classifying occupations
 - (B) a flaw in the United States government's definition of services
 - (C) a factor that has influenced the growth of the service economy in the United States
 - (D) a type of worker who is classified on the basis of work performed rather than on the basis of the company's final product
 - (E) the diversity of the workers who are referred to as service workers

Logical structure

The author discusses *the many service workers employed by manufacturers* to illustrate the failure of the government's definition to distinguish between service industries and service occupations. The resulting ambiguities, in the author's view, reveal the *arbitrariness* of the definition and its inaccuracy in reflecting the composition of the economy.

- A The worker is covered but misclassified.
- B **Correct.** The author uses this example to point out a serious shortcoming in the government's definition.
- C The author mentions the growth of services at the beginning of the passage but does not explore the reasons for it.
- D The situation of service workers employed by manufacturers is just the reverse; they are categorized by the company's final product, not by the work they do.
- E The author had earlier cited and illustrated the diversity of service activities that are included in the government's residual category of services; the focus here is instead the arbitrariness and inaccuracy, in the author's view, of the government's definition.

The correct answer is B.

Questions 36–41 refer to the passage on page 374.

36. The passage is primarily concerned with
- (A) contrasting the benefits of one methodology with the benefits of another
 - (B) describing the historical origins and inherent drawbacks of a particular methodology
 - (C) discussing the appeal of a particular methodology and some concerns about its use
 - (D) showing that some historians' adoption of a particular methodology has led to criticism of recent historical scholarship
 - (E) analyzing the influence of current feminist views on women's interpretations of their experience

Main idea

This question asks for an abstract view of what the passage as a whole is primarily doing. The passage introduces a particular methodology that scholars of women's history have been encouraged to employ, explaining why the use of the methodology is supported. The passage then goes on to raise some concerns about the use of the methodology and cites one example in which caution is needed.

- A The passage is primarily concerned with only one methodology.
- B The passage mentions why the methodology had been encouraged but does not give the history of its origins; while it cautions historians to employ the methodology carefully, it is not concerned with drawbacks of its proper use.
- C **Correct.** The passage discusses why the use of a methodology is being encouraged and then offers some concerns about its use.
- D The passage does not discuss any criticism of recent scholarship in women's history.
- E There is no mention in the passage that feminist theory is influencing how women in general think about their experiences.

The correct answer is C.

37. According to the passage, which of the following shapes the oral narratives of women storytellers?
- (A) The conventions for standard histories in the culture in which a woman storyteller lives
 - (B) The conventions of storytelling in the culture in which a woman storyteller lives
 - (C) A woman storyteller's experience with distinctive traditions of storytelling developed by the women in her family of origin
 - (D) The cultural expectations and experiences of those who listen to oral narratives
 - (E) A woman storyteller's familiarity with the stories that members of other groups in her culture tell to explain themselves

Supporting ideas

This question asks for an identification of specific information provided by the passage. In the second paragraph, the passage describes certain concerns about using oral narratives. One of these concerns is that *the stories people tell to explain themselves are shaped by ... storytelling conventions* (lines 17–19) and other influences tied to the teller's cultural and historical context.

- A The passage uses *standard histories* (line 7) to refer to the usual work of scholars and not to something that influences oral narratives.
- B **Correct.** The passage raises as a concern that oral narratives may be influenced by storytelling conventions present in the culture of the speaker.
- C The passage does not mention the family of origin of women storytellers.
- D The passage does not mention the expectations of the listeners of oral narratives.
- E The passage does not discuss women storytellers' familiarity with the oral narratives belonging to other groups of women.

The correct answer is B.

38. The author of the passage would be most likely to make which of the following recommendations to scholars of women's history?
- (A) They should take into account their own life experiences when interpreting the oral accounts of women's historical experiences.
 - (B) They should assume that the observations made in women's oral narratives are believed by the intended audience of the story.
 - (C) They should treat skeptically observations reported in oral narratives unless the observations can be confirmed in standard histories.
 - (D) They should consider the cultural and historical context in which an oral narrative was created before arriving at an interpretation of such a narrative.
 - (E) They should rely on information gathered from oral narratives only when equivalent information is not available in standard histories.

Application

Answering this question involves recognizing what the author believes about oral narratives and then applying this belief to a hypothetical situation in which the author makes recommendations to scholars of women's history. While acknowledging the appeal of oral narratives to these scholars, in the second paragraph the author urges caution when using these narratives as sources of *disinterested commentary* (line 16). The passage then states that people's oral narratives are shaped by *cultural and historical factors* (line 20), which presumably relate to the cultural and historical context within which the narratives are spoken.

- A The passage does not mention the personal life experiences of scholars.
- B The passage does not mention the intended audiences of oral narratives.
- C The passage mentions *standard histories* (line 7) only as a reference to scholarly works that often have shortcomings.

- D **Correct.** The passage cautions that oral narratives may be biased due to cultural and historical factors, and it is therefore reasonable to suppose that the author would recommend that scholars consider this when using such information.
- E The passage does not refer to oral narratives as being valuable only for filling a gap in the available historical record.

The correct answer is D.

39. Which of the following best describes the function of the last sentence of the passage?
- (A) It describes an event that historians view as crucial in recent women's history.
 - (B) It provides an example of how political rhetoric may influence the interpretations of experience reported in women's oral narratives.
 - (C) It provides an example of an oral narrative that inaccurately describes women's experience during a particular historical period.
 - (D) It illustrates the point that some women are more aware than others of the social forces that shape their oral narratives.
 - (E) It identifies the historical conditions that led to the social acceptance of women's paid work outside the home.

Evaluation

This question requires recognizing how a particular part of the passage is related to the overall reasoning in the passage. The first paragraph introduces a methodology and describes the methodology's appeal. The second paragraph then raises concerns about the use of the methodology, drawing attention to the cultural and historical bias that may be present in oral narratives. In line 21, the passage refers specifically to the influence *political rhetoric* may have on a woman's understanding of her experience. In the final sentence, the passage provides a specific hypothetical example of a woman at the time of the Second World War to illustrate this concern.

- A The last sentence employs a hypothetical example and does not describe a particular event as being important to historians.
- B Correct.** After contending that political rhetoric may influence oral narratives, the passage uses the example of the Second World War in the final sentence to support this claim.
- C The last sentence does not provide a particular example of an oral narrative.
- D The passage does not claim that some women are more aware than others of the social forces that may bear on them.
- E The passage does not claim that social conditions during the Second World War led to acceptance of women in the workplace.

The correct answer is B.

40. According to the passage, scholars of women's history should refrain from doing which of the following?
- (A) Relying on traditional historical sources when women's oral narratives are unavailable
 - (B) Focusing on the influence of political rhetoric on women's perceptions to the exclusion of other equally important factors
 - (C) Attempting to discover the cultural and historical factors that influence the stories women tell
 - (D) Assuming that the conventions of women's written autobiographies are similar to the conventions of women's oral narratives
 - (E) Accepting women's oral narratives less critically than they accept women's written histories

Inference

Answering this question requires recognizing which option is directly inferable from information in the passage. After describing in the first paragraph why oral narratives are appealing to historians, the passage begins the second paragraph by imploring scholars of women's history to *be as cautious about accepting oral narratives ... as ... written memories* (lines 12–14). The passage then goes on to describe potential bias in oral narratives, suggesting that scholars should be as critical of them as they are of written sources.

- A The passage does not claim that traditional historical sources should be avoided by scholars.
- B The passage mentions the influence of political rhetoric merely as one example of potential bias.
- C The passage suggests that scholars *should* attempt to be aware of cultural and historical factors.
- D The passage does not discuss the conventions of women's written autobiographies.
- E Correct.** The passage implies that written histories and oral narratives should receive the same level of critical scrutiny by scholars.

The correct answer is E.

41. According to the passage, each of the following is a difference between women's oral narratives and most standard histories EXCEPT:
- (A) Women's oral histories validate the significance of women's achievements.
 - (B) Women's oral histories depict experience from the point of view of women.
 - (C) Women's oral histories acknowledge the influence of well-known women.
 - (D) Women's oral histories present today's women with a sense of their historical relationship to women of the past.
 - (E) Women's oral histories are crucial to the collective identity of today's women.

Supporting ideas

This question asks for information that is stated in the passage, and it requires a process of elimination. In line 7, oral narratives are presented as being *unlike most standard histories*, and the passage then goes on in lines 7–11 to list characteristics of oral histories that most standard histories do not have. The answer to this question will therefore contain a characteristic of women's oral histories that is not described in lines 7–11.

- A The passage states that, unlike most standard histories, women's oral histories *affirm the importance of women's contributions* (lines 8–9).
- B The passage states that, unlike most standard histories, women's oral histories *represent experience from the perspective of women* (lines 7–8).
- C **Correct.** The passage does not mention the influence of well-known women on women's oral histories.
- D The passage states that, unlike most standard histories, women's oral histories *furnish present-day women with historical continuity* (lines 9–10).
- E The passage states that, unlike most standard histories, women's oral histories furnish a historical sense that is *essential to their identity, individually and collectively* (line 11).

The correct answer is C.

Questions 42–46 refer to the passage on page 376.

42. The author of the passage is primarily concerned with doing which of the following?
- (A) Recommending a methodology
 - (B) Describing a course of study
 - (C) Discussing a problem
 - (D) Evaluating a past course of action
 - (E) Responding to a criticism

Main idea

This question about the author's intent requires looking at the whole passage. The first paragraph introduces a problem unknown just a short time ago: an overabundance of materials. The second paragraph explains a complicating factor of this problem: the lack of reference works. A consideration of the passage as a whole shows that the author is most interested in discussing a problem.

- A A methodology is a system of principles and practices, or methods; no such system is recommended in this passage.
- B The author does not describe a particular course in Asian American studies, but rather points out a problem shared by all courses in the field.
- C **Correct.** The author discusses the problem created by the existence of too many materials and the nonexistence of easily usable reference works.
- D The author discusses a current situation, as the opening, *in recent years*, indicates.
- E If the author were responding to a criticism, the passage would likely cite the source of the criticism and discuss the basis of it; no such source is cited here.

The correct answer is C.

43. The “dilemma” mentioned in line 3 can best be characterized as being caused by the necessity to make a choice when faced with a
- (A) lack of acceptable alternatives
 - (B) lack of strict standards for evaluating alternatives
 - (C) preponderance of bad alternatives as compared to good
 - (D) multitude of different alternatives
 - (E) large number of alternatives that are nearly identical in content

Logical structure

This question asks the reader to consider the context in which the author uses the word *dilemma*. The first sentence establishes that this dilemma did not exist previously, *when hardly any texts ... were available*. The next sentence introduces the contrast to *today*, when so many excellent choices exist that it is difficult to select from among them.

- A As the second sentence makes clear, it is not a lack, but an abundance, of acceptable alternatives that creates the problem.
- B The context in which *dilemma* is used, the first two sentences, discusses a relative wealth of materials, not a lack of standards.
- C The author calls the anthologies *excellent* and does not describe any of the other materials in a negative light.
- D Correct.** Teachers face the dilemma of choosing from the wealth of materials listed in the second sentence.
- E The second sentence identifies four different kinds of materials, all with varying content: anthologies, introductory texts, books on individual nationality groups, and books on general issues.

The correct answer is D.

44. The passage suggests that the factor mentioned in lines 15–18 complicates professors' attempts to construct introductory reading lists for courses in Asian American studies in which of the following ways?
- (A) By making it difficult for professors to identify primary source material and to obtain standard information on Asian American history and culture
 - (B) By preventing professors from identifying excellent anthologies and introductory texts in the field that are both recent and understandable to students
 - (C) By preventing professors from adequately evaluating the quality of the numerous texts currently being published in the field
 - (D) By making it more necessary for professors to select readings for their courses that are not too challenging for students unfamiliar with Asian American history and culture
 - (E) By making it more likely that the readings professors assign to students in their courses will be drawn solely from primary sources

Inference

When a question asks what a passage *suggests* or *implies*, it is often necessary to look at more than one sentence or at sentences in different parts of the passage. The *complicating factor* cited at the beginning of the second paragraph is the lack of reference works. How this factor affects the way professors construct introductory reading lists is discussed in the final sentence of that paragraph. If students had good reference works to consult for *background information necessary to interpret difficult or unfamiliar material*, then their professors *might feel more free to include more challenging Asian American material in their introductory reading lists*. This sentence suggests that professors currently do not include challenging material on their reading lists because it is too difficult or unfamiliar for their students.

- A Identifying primary source material is not a problem; the author notes that there are *mountains* of it.
- B The lack of reference works does not prevent professors from identifying the recently published sources available in abundance to them; these sources are listed in the second sentence of the passage.
- C The author does not link the lack of reference materials to an inadequate evaluation of texts.
- D Correct.** Because students cannot easily find basic information that would be available to them in reference works, professors might be inclined to select readings that are not too challenging for students unfamiliar with Asian American history and culture.
- E If reference works were available, students would not have to consult so many primary sources to find basic information; the passage does not indicate that the professors use solely primary materials.

The correct answer is D.

45. The passage implies that which of the following was true of introductory courses in Asian American studies a few decades ago?

- (A) The range of different textbooks that could be assigned for such courses was extremely limited.
- (B) The texts assigned as readings in such courses were often not very challenging for students.
- (C) Students often complained about the texts assigned to them in such courses.
- (D) Such courses were offered only at schools whose libraries were rich in primary sources.
- (E) Such courses were the only means then available by which people in the United States could acquire knowledge of the field.

Inference

This question requires information that is implied rather than explicitly stated in the passage. The comparison of introductory courses in Asian American studies taught now with those taught a few decades ago is made in the first sentence, where the author notes that *in recent years*, teachers have faced a *dilemma nonexistent a few decades ago, when hardly any texts . . . were available*. From this sentence, it is reasonable to infer that a few decades ago, teachers of introductory courses in this field had few texts to choose from.

- A Correct.** Because *hardly any texts were available*, teachers of introductory courses had few choices when they assigned textbooks to students.
- B Currently, professors are prevented from assigning challenging works because students do not have reference works to consult for background information, but there is no indication about the difficulty of readings a few decades ago.
- C The passage provides no information about student response to the readings.
- D The passage does not discuss the primary-source materials available in school libraries.
- E The author does not claim that these introductory courses were the sole means of acquiring knowledge in this field.

The correct answer is A.

46. According to the passage, the existence of good one-volume reference works about Asian Americans could result in

- (A) increased agreement among professors of Asian American studies regarding the quality of the sources available in their field
- (B) an increase in the number of students signing up for introductory courses in Asian American studies
- (C) increased accuracy in writings that concern Asian American history and culture
- (D) the use of introductory texts about Asian American history and culture in courses outside the field of Asian American studies
- (E) the inclusion of a wider range of Asian American material in introductory reading lists in Asian American studies

Supporting ideas

The phrase *according to the passage* indicates that this question concerns information that is explicitly stated in the passage. In the second paragraph, the author identifies two related advantages that would result if good one-volume reference works existed in this field: (1) students would be able to look up basic information easily, and (2) professors would be able to assign more challenging texts because of the students' resulting access to information required to understand those texts. Thus, introductory reading lists could include a wider range of materials than they do presently.

- A The author neither indicates that reference works would promote a consensus of opinion on the quality of sources nor calls the quality of sources into question.
- B The author does not link the availability of reference works to the popularity of courses.
- C The author does not claim that the availability of reference works would increase accuracy in writing about the field.
- D The passage mentions that nonexperts, professors who teach in related fields, might also benefit from using reference works, but there is no indication that the existence of a good one-volume work would result in the use of introductory texts in Asian American studies outside the field.

- E Correct.** The existence of a good, easy-to-use reference work would allow professors to include a greater range of materials, including those that are more challenging, in their introductory reading lists.

The correct answer is E.

Questions 47–49 refer to the passage on page 378.

47. The passage suggests that combing and carding differ from weaving in that combing and carding were
- (A) low-skill jobs performed primarily by women employees
 - (B) low-skill jobs that were not performed in the home
 - (C) low-skill jobs performed by both male and female employees
 - (D) high-skill jobs performed outside the home
 - (E) high-skill jobs performed by both male and female employees

Inference

Since the question uses the word *suggests*, the answer is probably not directly stated in the passage and therefore has to be inferred. How was weaving different from carding and combing? Lines 16–17 discuss weaving, combing, and carding; all three activities are characterized as low-skill jobs. As the human capital theory notes, there was a concentration of women in certain low-skill occupations because they *could be carried out in the home* (lines 19–20); weaving was one such occupation. Since the passage implies that relatively few women worked in carding and combing, these jobs presumably could *not* be carried out in the home. Thus the passage suggests that carding and combing were low-skill jobs, mostly done by men working outside the home.

- A Lines 15–17 imply that women predominated in weaving but that carding and combing were done mainly by men.
- B Correct.** Carding and combing, unlike weaving, could not be done at home.

- C The passage suggests that weaving, carding, and combing were all low-skill jobs done by both men and women, although the concentrations of the genders in these jobs were different; this statement does not explain how the passage suggests that *combing and carding differ from weaving*.
- D Lines 16–17 characterize all three jobs as low-skill.
- E Lines 16–17 characterize all three jobs as low-skill.

The correct answer is B.

48. Which of the following, if true, would most weaken the explanation provided by the human capital theory for women's concentration in certain occupations in seventeenth-century Florence?
- (A) Women were unlikely to work outside the home even in occupations whose hours were flexible enough to allow women to accommodate domestic tasks as well as paid labor.
 - (B) Parents were less likely to teach occupational skills to their daughters than they were to their sons.
 - (C) Women's participation in the Florentine paid labor force grew steadily throughout the sixteenth and seventeenth centuries.
 - (D) The vast majority of female weavers in the Florentine wool industry had children.
 - (E) Few women worked as weavers in the Florentine silk industry, which was devoted to making cloths that required a high degree of skill to produce.

Logical structure

To answer this question, examine the logic of the explanation. How does the human capital theory explain women's concentration in certain occupations? The theory says that women's roles in childbearing made it difficult for them to acquire the skills needed in high-skill jobs. Moreover, their role in child rearing made them choose occupations that could be carried out at home. Evidence against either of these points will weaken the explanation.

- A **Correct.** If women of that time were generally unlikely to take any jobs outside the home, even those that allowed them to handle their domestic tasks, then these tasks are not the reason women predominated in jobs that they could do within the home, as the human capital theory posits.
- B Different levels of teaching by parents may help perpetuate job segregation, but this is quite consistent with the socially defined role that women then had as childbearers and child rearers and the explanation provided by the human capital theory.
- C The growth of women's participation in the paid labor force does not affect the explanation of occupational concentrations provided by the human capital theory.
- D The explanation suggests the women chose weaving because they had children to raise at home. The fact that the majority of weavers had children actually supports, rather than weakens, the explanation.
- E Silk weaving was a high-skill job, exactly the kind of job that women would not have in the human capital explanation. This point supports, rather than weakens, the explanation.

The correct answer is A.

49. The author of the passage would be most likely to describe the explanation provided by the human capital theory for the high concentration of women in certain occupations in the seventeenth-century Florentine textile industry as
- (A) well founded though incomplete
 - (B) difficult to articulate
 - (C) plausible but poorly substantiated
 - (D) seriously flawed
 - (E) contrary to recent research

Logical structure

This question requires an evaluation of the author's point of view. What does the author think of the human capital explanation of women's occupational concentration in the Florentine textile industry? In line 5, the author characterizes the theory as *useful*, a positive word reflecting a positive evaluation. However, the entire second paragraph is devoted to examining *differences in pay scales that cannot be explained by the human capital theory*. The author's positive view of the theory is qualified by the theory's inability to explain an important point.

- A **Correct.** This statement reflects the author's generally positive evaluation, as well as concerns about insufficiencies.
- B The author articulates the theory without difficulty and does not criticize it as difficult to articulate.
- C To substantiate the theory means to provide evidence that verifies the theory. The author regards the theory's explanations of high concentration of women in certain occupations as sound, and so is unlikely to regard the theory as *poorly substantiated*.
- D If the author regarded the theory as *seriously flawed*, the passage would not describe it as *useful* (see line 5).
- E The author does not mention recent research.

The correct answer is A.

Questions 50–56 refer to the passage on page 380.

50. The primary purpose of the passage is to
- (A) present the results of statistical analyses and propose further studies
 - (B) explain a recent development and predict its eventual consequences
 - (C) identify the reasons for a trend and recommend measures to address it
 - (D) outline several theories about a phenomenon and advocate one of them
 - (E) describe the potential consequences of implementing a new policy and argue in favor of that policy

Main idea

Understanding the author's purpose comes from a careful consideration of the whole passage. The author begins by noting one explanation for the rise in temporary employment, but dismisses it, finding another explanation more likely. The author closes the passage by making specific recommendations to counter the problems caused by temporary employment.

- A The author uses statistical analyses as the basis of an explanation, but the analyses act only as support for the larger purpose of explaining a trend; no further studies are proposed.
- B The author explores possible reasons for a recent development but recommends ways to curb or change that development; the author does not predict the consequences if the situation is left unchanged or the recommendations unmet.
- C **Correct.** The author examines possible reasons for the rise in temporary employment and makes specific recommendations to change the current situation.
- D The use of the phrase *several theories* is enough to make this inaccurate. Two types of explanation are suggested: employee preference or employer self-interest.
- E The author makes recommendations but provides no arguments in support of those recommendations—merely suggesting that they are aimed at discouraging employers from creating too many temporary positions.

The correct answer is C.

51. According to the passage, which of the following is true of the “factors affecting employers” that are mentioned in lines 10–19?
- (A) Most experts cite them as having initiated the growth in temporary employment that occurred during the 1980s.
 - (B) They may account for the increase in the total number of temporary workers during the 1980s.

- (C) They were less important than demographic change in accounting for the increase of temporary employment during the 1980s.
- (D) They included a sharp increase in the cost of labor during the 1980s.
- (E) They are more difficult to account for than are other factors involved in the growth of temporary employment during the 1980s.

Supporting idea

This question is based on information explicitly stated in lines 10–12. The statistical analyses *suggest that factors affecting employers account for the rise in temporary employment.*

- A *Some observers* attribute the rise to the composition of the workforce; the passage does not identify what most experts believe.
- B **Correct.** The factors affecting employers may explain the rise in temporary employment.
- C The passage suggests that these factors were more important than demographic changes in explaining the rise.
- D Although there is some suggestion in lines 15–16 that employers at some point experienced difficulty from the cost of labor, the passage does not suggest that a sharp increase in that cost occurred in the 1980s—and even suggests that labor costs may have decreased because of labor's reduced bargaining strength.
- E The issue of how to *account for* those factors (i.e., explain why they occurred) is not raised in the passage—so the issue of whether those factors are more difficult to account for than other factors is not raised.

The correct answer is B.

52. The passage suggests which of the following about the use of temporary employment by firms during the 1980s?
- (A) It enabled firms to deal with fluctuating product demand far more efficiently than they did before the 1980s.
 - (B) It increased as a result of increased participation in the workforce by certain demographic groups.
 - (C) It was discouraged by government-mandated policies.
 - (D) It was a response to preferences indicated by certain employees for more flexible working arrangements.
 - (E) It increased partly as a result of workers' reduced ability to control the terms of their employment.

Inference

Since the word *suggests* is used in the question, the answer is probably not directly stated in the passage and therefore has to be inferred. The author believes that the rise in temporary employment during the 1980s can be explained by two factors affecting employers: *product demand* and *labor's reduced bargaining strength*. Temporary employment allows employers to adapt their workforce to the fluctuating demand for their product. At this time, *labor's reduced bargaining strength* left employers, not workers, in greater control of the terms of employment.

- A This goes too far beyond the information provided in the passage. The passage neither says nor implies anything about efficiency levels before the 1980s.
- B The author says that *demographic changes in the workforce did not correlate with variations in the total number of temporary workers*, ruling out this explanation.
- C In 1992, the author recommended government-mandated policies because they did not exist.
- D The author says that *growth in temporary employment now far exceeds the level explainable by ... groups said to prefer temporary jobs*.
- E **Correct.** *Labor's reduced bargaining power* resulted in employers' increased control over the terms of employment.

The correct answer is E.

53. The passage suggests which of the following about the workers who took temporary jobs during the 1980s?
- (A) Their jobs frequently led to permanent positions within firms.
 - (B) They constituted a less demographically diverse group than has been suggested.
 - (C) They were occasionally involved in actions organized by labor unions.
 - (D) Their pay declined during the decade in comparison with the pay of permanent employees.
 - (E) They did not necessarily prefer temporary employment to permanent employment.

Inference

The question's use of the word *suggests* indicates that the answer is probably not directly stated in the passage. The author says that the rise in temporary employment *now far exceeds the level explainable by recent workforce entry rates of groups said to prefer temporary jobs*. Thus, the number of workers employed on a temporary basis is far greater than the number of workers who actually do prefer temporary employment.

- A No evidence is presented that temporary jobs led to permanent positions.
- B The passage grants that there was *increased participation in the workforce by certain groups, such as first-time or reentering workers*. This suggests more rather than less demographic diversity.
- C The role of temporary workers in labor unions is not discussed.
- D The passage does suggest that the pay of temporary workers is less than that of permanent workers, but not that the pay of temporary workers *declined*.
- E **Correct.** The passage indicates that the number of workers in temporary jobs was higher than the number of workers who stated a preference for temporary work.

The correct answer is E.

54. The first sentence in the passage suggests that the “observers” mentioned in line 1 would be most likely to predict which of the following?
- (A) That the number of new temporary positions would decline as fewer workers who preferred temporary employment entered the workforce
 - (B) That the total number of temporary positions would increase as fewer workers were able to find permanent positions
 - (C) That employers would have less control over the terms of workers’ employment as workers increased their bargaining strength
 - (D) That more workers would be hired for temporary positions as product demand increased
 - (E) That the number of workers taking temporary positions would increase as more workers in any given demographic group entered the workforce

Application

These observers specifically attribute the growth of temporary employment to *increased participation in the workforce by certain groups ... who supposedly prefer such arrangements*. On the basis of the passage’s first sentence, any prediction these observers might make must be about the relation between the number of workers in temporary employment and the preference of these workers for temporary employment. No other issue is discussed. A rise in temporary employment could be explained only by a rise in the number of new workers who prefer temporary jobs, and a decline in temporary employment only by a decline in the number of new workers who prefer temporary work.

- A **Correct.** By this rationale, the only reason for a decline in temporary employment would be a corresponding decline in the number of new workers who preferred temporary jobs.
- B According to the observers, temporary employment would increase only if a greater number of employers who preferred temporary jobs entered the workforce.
- C These observers are not said to consider control over the terms of employment.

- D These observers are not said to consider the relationship between product demand and temporary employment.
- E The number of workers taking temporary positions would rise only if they were composed of *certain groups, such as first-time or reentering workers*, who, the observers believe, prefer temporary work.

The correct answer is A.

55. In the context of the passage, the word “excessive” (line 23) most closely corresponds to which of the following phrases?
- (A) Far more than can be justified by worker preferences
 - (B) Far more than can be explained by fluctuations in product demand
 - (C) Far more than can be beneficial to the success of the firms themselves
 - (D) Far more than can be accounted for by an expanding national economy
 - (E) Far more than can be attributed to increases in the total number of people in the workforce

Logical structure

In its context in this passage, the word *excessive* indicates a value-judgment by the author. The author recommends that firms be *discouraged from creating excessive numbers of temporary positions* on the basis of the statistical analyses, which show that the rise in temporary employment *now far exceeds the level explainable by recent workforce entry rates of groups said to prefer temporary jobs*. In the context of lines 24–31, it is clear that the author believes that the large expansion in temporary employment exclusively serves employer interests at the expense of employee interests (including their preferences), and is, for that reason, excessive.

- A **Correct.** An expansion of temporary employment that serves employer interests more than it serves employee interests (such as preferences) is considered by the author to be *excessive*.
- B It is not because the expansion in temporary employment allows employers to respond to fluctuations in product demand that the author regards the expansion as *excessive*.
- C The relation of temporary employment to the success of firms is not discussed.
- D The relation of temporary employment to an expanding economy is not discussed.
- E The author does not consider the issue of overall increases in the workforce as a whole, only the issue of increases in temporary employment.

The correct answer is A.

56. The passage mentions each of the following as an appropriate kind of governmental action EXCEPT
- (A) getting firms to offer temporary employment primarily to a certain group of people
 - (B) encouraging equitable pay for temporary and permanent employees
 - (C) facilitating the organization of temporary workers by labor unions
 - (D) establishing guidelines on the proportion of temporary workers that firms should employ
 - (E) ensuring that temporary workers obtain benefits from their employers

Supporting ideas

The author closes the passage with a list of specific recommendations. Check that list against the possible answers. By the process of elimination, choose the one recommendation the author does not make. The author recommends that government policymakers consider: 1) *mandating benefit coverage for temporary employees*, 2) *promoting pay equity between temporary and permanent workers*, 3) *assisting labor unions in organizing temporary workers*, and 4) *encouraging firms to assign temporary jobs primarily to employees who explicitly indicate that preference*.

- A The author does recommend that firms assign temporary jobs to workers who prefer temporary work.
- B The author does recommend that pay equity between temporary and permanent workers be encouraged.
- C The author does recommend that labor unions be assisted in organizing temporary workers.
- D **Correct.** The author does not recommend that such guidelines be established.
- E The author does recommend that benefit coverage for temporary workers be mandated.

The correct answer is D.

Questions 57–63 refer to the passage on page 382.

57. According to the passage, which of the following was true of the treaty establishing the Fort Belknap Indian Reservation?
- (A) It was challenged in the Supreme Court a number of times.
 - (B) It was rescinded by the federal government, an action that gave rise to the *Winters* case.
 - (C) It cited American Indians' traditional use of the land's resources.
 - (D) It failed to mention water rights to be enjoyed by the reservation's inhabitants.
 - (E) It was modified by the Supreme Court in *Arizona v. California*.

Supporting ideas

This question requires recognizing information that is explicitly stated in the passage. In the first sentence, the passage states that the Fort Belknap Indian Reservation was established by treaty. The following sentence begins by stating that this treaty *did not mention water rights* (lines 5–6); in other words, the right to use the water flowing through the reservation was not established by treaty.

- A Although the Supreme Court ruled on water rights for the reservation established by the treaty, there is no evidence in the passage that the treaty itself was ever challenged in the Supreme Court.
- B Although the *Winters* case resulted in water rights for the reservation established by the treaty, there is no evidence in the passage that the treaty was ever rescinded.
- C The passage does not mention American Indians' traditional resource use as being tied to the treaty establishing the Fort Belknap Indian Reservation.
- D **Correct.** The passage states explicitly that the treaty establishing the Fort Belknap Indian Reservation did not mention the right to use water flowing through the reservation.
- E The passage does not mention the Fort Belknap Indian Reservation or the treaty that established it in relation to *Arizona v. California*.

The correct answer is D.

58. The passage suggests that, if the criteria discussed in lines 10–20 were the only criteria for establishing a reservation's water rights, which of the following would be true?
- (A) The water rights of the inhabitants of the Fort Belknap Indian Reservation would not take precedence over those of other citizens.
 - (B) Reservations established before 1848 would be judged to have no water rights.
 - (C) There would be no legal basis for the water rights of the Rio Grande pueblos.
 - (D) Reservations other than American Indian reservations could not be created with reserved water rights.
 - (E) Treaties establishing reservations would have to mention water rights explicitly in order to reserve water for a particular purpose.

Inference

Answering this question requires making an inference based on information given in the passage. The question focuses on lines 10–20, where the passage provides a summary of the criteria used by the U.S. courts to establish water rights. The passage then explains that the Rio Grande pueblos used other means to establish water rights, noting that what *constitutes an American Indian reservation is a question of practice, not of legal definition* (lines 34–36). This strongly implies that establishing water rights for the Rio Grande pueblos required reference to legal language not contained in the criteria described in lines 10–20.

- A Since the passage says that decisions setting the criteria in lines 10–20 cited the *Winters* case—which gave water rights to the Fort Belknap Indian Reservation—one can infer that the Fort Belknap reservation met all of those criteria.
- B The criteria in lines 10–20 do not touch on specific dates of the transfer of sovereignty over particular lands.
- C **Correct.** The passage demonstrates that for the Rio Grande pueblos, it was necessary to establish water rights based on criteria not contained in lines 10–20.
- D The criteria described in lines 10–20 are not specific only to lands reserved for American Indians.
- E The passage illustrates that *Winters* established water rights in the absence of any explicit mention of water rights in the treaty.

The correct answer is C.

59. Which of the following most accurately summarizes the relationship between *Arizona v. California* in lines 38–42, and the criteria citing the *Winters* doctrine in lines 10–20?
- (A) *Arizona v. California* abolishes these criteria and establishes a competing set of criteria for applying the *Winters* doctrine.
 - (B) *Arizona v. California* establishes that the *Winters* doctrine applies to a broader range of situations than those defined by these criteria.
 - (C) *Arizona v. California* represents the sole example of an exception to the criteria as they were set forth in the *Winters* doctrine.
 - (D) *Arizona v. California* does not refer to the *Winters* doctrine to justify water rights, whereas these criteria do rely on the *Winters* doctrine.
 - (E) *Arizona v. California* applies the criteria derived from the *Winters* doctrine only to federal lands other than American Indian reservations.

Inference

This question requires inferring how one part of the passage bears on another part of the passage. The two parts referred to are the criteria described in lines 10–20 and *Arizona v. California*, which is referred to in lines 38–45. *Arizona v. California* shows that the establishment of water rights need not be tied to any previous legal definition of reservation lands but may be tied to the U.S. government's practice merely of treating the land as reserved for American Indians. The criteria described in lines 10–20 apply to situations in which the land in question has been legally identified as reservation land. So *Arizona v. California* broadened the scope of *Winters* in establishing water rights.

- A The passage illustrates that *Arizona v. California* does not supersede or deny any of the criteria in lines 10–20.
- B Correct.** The passage suggests that *practice* and not *legal definition* (lines 34–36) allows *Winters* to be applied to situations not covered by the criteria in lines 10–20.
- C In stating that *some American Indian tribes have also established water rights* by means other than the criteria in lines 10–20, the first sentence of the second paragraph makes clear that *Arizona v. California* is not the sole exception to the criteria.

- D The passage states that *Arizona v. California* does refer to *Winters*.
- E The passage illustrates that *Arizona v. California* was directly relevant to the Pueblo Indians' water rights.

The correct answer is B.

60. The “pragmatic approach” mentioned in lines 37–38 of the passage is best defined as one that
- (A) grants recognition to reservations that were never formally established but that have traditionally been treated as such
 - (B) determines the water rights of all citizens in a particular region by examining the actual history of water usage in that region
 - (C) gives federal courts the right to reserve water along with land even when it is clear that the government originally intended to reserve only the land
 - (D) bases the decision to recognize the legal rights of a group on the practical effect such a recognition is likely to have on other citizens
 - (E) dictates that courts ignore precedents set by such cases as *Winters v. United States* in deciding what water rights belong to reserved land

Supporting ideas

This question requires recognizing what a particular phrase in the passage is referring to. The pragmatic approach the question refers to is introduced by the passage as *this* pragmatic approach. It is therefore necessary to identify which approach the passage has already referred to in this context, which in this case is contained in the sentence just prior to the reference. This sentence states that establishing what is an American Indian reservation is a matter of the U.S. government's practice and not of any formal, legal definition.

- A Correct.** The approach referred to as *pragmatic* involves establishing American Indian reservations based not on formal law but on the government's established practice of treating the lands as such.
- B The approach referred to as *pragmatic* is not specific to establishing water rights.

- C The approach referred to as *pragmatic* is not specific to establishing water rights.
- D The approach referred to as *pragmatic* does not refer to balancing the rights of some people with rights of others.
- E The approach referred to as *pragmatic* is shown to be consistent with and supportive of the rights established by *Winters*.

The correct answer is A.

61. The author cites the fact that the Rio Grande pueblos were never formally withdrawn from public lands primarily in order to do which of the following?
- (A) Suggest why it might have been argued that the *Winters* doctrine ought not to apply to pueblo lands
 - (B) Imply that the United States never really acquired sovereignty over pueblo lands
 - (C) Argue that the pueblo lands ought still to be considered part of federal public lands
 - (D) Support the argument that the water rights of citizens other than American Indians are limited by the *Winters* doctrine
 - (E) Suggest that federal courts cannot claim jurisdiction over cases disputing the traditional diversion and use of water by Pueblo Indians

Evaluation

Answering this question involves recognizing how a particular part of the passage functions within the passage as a whole. The passage illustrates in the first paragraph that *Winters* was cited in the establishment of water rights based on a set of criteria that included the formal withdrawal of lands by the government. In the second paragraph, the case of the Rio Grande pueblos is introduced as an example of lands that had never been formally withdrawn by the government, raising the question of whether *Winters* would still be applicable in such situations. The passage then asserts that the situation of the pueblos *has not barred* (line 33) the application of *Winters*.

- A **Correct.** While the passage affirms the application of *Winters* to the situation with the pueblos, it recognizes that it may initially appear that *Winters* does not apply.
- B The passage states explicitly that the United States did gain official sovereignty over pueblo lands in 1848, when they *became part of the United States* (lines 27–28).
- C The passage states explicitly that *the pueblo lands never formally constituted a part of federal public lands* (lines 28–29) and takes no stand on the issue of whether particular lands ought to be considered public lands.
- D While one can infer that the rights of other citizens to use water could be limited by reserving water rights for residents of American Indian lands according to the *Winters* doctrine, the passage takes no stand on this issue.
- E The passage does not mention the rights of federal courts to claim jurisdiction over particular water rights cases.

The correct answer is A.

62. The primary purpose of the passage is to
- (A) trace the development of laws establishing American Indian reservations
 - (B) explain the legal bases for the water rights of American Indian tribes
 - (C) question the legal criteria often used to determine the water rights of American Indian tribes
 - (D) discuss evidence establishing the earliest date at which the federal government recognized the water rights of American Indians
 - (E) point out a legal distinction between different types of American Indian reservations

Main idea

This question requires recognizing the main topic of the passage, which is about the establishment of water rights on American Indian lands. Its intent is to explain or describe, and it does not take sides on any issue.

- A The passage is primarily about establishing water rights, not establishing reservations.
- B Correct.** The passage is an explanation of water rights on American Indian lands.
- C The passage describes legal criteria used to establish water rights on American Indian lands but does not take issue with them.
- D The passage does not discuss the earliest date for water rights on American Indian lands.
- E The passage is primarily about establishing water rights, not about types of reservations.

The correct answer is B.

63. The passage suggests that the legal rights of citizens other than American Indians to the use of water flowing into the Rio Grande pueblos are
- (A) guaranteed by the precedent set in *Arizona v. California*
 - (B) abolished by the *Winters* doctrine
 - (C) deferred to the Pueblo Indians whenever treaties explicitly require this
 - (D) guaranteed by federal land-use laws
 - (E) limited by the prior claims of the Pueblo Indians

Inference

Answering this question requires recognizing what the passage implies. The passage illustrates at the beginning of the second paragraph that water rights were granted to Pueblo Indians based on their use of the water in the Rio Grande pueblos prior to U.S. sovereignty. The passage also later states that since the *Winters* doctrine applies, the water rights of Pueblo Indians *have priority over other citizens' water rights as of 1848* (lines 42–44), which implies that the water rights of citizens other than Pueblo Indians are limited.

- A The passage illustrates that *Arizona v. California* reinforced the water rights of citizens residing on American Indian

reservations; it does not imply a precedent ensuring water rights for other citizens.

- B The passage states that the water rights of citizens other than Pueblo Indians are lower in priority, not abolished altogether.
- C The passage does not mention that different water rights have been defined by different treaties.
- D The passage does not mention that the water rights of citizens other than Pueblo Indians are guaranteed on pueblo lands.
- E Correct.** The passage states that the water rights of Pueblo Indians have priority over other citizens' water rights, which thereby limits the rights of those citizens.

The correct answer is E.

Questions 64–69 refer to the passage on page 384.

64. The passage is chiefly concerned with
- (A) arguing against the increased internationalization of United States corporations
 - (B) warning that the application of laws affecting trade frequently has unintended consequences
 - (C) demonstrating that foreign-based firms receive more subsidies from their governments than United States firms receive from the United States government
 - (D) advocating the use of trade restrictions for “dumped” products but not for other imports
 - (E) recommending a uniform method for handling claims of unfair trade practices

Main idea

To answer this question, consider the passage as a whole. In the first sentence, the author sets off *unfortunately* in commas, drawing attention to the author's attitude about companies that seek legal protection from imports. In the next paragraph, the author says, *this quest for import relief has hurt more companies than it has helped*. The third paragraph creates a hypothetical situation to show how import relief might hurt American companies, and the last paragraph shows the actual, unintended, and unfortunate consequences of import relief laws.

- A Internationalization is accepted as a given (lines 16–18); no argument is made against it.
- B Correct.** The author warns that American companies seeking relief from imports may suffer unexpected adverse consequences when the laws are applied to them.
- C The author does not make this comparison.
- D The author does not make this recommendation.
- E The author makes no recommendation but simply describes actual and possible consequences.

The correct answer is B.

65. It can be inferred from the passage that the minimal basis for a complaint to the International Trade Commission is which of the following?
- (A) A foreign competitor has received a subsidy from a foreign government.
 - (B) A foreign competitor has substantially increased the volume of products shipped to the United States.
 - (C) A foreign competitor is selling products in the United States at less than fair market value.
 - (D) The company requesting import relief has been injured by the sale of imports in the United States.
 - (E) The company requesting import relief has been barred from exporting products to the country of its foreign competitor.

Inference

To make an inference about the minimal basis for a complaint, read what the passage says about complaints. The first paragraph describes two specific kinds of complaints the International Trade Commission (ITC) has received: *damage from imports that benefit from subsidies by foreign governments* and *damage from imports dumped at less than fair value*. The author contends that companies would complain even without any specific basis. In the current climate promoting import relief, *the simple claim that an industry has been injured by imports is sufficient grounds to seek relief*. Complaints are reviewed even when the complaining firm does not allege that dumping occurred—simply that the imports damaged its competitiveness.

- A This specific complaint is explicitly referred to in lines 4–7, but there is no suggestion that it is the minimal basis.
- B The scenario of a large increase in exports is not discussed in the passage.
- C This specific complaint is explicitly referred to in lines 8–10, but there is no suggestion that it is the minimal basis.
- D Correct.** Lines 10–13 show that merely claiming to be injured by imports is enough for a company *to seek relief*, that is, to complain to the ITC.
- E This possibility is not discussed in the passage.

The correct answer is D.

66. The last paragraph performs which of the following functions in the passage?
- (A) It summarizes the discussion thus far and suggests additional areas for research.
 - (B) It presents a recommendation based on the evidence presented earlier.
 - (C) It discusses an exceptional case in which the results expected by the author of the passage were not obtained.
 - (D) It introduces an additional area of concern not mentioned earlier.
 - (E) It cites a specific case that illustrates a problem presented more generally in the previous paragraph.

Logical structure

The first sentence of the last paragraph identifies its function when it introduces *the most brazen case*; this is a paragraph that will give an example. To discover what this *most brazen case* exemplifies, go back to the previous paragraph, where lines 22–25 provide a general statement about the danger of import laws being used against the companies the laws are supposed to protect. The last paragraph offers a specific example of the problem that is treated generally and hypothetically in the third paragraph.

- A It gives an example; it does not summarize.
- B It presents a specific case, not a recommendation.
- C It does discuss an exceptional case, but the author is using the case to illustrate consequences that the passage has already predicted could occur.
- D The last paragraph is discussing the same *area of concern* as the one discussed in the rest of the passage.
- E **Correct.** A potential danger of import laws, discussed hypothetically in the third paragraph, is illustrated by an actual case in the final paragraph.

The correct answer is E.

67. The passage warns of which of the following dangers?
- (A) Companies in the United States may receive no protection from imports unless they actively seek protection from import competition.
 - (B) Companies that seek legal protection from import competition may incur legal costs that far exceed any possible gain.
 - (C) Companies that are United States owned but operate internationally may not be eligible for protection from import competition under the laws of the countries in which their plants operate.
 - (D) Companies that are not United States owned may seek legal protection from import competition under United States import relief laws.
 - (E) Companies in the United States that import raw materials may have to pay duties on those materials.

Supporting ideas

The passage as a whole warns against the potential dangers of import laws. Specifically, it points in lines 22–25 to *the danger that foreign companies will use import relief laws against the very companies the laws were designed to protect*. This specific danger is discussed at length in the third and fourth paragraphs.

- A The passage does not discuss this situation.
- B The passage does not discuss this situation.
- C The passage does not discuss this situation.

- D **Correct.** Foreign companies with operations in the United States may use the import relief laws to the detriment of American companies that have operations outside the United States.
- E The passage does not discuss this situation.

The correct answer is D.

68. The passage suggests that which of the following is most likely to be true of United States trade laws?
- (A) They will eliminate the practice of “dumping” products in the United States.
 - (B) They will enable manufacturers in the United States to compete more profitably outside the United States.
 - (C) They will affect United States trade with Canada more negatively than trade with other nations.
 - (D) Those that help one unit within a parent company will not necessarily help other units in the company.
 - (E) Those that are applied to international companies will accomplish their intended result.

Inference

The use of *suggests* indicates that the answer is probably not directly stated in the passage. The second paragraph explains that global operations increase the complexity of a corporation’s relationships, and this *intricate web of relationships makes it unlikely that a system of import relief laws will meet the strategic needs of all the units under the same parent company*. This statement leads the reader to infer that the trade laws may help one unit within a parent company, but not necessarily others.

- A The passage does not suggest that *dumping* will be eliminated.
- B The passage does not discuss this alternative.
- C The passage offers no evidence—even in its final paragraph—to support this inference.
- D **Correct.** The passage conveys this information in other words.
- E Lines 22–25 contend the reverse: Internationalization increases the likelihood that invoking import laws will have unintended consequences.

The correct answer is D.

69. It can be inferred from the passage that the author believes which of the following about the complaint mentioned in the last paragraph?
- (A) The ITC acted unfairly toward the complainant in its investigation.
 - (B) The complaint violated the intent of import relief laws.
 - (C) The response of the ITC to the complaint provided suitable relief from unfair trade practices to the complainant.
 - (D) The ITC did not have access to appropriate information concerning the case.
 - (E) Each of the companies involved in the complaint acted in its own best interest.

Inference

An inference requires going beyond the material explicitly stated in the passage. Reread the last paragraph to see what the author says about that specific complaint. In that case, a foreign competitor with American operations was seeking relief in these laws: *The bizarre aspect of the complaint was that a foreign conglomerate ... was crying for help against a United States company.* The first sentence of the passage suggests that the author believes firms in the United States are making excessive use of trade-protection law. It does not suggest that the author opposes all trade-protection law—only that the laws should be used prudently, and in a manner consistent with their intended purpose. Lines 22–25 suggest that the author believes import relief laws are supposed to be protecting American companies from foreign competitors. The reader can infer that the author believes that the intent of these laws—the protection of American companies—is violated in the example described in the final paragraph.

- A The passage gives no information about how the ITC acted.
- B Correct.** The author believes that the laws are supposed to protect American companies; the author's point in the final paragraph is that a foreign company may in fact invoke those laws against an American company.

- C The passage does not reveal the ITC's response to the complaint.
- D The passage does not discuss the ITC's access to information.
- E The inference concerns what the author thinks about the complaint itself rather than about the motivation of the companies.

The correct answer is B.

Questions 70–75 refer to the passage on page 386.

70. In the passage, the author is primarily interested in
- (A) suggesting an alternative to an outdated research method
 - (B) introducing a new research method that calls an accepted theory into question
 - (C) emphasizing the instability of data gathered from the application of a new scientific method
 - (D) presenting a theory and describing a new method to test that theory
 - (E) initiating a debate about a widely accepted theory

Main idea

This question concerns the main point of the passage. A careful examination of the overall structure of the passage will reveal the main point. In the first paragraph, the author briefly presents Milankovitch's theory and explains why it could not be tested early on. In the second and third paragraphs, the author describes how a new method allows testing of the theory and shows how evidence from the testing supports the theory. While the final paragraph acknowledges that other factors should be considered, the author's primary interest in this passage is in presenting Milankovitch's theory and the recently discovered method for testing it.

- A A new research method is described, but no previous method is discussed.
- B As described in the passage, the new method tests and confirms the theory; there is no mention that the theory is accepted or that the method casts doubt on it.
- C Nothing in the passage suggests that “instability of data” is an issue.
- D Correct.** The author presents Milankovitch’s theory and describes the oxygen isotope method of testing it.
- E The theory is nowhere said to be “widely accepted” and the author does not debate the theory.

The correct answer is D.

71. The author of the passage would be most likely to agree with which of the following statements about the Milankovitch theory?
- (A) It is the only possible explanation for the ice ages.
 - (B) It is too limited to provide a plausible explanation for the ice ages, despite recent research findings.
 - (C) It cannot be tested and confirmed until further research on volcanic activity is done.
 - (D) It is one plausible explanation, though not the only one, for the ice ages.
 - (E) It is not a plausible explanation for the ice ages, although it has opened up promising possibilities for future research.

Application

The author’s reaction to the statements about the Milankovitch theory must be based on how the author treats the theory in the passage. The first, second, and third paragraphs describe the theory and the use of a new research method to test the theory. The passage states that data from these tests *have established a strong connection between variations in the Earth’s orbit and the periodicity of the ice ages*, suggesting that the author of the passage believes the theory is plausible. In the final paragraph, the author points to other factors that might be involved, suggesting that the theory might not provide a complete explanation.

- A In the last paragraph, the author suggests that because there are still other untested factors that may have effects on climate, other explanations are possible.
- B Though in the last paragraph the author points to other factors that may be involved, these are not presented by the author as indicating limitations that diminish the plausibility of the theory—they are acknowledged merely as possibilities that are not now understood—and nothing else in the passage suggests that the theory is “too limited.”
- C The author shows how the theory has been tested; volcanic activity is not part of this theory.
- D Correct.** The author’s presentation of the theory and the tests of the theory show that the author finds the theory plausible; the mention of other factors shows the author does not think that all other explanations have been ruled out, even if they are as yet untested.
- E The theory was a plausible explanation from its beginning, but it was not testable until recently; scientists would be unlikely to try to devise means to test a theory that did not strike them as antecedently plausible.

The correct answer is D.

72. It can be inferred from the passage that the isotope record taken from ocean sediments would be less useful to researchers if which of the following were true?
- (A) It indicated that lighter isotopes of oxygen predominated at certain times.
 - (B) It had far more gaps in its sequence than the record taken from rocks on land.
 - (C) It indicated that climate shifts did not occur every 100,000 years.
 - (D) It indicated that the ratios of oxygen 16 and oxygen 18 in ocean water were not consistent with those found in fresh water.
 - (E) It stretched back for only a million years.

Inference

To make an inference about the isotope record from ocean sediments, examine what the passage says about that record. The third paragraph discusses that record and lists its two advantages. First, it is a global record with *remarkably little variation* in samples from varied locations. Second, it is *more continuous* than the record from rocks. If either of these advantages were not true, then it is logical to infer that the record would be less useful.

- A According to lines 14–16, the lighter isotope does predominate; this is part of the record and does not affect its usefulness.
- B Correct.** In lines 37–42, the author states that an advantage of the ocean record is that it is *a more continuous record than that taken from rocks on land*. If this were not true, the ocean record would be less useful.
- C If the record were to show that the shifts did not occur every 100,000 years, Milankovitch's theory would be weakened. This impact on the theory does not make the isotope record less useful to researchers. The record is useful precisely because it can offer evidence to confirm or refute such theories.
- D This inconsistency would not affect the usefulness of the ocean-water record. Researchers would simply need to accommodate the fresh-water inconsistency.
- E The record would still be useful. Lines 42–46 attest to the establishment of a pattern based on data from *the past several hundred thousand years*.

The correct answer is B.

73. According to the passage, which of the following is true of the ratios of oxygen isotopes in ocean sediments?
- (A) They indicate that sediments found during an ice age contain more calcium carbonate than sediments formed at other times.
 - (B) They are less reliable than the evidence from rocks on land in determining the volume of land ice.

- (C) They can be used to deduce the relative volume of land ice that was present when the sediment was laid down.
- (D) They are more unpredictable during an ice age than in other climatic conditions.
- (E) They can be used to determine atmospheric conditions at various times in the past.

Supporting ideas

The phrase *according to the passage* suggests that the answer to the question is most likely stated in the passage. Lines 12–14 state that the relative volume of land ice can be deduced from the ratio of oxygen 18 to oxygen 16 in ocean sediments.

- A There is no evidence in the passage about this point.
- B The ocean record is described in lines 38–39 as *more continuous*, so it is unlikely to be less reliable. In any case, reliability is not discussed.
- C Correct.** Lines 12–14 explain that *the land-ice volume for a given period can be deduced from the ratio of two oxygen isotopes*.
- D There is no evidence in the passage to support this statement.
- E The passage does not discuss the use of this record in determining past atmospheric conditions.

The correct answer is C.

74. It can be inferred from the passage that precipitation formed from evaporated ocean water has
- (A) the same isotopic ratio as ocean water
 - (B) less oxygen 18 than does ocean water
 - (C) less oxygen 18 than has the ice contained in continental ice sheets
 - (D) a different isotopic composition than has precipitation formed from water on land
 - (E) more oxygen 16 than has precipitation formed from fresh water

Inference

Any inference about precipitation from evaporated ocean water needs to be based on what the passage says. Lines 20–22 show that *heavier isotopes tend to be left behind when water evaporates from the ocean surfaces*. Therefore, the evaporated water would contain less oxygen 18 and the remaining ocean water would contain more. It is logical to infer that precipitation formed from this evaporated water would also contain less oxygen 18.

- A Lines 20–24 explain that the water remaining in the ocean after evaporation has more oxygen 18.
- B Correct.** Since *the heavier isotopes tend to be left behind*, there will be less oxygen 18 in the evaporated water and in the precipitation that forms from it.
- C The passage suggests that the ocean water evaporates and through subsequent precipitation helps form the ice sheets, so the amount of oxygen 18 in the ice sheets should be similar to the amount in the precipitation formed from the evaporated water.
- D The passage does not discuss precipitation formed from water on land.
- E The passage does not discuss precipitation formed from fresh water.

The correct answer is B.

75. It can be inferred from the passage that calcium carbonate shells
- (A) are not as susceptible to deterioration as rocks
 - (B) are less common in sediments formed during an ice age
 - (C) are found only in areas that were once covered by land ice
 - (D) contain radioactive material that can be used to determine a sediment's isotopic composition
 - (E) reflect the isotopic composition of the water at the time the shells were formed

Inference

Any inference about calcium carbonate shells needs to be based on what the passage says about these shells. Lines 24–32 explain the role of these shells in forming sediments and establishing a chronology for ice ages. The shells *were constructed with oxygen atoms drawn from the surrounding ocean*. Lines 29–32 make it clear that if the sediments reveal a higher ratio of oxygen 18, it is because more oxygen 18 had been left behind when the ocean water evaporated and contributed to the growth of continental ice sheets. It can thus be inferred that the shells that make up those sediments must reflect the proportion of oxygen 18 found in the ocean water at the time they were formed.

- A The only mention of rocks in the passage is a comparison of “gappiness” of the rock and sedimentary specimen records in lines 38–39; this information does not allow any firm inference to be made with respect to relative susceptibility to deterioration, though a more continuous record might be the result of less susceptibility to deterioration.
- B The passage does not make any reference to the relative abundance of these shells during ice ages; no such inference can be drawn.
- C The only information in the passage that might support this statement is found in lines 29–32, but that information, about the correlation between oxygen ratios in sediment specimens and land ice, describes a relation that implies nothing about distributions of such specimens.
- D Though the passage does indirectly indicate that the shells contained radioactive material, nothing in the passage suggests that radioactive material is used to determine isotopic composition.
- E Correct.** The passage explains that oxygen atoms in the surrounding water are one of the building blocks of calcium carbonate shells. The isotopic composition of the surrounding water changes during the ice age cycles, so it is logical that the isotopic composition of the shells will change depending on when they were formed.

The correct answer is E.

Questions 76–81 refer to the passage on page 388.

76. The primary purpose of the passage is to
- (A) examine two sides of a historiographical debate
 - (B) call into question an author's approach to a historiographical debate
 - (C) examine one author's approach to a historiographical debate
 - (D) discuss two authors' works in relationship to a historiographical debate
 - (E) explain the prevalent perspective on a historiographical debate

Main idea

This question requires understanding what the passage as a whole is attempting to do. The passage opens by introducing two books published in 1984 that both concern the history of women in the United States. The passage then makes it clear that one book deals *directly* (line 14) with the issue of women's status, while the other does not. The passage then goes on to discuss the perspective that each book takes and what each book has to offer for an assessment of women's status in the eighteenth and nineteenth centuries.

- A The two books discussed in the passage do not take different sides on a particular debate but rather are described as being more or less useful to the debate itself.
- B The passage focuses on how two different books contain information useful to a particular historiographical debate but does not call into question the approach of either book.
- C The passage focuses on two authors' works, not one.
- D **Correct.** The passage discusses what two different books have to offer in relation to a particular historiographical debate.
- E The passage does not describe any perspective on a particular historiographical debate as being more prevalent than any other.

The correct answer is D.

77. The author of the passage mentions the supervision of schools primarily in order to
- (A) remind readers of the role education played in the cultural changes of the nineteenth century in the United States
 - (B) suggest an area in which nineteenth-century American women were relatively free to exercise power
 - (C) provide an example of an occupation for which accurate data about women's participation are difficult to obtain
 - (D) speculate about which occupations were considered suitable for United States women of the nineteenth century
 - (E) illustrate how the answers to questions about women's status depend on particular contexts

Evaluation

Answering this question depends on understanding what role a particular piece of information plays in the passage as a whole. The author implicitly supports Lebsock's contention (beginning at line 19) that different frames of reference can produce different perspectives on the debate about women's status in the eighteenth and nineteenth centuries. The author then summarizes different contexts cited by Lebsock to support the contention about frames of reference. As part of this summary, the author refers to *supervising schools* (line 23) as an example of a job that apparently showed women losing power.

- A The passage does not discuss the role of education in the nineteenth century.
- B The passage does mention some ways in which, according to Lebsock, *women ... gained power* (line 24) in the nineteenth century, but *supervising schools* is not among them.
- C The passage does not discuss the difficulty of obtaining data about particular occupations.
- D The passage makes no judgments about the suitability for women of any jobs in the nineteenth century.
- E **Correct.** The passage mentions supervising schools as part of an illustration of Lebsock's claim that the debate about women's status depends on the context being examined.

The correct answer is E.

78. With which of the following characterizations of Lebsock's contribution to the controversy concerning women's status in the nineteenth-century United States would the author of the passage be most likely to agree?
- (A) Lebsock has studied women from a formerly neglected region and time period.
 - (B) Lebsock has demonstrated the importance of frame of reference in answering questions about women's status.
 - (C) Lebsock has addressed the controversy by using women's current status as a frame of reference.
 - (D) Lebsock has analyzed statistics about occupations and property that were previously ignored.
 - (E) Lebsock has applied recent historiographical methods to the biography of a nineteenth-century woman.

Supporting ideas

Answering this question requires recognizing information explicitly given in the passage. The passage introduces the work of Lebsock in line 6 and then goes on to describe several characteristics of Lebsock's book. In lines 19–21, the author introduces Lebsock's claim that the historiographical debate about women's status is dependent on frame of reference and calls that claim important; the passage then gives an example showing how frame of reference affects views of women's status. In so doing, the author displays an implicit agreement with Lebsock's discussion on this point.

- A The author of the passage portrays neither the place nor time period that Lebsock focuses on as having been neglected by historians.
- B Correct.** The author describes as important Lebsock's idea that frame of reference informs the debate about women's status.
- C According to the passage, Lebsock's book deals with women's status in the eighteenth and nineteenth centuries, not the present status of women.

- D The passage does not mention or imply that Lebsock analyzed statistics in writing her book.
- E Although the passage does describe Lebsock's book as pertaining to an ongoing historiographical debate, it identifies the book's topic as *women in one southern community* (lines 7–8), not the life of a single woman.

The correct answer is B.

79. According to the passage, Lebsock's work differs from Buel and Buel's work in that Lebsock's work
- (A) uses a large number of primary sources
 - (B) ignores issues of women's legal status
 - (C) refuses to take a position on women's status in the eighteenth century
 - (D) addresses larger historiographical issues
 - (E) fails to provide sufficient material to support its claims

Supporting ideas

This question asks for recognition of information contained in the passage. In the first sentence, the passage states that Buel and Buel's work and Lebsock's work have *contrasting approaches*. The passage then proceeds, using descriptions of each work's approach, to illustrate how the works differ. The passage notes that Buel and Buel's work *makes little effort* to place its biographical subject *in the context of recent historiography on women* (lines 4–6), whereas Lebsock's work attempts *to redirect two decades of historiographical debate* about women's status.

- A Primary sources are not mentioned in the passage in relation to either work discussed.
- B The legal status of women is not mentioned in the passage.
- C Lebsock's work is described in the passage as attempting to redirect the debate about women's status in the eighteenth and nineteenth centuries.

- D Correct.** The passage suggests that by not placing its subject's story in the context of historiography, Buel and Buel's work does not therefore address larger historiographical issues, as Lebsock's does.
- E** The passage tends to support Lebsock's views and does not refer to any lack of support for the claims made in Lebsock's work.

The correct answer is D.

80. The passage suggests that Lebsock believes that compared to nineteenth-century American women, eighteenth-century American women were
- (A) in many respects less powerful in relation to men
- (B) more likely to own real estate
- (C) generally more economically independent
- (D) more independent in conducting their private lives
- (E) less likely to work as school superintendents

Inference

This question requires making an inference based on information given in the passage. As part of the passage's description of Lebsock's contribution to the historiographical debate about women's status in the eighteenth and nineteenth centuries, Lebsock's conclusions about women's autonomy are described. As part of this description, the passage cites Lebsock's conclusion that nineteenth-century women lost economic autonomy when compared to eighteenth-century women (lines 16–19).

- A** The passage states that in many ways women in the nineteenth century *lost power in relation to men* (lines 21–22), which would imply that in those respects eighteenth-century women had more power in relation to men, not less. The only increase mentioned in nineteenth-century women's power is associated with owning more real estate.
- B** The passage states that more nineteenth-century women owned real estate.

- C Correct.** As the passage states, Lebsock concluded that nineteenth-century women lost economic autonomy compared to eighteenth-century women.
- D** The passage states that nineteenth-century women gained more independence in their private lives.
- E** The passage cites school superintendents as an example of an occupation more likely to be held by eighteenth-century women.

The correct answer is C.

81. The passage suggests that Buel and Buel's biography of Mary Fish provides evidence for which of the following views of women's history?
- (A) Women have lost power in relation to men since the colonial era.
- (B) Women of the colonial era were not as likely to be concerned with their status as were women in the nineteenth century.
- (C) The colonial era was not as favorable for women as some historians have believed.
- (D) Women had more economic autonomy in the colonial era than in the nineteenth century.
- (E) Women's occupations were generally more respected in the colonial era than in the nineteenth century.

Inference

This question requires understanding what the passage implies. The approach that Buel and Buel's work takes is specifically described in lines 3–6 and again in lines 27–32. In lines 27–30, the passage states that Buel and Buel's work *provides ample raw material for questioning the myth ... of a colonial golden age in the eighteenth century*, referring to a myth about women's status. In describing this golden age as a myth fostered by some historians, the passage suggests that this era was not as favorable to women as these historians suggest.

- A The passage describes Lebsock's work as providing such evidence, not Buel and Buel's work.
- B The passage does not pertain to the level of concern women had for their status.
- C **Correct.** The final paragraph of the passage describes Buel and Buel's work as providing material that calls into question claims that the eighteenth century was especially favorable to women.
- D The passage refers to the economic autonomy of women in relation to Lebsock's work, not Buel and Buel's work.
- E The passage does not refer to whether any particular occupations held by women were more respected at one time or another.

The correct answer is C.

Questions 82–90 refer to the passage on page 390.

82. Which of the following titles best summarizes the contents of the passage?
- (A) Neurotransmitters: Their Crucial Function in Cellular Communication
 - (B) Diet and Survival: An Old Relationship Reexamined
 - (C) The Blood Supply and the Brain: A Reciprocal Dependence
 - (D) Amino Acids and Neurotransmitters: The Connection between Serotonin Levels and Tyrosine
 - (E) The Effects of Food Intake on the Production and Release of Serotonin: Some Recent Findings

Main idea

Finding a title that best summarizes a passage requires examining the passage as a whole. This task is made easier by the fact that the second sentence of the first paragraph provides a topic sentence stating the main idea: *In recent studies, however, we have discovered that the production and release in brain neurons of the neurotransmitter serotonin ... depend directly on the food that the body processes.* In the second paragraph, the authors cite the results of several studies relating neurotransmitter levels to eating meals and to injections of insulin. In the final paragraph, the authors discuss a study of the effect of a protein-rich meal on serotonin level. Thus, the correct title must show the relationship between food eaten and serotonin produced.

- A The function of neurotransmitters is only briefly mentioned.
- B The passage does not discuss the relation between diet and survival.
- C There is no discussion of blood supply and the brain.
- D While tyrosine is briefly mentioned, this was not a main focus of the studies.
- E **Correct.** This title offers a summary of the article's contents.

The correct answer is E.

83. According to the passage, the speed with which tryptophan is provided to the brain cells of a rat varies with the
- (A) amount of protein present in a meal
 - (B) concentration of serotonin in the brain before a meal
 - (C) concentration of leucine in the blood rather than with the concentration of tyrosine in the blood after a meal
 - (D) concentration of tryptophan in the brain before a meal
 - (E) number of serotonin-containing neurons

Supporting ideas

The phrase *according to the passage* suggests that the answer is likely stated in the passage. Look at the third paragraph, which discusses variations in the speed with which tryptophan is provided to the brain. Lines 41–44 state *the more protein is in a meal ... the more slowly is tryptophan provided to the brain*.

- A **Correct.** The greater the amount of protein, the more slowly tryptophan is provided.
- B The relationship is not discussed in the passage, although the concentration of serotonin *after* a meal is measured.
- C While leucine and tyrosine are mentioned, their concentrations in the blood are not compared.
- D This relationship is not discussed in the passage, although the concentration of tryptophan *after* a meal is measured.
- E The researchers do not consider the number of neurons.

The correct answer is A.

84. According to the passage, when the authors began their first studies, they were aware that
- (A) they would eventually need to design experiments that involved feeding rats high concentrations of protein
 - (B) tryptophan levels in the blood were difficult to monitor with accuracy
 - (C) serotonin levels increased after rats were fed meals rich in tryptophan
 - (D) there were many neurotransmitters whose production was dependent on metabolic processes elsewhere in the body
 - (E) serotonin levels increased after rats were injected with a large amount of tryptophan

Supporting ideas

The phrase *according to the passage* suggests that the answer is likely stated in the passage. Look at the first sentence of the second paragraph where the focus of the authors' *first studies* is explained. The investigators wanted to see if an increase in serotonin levels would be observed after rats ate meals that changed tryptophan levels in the blood. Earlier research had already established that injecting tryptophan increased serotonin levels.

- A The authors' decision to add protein came later in their studies, after they had seen the effects of eating in general.
- B The passage does not identify any problems with monitoring tryptophan levels in the blood.
- C This was the hypothesis of the first experiment, so the authors could not have known it beforehand.
- D This point is irrelevant to the authors' work; only one neurotransmitter, serotonin, is discussed.
- E **Correct.** Lines 9–12 show that this increase had already been observed.

The correct answer is E.

85. According to the passage, one reason that the authors gave rats carbohydrates was to
- (A) depress the rats' tryptophan levels
 - (B) prevent the rats from contracting diseases
 - (C) cause the rats to produce insulin
 - (D) demonstrate that insulin is the most important substance secreted by the body
 - (E) compare the effect of carbohydrates with the effect of proteins

Supporting ideas

The phrase *according to the passage* suggests that the answer is likely stated in the passage. Look at lines 22–26, which say *We then decided to see whether the secretion of the animal's own insulin similarly affected serotonin production. We gave the rats a carbohydrate-containing meal that we knew would elicit insulin secretion*. These sentences together show that the authors gave carbohydrates to the rats to cause the rats to secrete insulin.

- A Lines 26–29 show that the carbohydrate increased the blood tryptophan level.
- B Preventing disease was not part of the study.
- C **Correct.** The authors had already tried injecting insulin; they then gave the rats carbohydrates to stimulate insulin production.
- D The authors make no such claim about insulin.
- E The study involving protein came later, so this could not have been the reason for giving the rats carbohydrates.

The correct answer is C.

86. According to the passage, the more protein a rat consumes, the lower will be the
- (A) ratio of the rat's blood-tryptophan concentration to the amount of serotonin produced and released in the rat's brain
 - (B) ratio of the rat's blood-tryptophan concentration to the concentration in its blood of the other amino acids contained in the protein
 - (C) ratio of the rat's blood-tyrosine concentration to its blood-leucine concentration
 - (D) number of neurotransmitters of any kind that the rat will produce and release
 - (E) number of amino acids the rat's blood will contain

Supporting ideas

The phrase *according to the passage* suggests that the answer is likely stated in the passage. In lines 41–43, the authors state: *The more protein is in a meal, the lower is the ratio of the resulting blood-tryptophan concentration to the concentration of competing amino acids*

- A While lower levels of blood-tryptophan lead to lower serotonin levels, the relationship is not discussed in terms of a ratio.
- B **Correct.** Lines 41–43 show this to be the correct answer choice.
- C This relationship is not demonstrated in the passage.

- D This point is not made in the passage.
- E Lines 38–40 explain that *consumption of protein increases blood concentration of the other amino acids much more* Since proteins are made up of amino acids, eating protein would logically increase the number of amino acids.

The correct answer is B.

87. The authors' discussion of the "mechanism that provides blood tryptophan to the brain cells" (lines 34–35) is meant to
- (A) stimulate further research studies
 - (B) summarize an area of scientific investigation
 - (C) help explain why a particular research finding was obtained
 - (D) provide supporting evidence for a controversial scientific theory
 - (E) refute the conclusions of a previously mentioned research study

Logical structure

To find the purpose of this discussion, look at the context in which this reference occurs. At the beginning of the third paragraph, the authors note that, *surprisingly*, adding protein led to lower brain tryptophan and serotonin levels. The question is why were the levels lowered? *The answer lies* in the mechanism cited in lines 34–35. Therefore, the discussion of the mechanism is meant to explain a surprising research finding.

- A No further studies are mentioned.
- B There are summaries of several studies, but there is no summary of an entire area of scientific investigation.
- C **Correct.** The mechanism helps explain the surprising finding about lower brain tryptophan and serotonin levels.
- D No theory is advanced, nor is any evidence about it provided.
- E There is no attempt to refute any other study.

The correct answer is C.

88. According to the passage, an injection of insulin was most similar in its effect on rats to an injection of

(A) tyrosine
(B) leucine
(C) blood
(D) tryptophan
(E) protein

Supporting ideas

Since the question refers to information given in the passage, the answer can be found by careful reading. In order to find an injection with a similar effect, look first at the effect of injecting insulin. In lines 20–22, the authors state that *injecting insulin ... caused parallel elevations in blood and brain tryptophan levels and in serotonin levels*. The only other reference to injection occurs earlier in lines 10–13 where rats injected with tryptophan had increased serotonin levels; injecting tryptophan would obviously cause tryptophan levels to increase. Thus, the effects of injecting insulin were similar to the effects on injecting tryptophan.

- A No evidence suggests that tyrosine injection would have similar effects.
B The studies did not involve injecting leucine.
C The studies did not involve injecting blood.
D **Correct.** According to the passage, injecting tryptophan raises serotonin and tryptophan levels just as injecting insulin does.
E The studies involved eating protein, not injecting it; eating protein did not raise serotonin levels.

The correct answer is D.

89. It can be inferred from the passage that which of the following would be LEAST likely to be a potential source of aid to a patient who was not adequately producing and releasing serotonin?

(A) Meals consisting almost exclusively of protein
(B) Meals consisting almost exclusively of carbohydrates
(C) Meals that would elicit insulin secretion
(D) Meals that had very low concentrations of tyrosine
(E) Meals that had very low concentrations of leucine

Inference

Since this question asks for an inference, the answer is not directly stated in the passage; it must instead be derived from the information given. What kind of meals would NOT help a patient with low serotonin levels? Meals that increased serotonin would help the patient; meals that lowered serotonin would not. According to the last sentence in the passage, *the more protein in a meal, the less serotonin subsequently produced and released*. Therefore, high-protein meals would be LEAST likely to help the patient.

- A **Correct.** Meals with very high levels of protein would tend to lower serotonin and thus to be less beneficial for the patient with inadequate serotonin levels.
B When rats ate a carbohydrate-containing meal, serotonin increased (lines 25–29). Therefore, these meals would tend to raise serotonin levels and so help the patient.
C In the study, meals that elicited insulin secretion raised serotonin levels.
D Since tyrosine is an amino acid found in protein, meals low in tyrosine would be low in protein and so would tend to raise serotonin levels and help the patient.
E Since leucine is an amino acid found in protein, meals low in leucine would be low in protein and so would tend to raise serotonin levels and help the patient.

The correct answer is A.

90. It can be inferred from the passage that the authors initially held which of the following hypotheses about what would happen when they fed large amounts of protein to rats?

(A) The rats' brain serotonin levels would not decrease.
(B) The rats' brain tryptophan levels would decrease.
(C) The rats' tyrosine levels would increase less quickly than would their leucine levels.
(D) The rats would produce more insulin.
(E) The rats would produce neurotransmitters other than serotonin.

Inference

When the authors discuss the results of adding protein to meals, they begin with the word *surprisingly* (line 30). The use of this word indicates that the results differed from the authors' initial hypotheses. The results showed lowered serotonin. It is reasonable to conclude that the researchers initially hypothesized that serotonin levels would not decrease.

- A **Correct.** The use of the word *surprisingly* in line 30 suggests that researchers thought serotonin levels would not decrease.
- B The researchers had expected that tryptophan levels would not decrease, *since protein contains tryptophan* (lines 32–34).
- C Since there is no discussion of the comparative levels of tyrosine and leucine, there was probably no hypothesis about these levels.
- D In the passage insulin is explicitly discussed in relation to carbohydrates, and plays no role at all in the discussion of protein; this very strongly suggests that insulin production played no role in the authors' decision to feed the rats large amounts of protein.
- E Serotonin is the only neurotransmitter discussed in the research, so it is unlikely that the researchers had an initial hypothesis involving other neurotransmitters.

The correct answer is A.

Questions 91–96 refer to the passage on page 392.

91. The primary purpose of the passage is to
- (A) evaluate a research study
 - (B) summarize the history of a research area
 - (C) report new research findings
 - (D) reinterpret old research findings
 - (E) reconcile conflicting research findings

Main idea

Determining the primary purpose comes from examining what the author does in the entire passage. In the first paragraph, the author explains Duverger's work on women's electoral participation. In the second paragraph the author points out both the successes and failures of that work. The purpose of this passage, then, is to evaluate Duverger's study.

- A **Correct.** The author evaluates Duverger's study of women's electoral activities.
- B This passage examines only one research study, not an entire research area.
- C Duverger's work was published in 1955; its findings are not new.
- D The author explains and evaluates Duverger's findings but does not reinterpret them.
- E The author's discussion of Duverger's work does not reveal or attempt to reconcile conflicting findings.

The correct answer is A.

92. According to the passage, Duverger's study was unique in 1955 in that it
- (A) included both election data and survey data
 - (B) gathered data from sources never before used in political studies
 - (C) included an analysis of historical processes
 - (D) examined the influence on voting behavior of the relationships between women and men
 - (E) analyzed not only voting and political candidacy but also other political activities

Supporting ideas

This question is based on information specifically stated in the first sentence of the passage. The author introduces Duverger's work by calling it the first study of *women's electoral participation ever to use election data and survey data together* (lines 3–5).

- A **Correct.** Duverger's work was unique because it used election data and survey data together.

- B The two data types had never before been used together in such a study; they may well have been used separately in many earlier political studies.
- C The second paragraph states that Duverger placed his findings in the context of historical processes, but not that he was unique in doing so (lines 15–17).
- D Duverger compared the frequency and direction of voting between men and women, not the effect that their relationships had on voting (line 27).
- E Duverger's work analyzed political activism, but the author does not claim that it was unique in doing so (lines 5–6).

The correct answer is A.

93. Which of the following characteristics of a country is most clearly an example of a factor that Duverger, as described in the passage, failed to consider in his study?
- (A) A large population
 - (B) A predominantly Protestant population
 - (C) A predominantly urban population
 - (D) A one-party government
 - (E) Location in the heart of Europe

Inference

In the second paragraph, the author notes Duverger's *failure to consider ... the influence of political regimes, the effects of economic factors, and the ramifications of political and social relations between women and men* (lines 22–27). This question requires checking this list from the passage against the possible answers; the only point of convergence is the system of government. A system of government in which there is only one political party is a type of political regime.

- A The author does not say that Duverger failed to consider the size of the population.
- B No evidence shows that Duverger failed to consider the predominance of a religion.
- C The author does not say that Duverger failed to consider the location of the population.
- D **Correct.** According to the author of the passage, Duverger failed to consider *the influence of political regimes*.

- E Duverger is not faulted for failing to consider the location of the countries that he studied.

The correct answer is D.

94. The author implies that Duverger's actual findings are
- (A) limited because they focus on only four countries
 - (B) inaccurate in their description of the four countries in the early 1950s
 - (C) out-of-date in that they are inapplicable in the four countries today
 - (D) flawed because they are based on unsound data
 - (E) biased by Duverger's political beliefs

Inference

Since the question uses the word *implies*, the answer involves making an inference based on the information in the text. The second paragraph evaluates Duverger's work. The author notes that Duverger *placed his findings in the context of many of the historical processes*. Because these contexts have changed since 1955, the author holds that *Duverger's approach has proved more durable than his actual findings*. The actual findings, then, are out-of-date and irrelevant to the countries today.

- A The limitations the author brings up in the second paragraph have no connection to the number of countries studied.
- B The limitations the author brings up in the second paragraph do not suggest that the findings were inaccurate; rather, they were, in the author's view, significantly incomplete.
- C **Correct.** The actual findings, unlike the research method, are out-of-date and inapplicable today.
- D The limitations the author brings up in the second paragraph do not suggest that Duverger's data were unsound; rather, in the author's view, they were incomplete and have become dated.
- E The limitations the author brings up in the second paragraph do not suggest that Duverger's findings were politically biased; rather, in the author's view, they did not take full enough account of politics.

The correct answer is C.

95. The passage implies that, in comparing four European countries, Duverger found that the voting rates of women and men were most different in the country in which women

- (A) were most politically active
- (B) ran for office most often
- (C) held the most conservative political views
- (D) had the most egalitarian relations with men
- (E) had possessed the right to vote for the shortest time

Inference

The comparison of voting rates is discussed at the end of the first paragraph and forms the basis for the required inference. Duverger found that *women voted somewhat less frequently than men* but that this difference narrowed *the longer the women had the vote* (lines 9–11). That is, there was an ongoing process of convergence in voting rates for women and men, as the time period for which women had the vote lengthened. This suggests that at one end, when women had been voting for the shortest time, voting rates were most dissimilar, and at the other end, when women had been voting for the longest time, the rates were most similar.

- A Women's political activism is not suggested as a reason for the difference.
- B Women's political candidacy is not suggested as a reason for the difference.
- C Women's political views are not suggested as a reason for the difference.
- D Women's egalitarian relations with men are not suggested as a reason for the difference.
- E **Correct.** Duverger's finding is of (apparently steady, ongoing) convergence in voting-frequency rates between women and men over time. This supports the inference that the shorter the time period, the less convergence—i.e., the more divergence—there is in voting-frequency rates.

The correct answer is E.

96. The author implies that some behavioralist research involving the multinational study of women's political participation that followed Duverger's study did which of the following?

- (A) Ignored Duverger's approach
- (B) Suffered from faults similar to those in Duverger's study
- (C) Focused on political activism
- (D) Focused on the influences of political regimes
- (E) Focused on the political and social relations between women and men

Inference

The final sentence of the passage links Duverger's study to behavioralist work in general. After noting Duverger's failure to consider several important elements, the author observes, *Duverger's study foreshadowed the enduring limitations of the behavioralist approach to the multinational study of women's political participation* (lines 28–31). Thus, it is reasonable to infer that the author is of the opinion that the behavioralist research that followed Duverger's study suffered from the same limitations.

- A The author does not imply that other behavioralists ignored Duverger's approach.
- B **Correct.** The author says that Duverger's work revealed the *enduring limitations* also found in later behavioralist research.
- C This is not obviously a limitation at all, let alone one that Duverger's study suffered from.
- D This is not obviously a limitation at all, let alone one that Duverger's study suffered from.
- E This is not obviously a limitation at all, let alone one that Duverger's study suffered from.

The correct answer is B.

Questions 97–102 refer to the passage on page 394.

97. According to the passage, senior managers use intuition in all of the following ways EXCEPT to
- (A) speed up the creation of a solution to a problem
 - (B) identify a problem
 - (C) bring together disparate facts
 - (D) stipulate clear goals
 - (E) evaluate possible solutions to a problem

Supporting ideas

To answer this question, look for information explicitly stated in the passage. The third paragraph of the passage describes the five ways that senior managers use intuition. To find the one way that is NOT described, go back to the paragraph and check the possible answers against the list of the ways provided in the paragraph. The list includes all the answer choices except stipulating clear goals.

- A Lines 39–40 state that intuition allows managers to *move rapidly to engender a plausible solution*.
- B Lines 22–23 explain that managers use intuition to *sense when a problem exists*.
- C Lines 28–29 say the third function of intuition is *to synthesize isolated bits of data and practice into an integrated picture*.
- D Correct.** Stipulating clear goals is not linked with managers' use of intuition.
- E Lines 30–38 show that managers use intuition *as a check on the results of more rational analysis*, when they are *leery of solutions suggested by these methods*.

The correct answer is D.

98. The passage suggests which of the following about the “writers on management” mentioned in line 12?
- (A) They have criticized managers for not following the classical rational model of decision analysis.
 - (B) They have not based their analyses on a sufficiently large sample of actual managers.
 - (C) They have relied in drawing their conclusions on what managers say rather than on what managers do.
 - (D) They have misunderstood how managers use intuition in making business decisions.
 - (E) They have not acknowledged the role of intuition in managerial practice.

Inference

Answering this question depends on making an inference from the passage. The second paragraph dismisses most *writers on management* for displaying *a poor grasp of what intuition is* (line 15). The third paragraph, in contrast, describes Isenberg's research, which shows that *senior managers use intuition in at least five distinct ways* (lines 21–22), and those ways are then discussed in more detail. It can be inferred that Isenberg understands what most *writers on management* do not: how managers use intuition in making business decisions.

- A The passage does not link these writers with such a critique of managers.
- B No mention is made in the passage of the writers' methods.
- C The passage does not indicate that the writers have examined words at the expense of actions.
- D Correct.** According to the passage, the writers do not understand what intuition is or how managers apply it.
- E According to lines 12–15, the writers have acknowledged that *some practicing managers rely heavily on intuition*, but the writers fail to understand how or why.

The correct answer is D.

99. Which of the following best exemplifies “an ‘Aha!’ experience” (line 30) as it is presented in the passage?
- (A) A manager risks taking an action whose outcome is unpredictable to discover whether the action changes the problem at hand.
 - (B) A manager performs well-learned and familiar behavior patterns in creative and uncharacteristic ways to solve a problem.
 - (C) A manager suddenly connects seemingly unrelated facts and experiences to create a pattern relevant to the problem at hand.
 - (D) A manager rapidly identifies the methodology used to compile data yielded by systematic analysis.
 - (E) A manager swiftly decides which of several sets of tactics to implement in order to deal with the contingencies suggested by a problem.

Application

Finding an example involves applying the information in the passage to new situations. How do managers reach an “Aha!” experience? Lines 28–29 clearly explain that this experience is the result of the managers’ ability *to synthesize isolated bits of data and practice into an integrated picture*. Managers connect apparently unrelated pieces of information and elements of their previous experience, and, through these unexpected connections, produce a unified picture or pattern.

- A This managerial style is mentioned in the last paragraph, but not as defining the “Aha!” experience.
- B Lines 23–27 indicate that managers use intuition *to perform well-learned behavior patterns rapidly*, but the result is not an “Aha!” experience.
- C **Correct.** Through an intuitive appreciation of the subtle interrelationships of disparate facts and experiences, the manager all at once perceives the coherent overarching pattern or picture formed by the interconnections, which lines 28–29 define as an “Aha!” experience.
- D Lines 34–38 show that managers do possess this ability, but it does not culminate in an “Aha!” experience.
- E This managerial style is also related to the second function of intuition, *to perform well-learned behavior patterns rapidly* (lines 23–27), but does not define an “Aha!” experience.

The correct answer is C.

100. According to the passage, the classical model of decision analysis includes all of the following EXCEPT
- (A) evaluation of a problem
 - (B) creation of possible solutions to a problem
 - (C) establishment of clear goals to be reached by the decision
 - (D) action undertaken in order to discover more information about a problem
 - (E) comparison of the probable effects of different solutions to a problem

Supporting ideas

What does the passage say about the classical model of decision analysis? The first sentence defines the classical model as *clarifying goals, assessing the problem, formulating options, estimating likelihoods of success, making a decision, and only then taking action to implement the decision*. To solve this process-of-elimination question, check the given list against the possible answers in order to find the one that does not match. Note that the exact wording in the answers may differ from that in the passage; the match is based on underlying meaning.

- A Evaluating a problem is identified as *assessing the problem*.
- B Creating solutions is identified as *formulating options*.
- C Establishing goals is identified as *clarifying goals*.
- D **Correct.** Acting in order to learn more about the problem is not identified in the passage as part of the rational classical model. It does appear as part of the acting/thinking cycle in the last paragraph.
- E Comparing probable effects is identified as *estimating likelihoods of success*.

The correct answer is D.

101. It can be inferred from the passage that which of the following would most probably be one major difference in behavior between Manager X, who uses intuition to reach decisions, and Manager Y, who uses only formal decision analysis?
- (A) Manager X analyzes first and then acts; Manager Y does not.
 - (B) Manager X checks possible solutions to a problem by systematic analysis; Manager Y does not.
 - (C) Manager X takes action in order to arrive at the solution to a problem; Manager Y does not.
 - (D) Manager Y draws on years of hands-on experience in creating a solution to a problem; Manager X does not.
 - (E) Manager Y depends on day-to-day tactical maneuvering; Manager X does not.

Application

To answer this question, apply the information in the passage to the specific examples of Manager X, an intuitive decision maker, and Manager Y, who relies exclusively on formal decision analysis. The first paragraph distinguishes between the process of formal decision analysis, in which a decision is made and then action is taken (lines 4–5), and the process of intuition, in which action is integrated into the process of thinking (lines 10–11). The last paragraph reinforces the definition of the intuitive manager as one for whom “*thinking*” is *inseparable from acting* and *action is often part of defining the problem*. Manager X is likely to act as part of the process of solving a problem, but Manager Y is not.

- A Acting only after analysis characterizes the rational model, not intuition.
- B Systematic analysis is typical of the rational model, not intuition.
- C **Correct.** An intuitive manager acts as a step within the problem-solving process, but a manager who depends on formal decision analysis acts only after making a decision.
- D Drawing on experience is linked in the passage with intuition rather than with rational analysis; the passage does not suggest that managers who use formal decision analysis would ignore their experience in so doing.
- E Day-to-day tactical maneuvers are required of all managers.

The correct answer is C.

102. The passage provides support for which of the following statements?

- (A) Managers who rely on intuition are more successful than those who rely on formal decision analysis.
- (B) Managers cannot justify their intuitive decisions.
- (C) Managers’ intuition works contrary to their rational and analytical skills.
- (D) Logical analysis of a problem increases the number of possible solutions.
- (E) Intuition enables managers to employ their practical experience more efficiently.

Logical structure

This question asks the reader to select the statement for which there is the most justification in the passage. The entire passage places value on the use of intuition, so the answer to this question is bound to show a benefit of intuition. Lines 25–27 reveal that intuition is based on *years of painstaking practice and hands-on experience* and lines 38–40 explain that, in contrast to formal decision analysis, intuition allows managers to *move rapidly to engender a plausible solution*. Thus, intuition enables managers to apply their experience quickly and productively, that is, efficiently.

- A The first paragraph acknowledges that most successful managers are intuitive, but it does not go so far as to make this comparison.
- B There is no support for or against this statement in the passage; Isenberg’s research shows why intuition is beneficial, but does not address how managers justify their decisions.
- C Intuition does not compete with rational analysis, but complements it; line 25 provides an assurance that intuition is *not arbitrary or irrational*.
- D The passage does not support this claim for logical analysis.
- E **Correct.** Managers can reach decisions more efficiently through an intuitive approach based on experience than through time-consuming formal analyses.

The correct answer is E.

Questions 103–107 refer to the passage on page 396.

103. The passage is primarily concerned with

- (A) identifying two practices in medical research that may affect the accuracy of clinical trials
- (B) describing aspects of medical research that tend to drive up costs
- (C) evaluating an analysis of certain shortcomings of current medical research practices
- (D) describing proposed changes to the ways in which clinical trials are conducted
- (E) explaining how medical researchers have traditionally conducted clinical trials and how such trials are likely to change

Main idea

This question requires an understanding of what the passage as a whole is doing. The passage introduces Frazier and Mosteller as proposing changes to the ways clinical trials in medical research are currently conducted. The rest of the passage then describes these proposed changes together with the support Frazier and Mosteller provide for adopting these changes.

- A The passage identifies practices in medical research to help illustrate the basis for Frazier and Mosteller's proposed changes.
- B The passage mentions medical research costs as one example within the larger description of Frazier and Mosteller's proposed changes.
- C The passage is not concerned with evaluating Frazier and Mosteller's proposed changes.
- D Correct.** The passage describes the changes proposed by Frazier and Mosteller to the way clinical trials are conducted.
- E The passage is not concerned with establishing the likelihood of any changes to the way medical research is conducted.

The correct answer is D.

104. Which of the following can be inferred from the passage about a study of the category of patients referred to in lines 21–23?
- (A) Its findings might have limited applicability.
 - (B) It would be prohibitively expensive in its attempt to create ideal conditions.
 - (C) It would be the best way to sample the total population of potential patients.
 - (D) It would allow researchers to limit information collection without increasing the risk that important variables could be overlooked.
 - (E) Its findings would be more accurate if it concerned treatments for a progressive disease than if it concerned treatments for a nonprogressive disease.

Inference

This question requires drawing an inference from information given in the passage. In describing the proposals put forth by Frazier and Mosteller, the passage states in lines 16–21 that they propose using more patients in clinical trials than are currently being used, and that the trials would thereby obtain *a more representative sample of the total population with the disease under study*. The passage then states that researchers often *restrict* (lines 21–23) their trials to certain types of patients, therefore limiting the applicability of their findings.

- A Correct.** The passage states that the researchers preferred to restrict the types of patients used in their studies, thereby using a less representative sample than if they used a more inclusive group of patients.
- B The passage mentions the added expense of clinical trials only in relation to data storage, collection, and analysis.
- C The passage describes the category of patients referred to as restricted and therefore unrepresentative of the total population.
- D While the passage does mention the amount of data collected about an individual patient, that topic is not connected to the category of patients referred to in lines 21–23.
- E The passage does not suggest that a study using the category of patients referred to would be more effective in investigating progressive diseases.

The correct answer is A.

105. It can be inferred from the passage that a study limited to patients like those mentioned in lines 21–23 would have which of the following advantages over the kind of study proposed by Frazier and Mosteller?
- (A) It would yield more data and its findings would be more accurate.
 - (B) It would cost less in the long term, though it would be more expensive in its initial stages.
 - (C) It would limit the number of variables researchers would need to consider when evaluating the treatment under study.

- (D) It would help researchers to identify subgroups of patients with secondary conditions that might also be treatable.
- (E) It would enable researchers to assess the value of an experimental treatment for the average patient.

Inference

This question requires understanding what the information in the passage implies. The passage explains that Frazier and Mosteller's proposal involves enrolling more patients in clinical trials (lines 18–19) than is the case with the category of patients referred to. The passage then explains that broadening the range of trial participants would allow an evaluation of particular treatments *under various conditions and for different patient subgroups* (lines 29–30). This strongly suggests that limiting the patients used to those described in the referred text would limit the number of variables researchers would need to consider.

- A The passage suggests that not limiting the patients used in clinical trials will yield more data than restricting them will.
- B The passage refers to the costs of clinical trials only as it concerns the collection, storage, and analysis of data collected from participants.
- C **Correct.** By limiting the patients used to those having the ailment under study, the passage suggests that researchers need to consider fewer variables in their assessment of a treatment.
- D The passage suggests that *not* limiting the types of patients used in clinical trials will better allow researchers to evaluate subgroups.
- E The passage suggests that limiting the types of patients available for clinical trials results in data for specific, rather than average, populations.

The correct answer is C.

- 106. The author mentions patients' ages (line 33) primarily in order to
 - (A) identify the most critical variable differentiating subgroups of patients
 - (B) cast doubt on the advisability of implementing Frazier and Mosteller's proposals about medical research
 - (C) indicate why progressive diseases may require different treatments at different stages
 - (D) illustrate a point about the value of enrolling a wide range of patients in clinical trials
 - (E) substantiate an argument about the problems inherent in enrolling large numbers of patients in clinical trials

Evaluation

Answering this question requires understanding how a particular piece of information functions in the passage as a whole. The passage is concerned with describing the proposals of Frazier and Mosteller. One of these proposals, described in the second paragraph, involves broadening the range of participants used in clinical trials. The passage states that in following this proposal, Frazier and Mosteller suggest that the effectiveness of treatments can be assessed for different patient subgroups. To affirm the value of broadening the range of participants, the passage then cites two examples of criteria by which relevant subgroups might be identified: disease stages and patients' ages.

- A The passage makes no judgment as to the value of the subgroups it refers to in relation to broadened participation in clinical trials.
- B The passage does not call into question the potential effectiveness of Frazier and Mosteller's proposals.
- C The passage's example of patients' ages is not intended to be causally connected to its previous example regarding progressive diseases.
- D **Correct.** Patients' ages are referred to in the passage to identify subgroups that could be evaluated if the range of participants in clinical trials were broadened.
- E The passage refers to patients' ages in support of Frazier and Mosteller's proposal that more patients be used in clinical trials.

The correct answer is D.

107. According to the passage, which of the following describes a result of the way in which researchers generally conduct clinical trials?
- (A) They expend resources on the storage of information likely to be irrelevant to the study they are conducting.
 - (B) They sometimes compromise the accuracy of their findings by collecting and analyzing more information than is strictly required for their trials.
 - (C) They avoid the risk of overlooking variables that might affect their findings, even though doing so raises their research costs.
 - (D) Because they attempt to analyze too much information, they overlook facts that could emerge as relevant to their studies.
 - (E) In order to approximate the conditions typical of medical treatment, they base their methods of information collection on those used by hospitals.

Supporting ideas

This question asks for an identification of specific information given in the passage. The passage describes the proposals of Frazier and Mosteller as attempting to improve the way clinical trials have generally been conducted. In describing how current trials are generally conducted, the passage states that researchers collect *far more background information on patients than is strictly required for their trials* (lines 4–6) and that they therefore escalate the costs of the trials.

- A Correct.** The passage states that researchers generally collect more information than they need to perform their clinical trials, which drives up the costs of the trials.
- B** The passage makes no judgment about the accuracy of the information collected by researchers who currently hold clinical trials.
- C** The passage states that the risk of overlooking relevant information in clinical trials is *never entirely eliminable* (lines 11–12).
- D** The passage states that researchers generally collect more information than is relevant, not that they overlook relevant information.
- E** The passage states that, in general, researchers currently collect more information than hospitals do (line 6).

The correct answer is A.

Questions 108–114 refer to the passage on page 398.

108. The author is primarily concerned with
- (A) advocating a return to an older methodology
 - (B) explaining the importance of a recent theory
 - (C) enumerating differences between two widely used methods
 - (D) describing events leading to a discovery
 - (E) challenging the assumptions on which a theory is based

Main idea

Examine the entire passage to find the author's primary concern. An analysis of this passage shows that the author introduces a recent theory in the first paragraph, explains the practical importance of the theory in the second, and discusses the methods of exploration the theory makes possible in the third and fourth paragraphs. The author is primarily concerned with presenting a new theory and showing why it is important.

- A** The only older methodology cited in the passage, *simple prospecting methods*, leads to only an *occasional discovery* (lines 15–17); there is no indication that the author favors this.
- B Correct.** The author describes a recent theory of ore formation and discusses its importance.
- C** Three methods of exploration are described in the third paragraph, but differences among them are not discussed.
- D** The passage describes a theory and the practice derived from it; it does not describe a series of events leading to a discovery.
- E** The author describes two theories of ore formation in the first paragraph but does not challenge the assumptions on which either one is based.

The correct answer is B.

109. According to the passage, the widely held view of Archean-age gold-quartz vein systems is that such systems

- (A) were formed from metamorphic fluids
- (B) originated in molten granite-like bodies
- (C) were formed from alluvial deposits
- (D) generally have surface expression
- (E) are not discoverable through chemical tests

Supporting ideas

This question asks for information explicitly stated in the first paragraph where Archean-age gold-quartz vein systems are discussed. The recent theory is *contrary* to the *widely held* theory that Archean-age gold-quartz vein systems *were deposited from metamorphic fluids* (lines 6–7).

- A **Correct.** The widely held theory explains that the systems were *deposited from metamorphic fluids* (line 7).
- B It is the recent theory that holds that the systems were formed *from magmatic fluids that originated from molten granite-like bodies* (lines 3–4); the recent theory is not *the widely held view*.
- C Alluvial deposits are mentioned only in the context of *simple prospecting methods* (lines 14–16); there is nothing in the passage explicitly linking alluvial deposits to metamorphic fluids.
- D Lines 17–19 explain that most deposits *not yet discovered ... have no surface expression*, but there is no mention in the passage of widely held beliefs concerning surface expressions of the metamorphic fluids.
- E *Sensitive chemical tests* are able to detect deposits where mineralization has occurred (lines 27–29).

The correct answer is A.

110. The passage implies that which of the following steps would be the first performed by explorers who wish to maximize their chances of discovering gold?

- (A) Surveying several sites known to have been formed more than two billion years ago
- (B) Limiting exploration to sites known to have been formed from metamorphic fluid

- (C) Using an appropriate conceptual model to select a site for further exploration
- (D) Using geophysical methods to analyze rocks over a broad area
- (E) Limiting exploration to sites where alluvial gold has previously been found

Inference

Since the question uses the word *implies*, the answer will be an inference based on what the passage says about exploration. The third and fourth paragraphs describe the process of exploration. The high-technology methods are of no use to the explorer if the sites have not mineralized, *and to maximize the chances of discovery the explorer must therefore pay particular attention to selecting the ground formations most likely to be mineralized* (lines 30–35). Conceptual models based on observation and ore-formation theories allow the explorer to identify the areas most likely to be mineralized (lines 39–46).

- A Nothing in the passage indicates that a large portion of two-billion-year-old sites will have gold in them; it only indicates that if they are gold-quartz vein systems, they will be over two billion years old.
- B The widely held view, rather than the recent theory that is the focus of the passage, argued that gold-quartz vein systems were formed from metamorphic fluids. The passage says the recent theory has *considerable practical importance*, suggesting the benefits of applying the recent theory rather than this widely held view.
- C **Correct.** Conceptual models lead the explorer to the sites most likely to have mineralized.
- D Geophysical techniques are of no use unless ground formations in an area have been mineralized (lines 24–32).
- E The *simple prospecting methods* that find alluvial gold lead to only an *occasional discovery*; *most deposits not yet discovered ... are buried* (lines 15–19).

The correct answer is C.

111. Which of the following statements about discoveries of gold deposits is supported by information in the passage?
- (A) The number of gold discoveries made annually has increased between the time of the original gold rushes and the present.
 - (B) New discoveries of gold deposits are likely to be the result of exploration techniques designed to locate buried mineralization.
 - (C) It is unlikely that newly discovered gold deposits will ever yield as much as did those deposits discovered during the original gold rushes.
 - (D) Modern explorers are divided on the question of the utility of simple prospecting methods as a source of new discoveries of gold deposits.
 - (E) Models based on the theory that gold originated from magmatic fluids have already led to new discoveries of gold deposits.

Supporting ideas

This question requires consideration of explicit information throughout the passage. The second paragraph explains that *most deposits not yet discovered ... are buried* (lines 17–19), so the explorer's best means of discovering them is the use of *conceptual models* to identify the sites most likely to have buried minerals (lines 35–38). At that point, the explorer may use the high-technology methods possible when buried mineralization is present (lines 22–29).

- A The passage does not discuss the number of gold discoveries.
- B Correct.** Since most gold deposits are buried, explorers must find the sites most likely to contain buried minerals.
- C The passage does not discuss the yield of gold discoveries.
- D While *simple prospecting methods* lead only to an *occasional discovery*, modern explorers are not said to dispute their utility (lines 15–17).
- E The passage does not say that gold deposits have already been found by using the models based on this recent theory.

The correct answer is B.

112. It can be inferred from the passage that which of the following is easiest to detect?
- (A) A gold-quartz vein system originating in magmatic fluids
 - (B) A gold-quartz vein system originating in metamorphic fluids
 - (C) A gold deposit that is mixed with granite
 - (D) A gold deposit that has shed alluvial gold
 - (E) A gold deposit that exhibits chemical halos

Application

To answer this question, apply what the passage says about gold deposits to the examples in the answer choices. The second paragraph states that the gold deposits discovered during the gold rushes were *exposed at the Earth's surface*; they were found because *they had shed trails of alluvial gold that were easily traced by simple prospecting methods* (lines 11–16). Most deposits have not been detected because they are buried and have *no surface expression*. Thus the simplest gold to find would be that in a deposit that had shed alluvial gold.

- A The recent theory holds that gold-quartz vein systems are formed from magmatic fluids, but does not say that these systems have easily detectable surface expressions; the passage states that they form deep beneath the surface of Earth, which makes it unlikely that they will be easy to find.
- B The widely held view contends that gold-quartz vein systems are formed from metamorphic fluids, but does not say if these have easily detectable surface expressions.
- C The passage does not comment on gold deposits mixed with granite, although the recent theory does mention *molten granite-like bodies deep beneath the surface of the Earth* (lines 4–5).
- D Correct.** Finding gold deposits that have shed alluvial gold at the Earth's surface is far easier than finding buried gold deposits.
- E One complex, difficult subsurface exploration method involves chemical tests detecting the subtle chemical halos that surround mineralized areas; clearly this is not the *easiest* means of detecting gold deposits.

The correct answer is D.

113. The theory mentioned in lines 1–5 relates to the conceptual models discussed in the passage in which of the following ways?
- (A) It may furnish a valid account of ore-forming processes, and, hence, can support conceptual models that have great practical significance.
 - (B) It suggests that certain geological formations, long believed to be mineralized, are in fact mineralized, thus confirming current conceptual models.
 - (C) It suggests that there may not be enough similarity across Archean-age gold-quartz vein systems to warrant the formulation of conceptual models.
 - (D) It corrects existing theories about the chemical halos of gold deposits, and thus provides a basis for correcting current conceptual models.
 - (E) It suggests that simple prospecting methods still have a higher success rate in the discovery of gold deposits than do more modern methods.

Logical structure

This question requires considering the conceptual models described in lines 35–41 in light of the recent theory (lines 1–5), which the author assures the reader has *considerable practical importance* (lines 10–11). The conceptual models are derived from observation and from *theories of ore-forming processes*. Therefore, the recent theory may explain ore formation in a way that leads to the development of an updated model, and that model may then aid in the discovery of gold deposits.

- A **Correct.** The theory provides an explanation of ore formation, which aids in creating a conceptual model that may help explorers find gold deposits.
- B The theory does not confirm models, but contributes to forming them.
- C The practical value of the theory is that it can help to formulate models.
- D The theory does not challenge theories about chemical halos but rather contributes to the development of conceptual models that might allow for the broader application of chemical halos.
- E The theory does not compare methods of discovering gold deposits.

The correct answer is A.

114. According to the passage, methods of exploring for gold that are widely used today are based on which of the following facts?
- (A) Most of the Earth's remaining gold deposits are still molten.
 - (B) Most of the Earth's remaining gold deposits are exposed at the surface.
 - (C) Most of the Earth's remaining gold deposits are buried and have no surface expression.
 - (D) Only one type of gold deposit warrants exploration, since the other types of gold deposits are found in regions difficult to reach.
 - (E) Only one type of gold deposit warrants exploration, since the other types of gold deposits are unlikely to yield concentrated quantities of gold.

Supporting ideas

This question concerns factual information stated in the passage. In contrast to the gold deposits discovered at the Earth's surface, *most deposits not yet discovered have gone undetected because they are buried and have no surface expression* (lines 17–19). The *methods widely used today* must search for buried minerals rather than minerals on the surface (lines 22–29).

- A The passage mentions neither molten gold nor the method to detect it.
- B The passage explicitly says that most deposits are buried.
- C **Correct.** The passage explicitly states that most gold deposits are buried, leaving no traces at the Earth's surface.
- D The passage neither distinguishes between types of gold nor describes inaccessible regions.
- E The passage does not relate types of gold to yields of gold deposits.

The correct answer is C.

Questions 115–119 refer to the passage on page 400.

115. The passage is primarily concerned with
- (A) defending a controversial approach
 - (B) criticizing an accepted view
 - (C) summarizing research findings
 - (D) contrasting competing theories
 - (E) describing an innovative technique

Main idea

Figuring out the authors' primary concern depends on a careful review of the passage as a whole. The first paragraph identifies the larger question that is the context for the authors' investigation. The second paragraph presents the part of the question the authors researched, concluding with their unexpected results. The third paragraph explains the importance of these findings in relation to the larger question of the universe's possible "close." The authors' primary purpose in this passage is to summarize the findings of their research.

- A The authors do not discuss approaches to the question they research.
- B The authors mention that their findings do not conform to Kepler's law, but the passage's primary focus is on summarizing research findings and not on criticizing any particular view.
- C **Correct.** This passage presents a summation of the findings of the authors' research.
- D The authors do not contrast different theories in this passage.
- E The authors do not discuss new techniques in this passage.

The correct answer is C.

116. The authors' study indicates that, in comparison with the outermost regions of a typical spiral galaxy, the region just outside the nucleus can be characterized as having

- (A) higher rotational velocity and higher luminosity
- (B) lower rotational velocity and higher luminosity
- (C) lower rotational velocity and lower luminosity
- (D) similar rotational velocity and higher luminosity
- (E) similar rotational velocity and similar luminosity

Inference

In the second paragraph, the authors observe that *outside the bright nucleus of a typical spiral galaxy luminosity falls off rapidly* (lines 20–21); the region just outside the nucleus may thus be characterized as having higher luminosity than the outermost regions of a spiral galaxy. Their research finds that *the rotational velocity in spiral galaxies either remains constant with increasing distance from the center or increases slightly* (lines 27–30). The region just outside the nucleus may thus be characterized as sharing with the outermost regions of a spiral galaxy a similar rotational velocity.

- A This region was expected to have higher rotational velocity, but the research findings did not corroborate this hypothesis; it is correct that the region has higher luminosity.
- B The region does have higher luminosity, but not lower rotational velocity.
- C The region has neither lower luminosity nor lower rotational velocity.
- D **Correct.** The region has similar rotational velocity and higher luminosity.
- E The region has similar rotational velocity but higher luminosity.

The correct answer is D.

117. The authors' suggestion that "as much as 90 percent of the mass of the universe is not radiating at any wavelength with enough intensity to be detected on the Earth" (lines 34–37) would be most weakened if which of the following were discovered to be true?
- (A) Spiral galaxies are less common than types of galaxies that contain little nonluminous matter.
 - (B) Luminous and nonluminous matter are composed of the same basic elements.
 - (C) The bright nucleus of a typical spiral galaxy also contains some nonluminous matter.
 - (D) The density of the observable universe is greater than most previous estimates have suggested.
 - (E) Some galaxies do not rotate or rotate too slowly for their rotational velocity to be measured.

Application

The authors' conclusion about nonluminous matter is based on their study of the rotational velocity of spiral galaxies. If spiral galaxies were found to be atypical of galaxies, then it would be possible that, in those other galaxies, nonluminous matter does not increase as luminous matter decreases. If this were the case, the authors' conclusion would be based on a sample of galaxies not representative of the whole, and their argument would be seriously weakened.

- A **Correct.** The authors' conclusion assumes that spiral galaxies are typical of all galaxies; information calling that assumption into question weakens the argument.
- B The relation rather than the composition of luminous and nonluminous mass is relevant to the conclusion.
- C Nonluminous mass increases as luminous mass decreases: This finding does not rule out that the nucleus contains some nonluminous mass; the argument is not affected.
- D The density of the observable universe is only *a fraction* of the density needed to "close" the universe, so even if this density were greater, it is not likely to exceed the density of nonluminous matter.
- E The authors are concerned only with measurable rotational velocity.

The correct answer is A.

118. It can be inferred from information presented in the passage that if the density of the universe were equivalent to significantly less than three hydrogen atoms per cubic meter, which of the following would be true as a consequence?

- (A) Luminosity would be a true indicator of mass.
- (B) Different regions in spiral galaxies would rotate at the same velocity.
- (C) The universe would continue to expand indefinitely.
- (D) The density of the invisible matter in the universe would have to be more than 70 times the density of the luminous matter.
- (E) More of the invisible matter in spiral galaxies would have to be located in their nuclei than in their outer regions.

Inference

An inference is drawn from stated information. This question refers to the first paragraph, where the authors explain that *the critical density of matter needed to brake the expansion and "close" the universe is equivalent to three hydrogen atoms per cubic meter* (lines 7–9). If the density is significantly less, then the universe will not "close" but continue to expand indefinitely.

- A The authors' finding that luminosity is not a true indicator of mass is not derived from the conclusion that the density is less than three hydrogen atoms per cubic meter.
- B The authors' finding that different regions rotate at similar velocities does not come from the hypothesis about the density of the universe.
- C **Correct.** If the critical density needed to "close" the universe is equivalent to three hydrogen atoms per cubic meter, then a density of significantly less than this amount means that the universe will continue its expansion.
- D This statement would be true of the hypothetical "close" of the universe, but if the density is less than three hydrogen atoms per cubic meter, the universe will continue its expansion.
- E This statement cannot be inferred from the hypothesis about the density of the universe.

The correct answer is C.

119. The authors propose all of the following as possibly contributing to the “missing matter” in spiral galaxies EXCEPT

- (A) massive black holes
- (B) small black holes
- (C) small, dim stars
- (D) massive stars
- (E) large planets

Supporting ideas

This question asks the reader to find the list of possible explanations for the “missing” or *dark matter* that the authors give in the passage and to check that list against the possible answers. Using the process of elimination will show which answer is not included on the authors’ list. In the final paragraph, the authors write, *Such dark matter could be in the form of extremely dim stars of low mass, of large planets like Jupiter, or of black holes, either small or massive* (lines 37–40).

- A The authors include massive black holes.
- B The authors include small black holes.
- C The authors include small, dim stars.
- D Correct.** The authors do not include massive stars in their list of possible explanations for “missing matter.”
- E The authors include large planets.

The correct answer is D.

Questions 120–127 refer to the passage on page 402.

120. The primary purpose of the passage is to
- (A) advocate a more positive attitude toward technological change
 - (B) discuss the implications for employees of the modernization of a telephone exchange
 - (C) consider a successful challenge to the constructivist view of technological change
 - (D) challenge the position of advocates of technological determinism
 - (E) suggest that the social causes of technological change should be studied in real situations

Main idea

This question asks for an assessment of what the passage as a whole is doing. The passage introduces Clark’s study as a *solid contribution* (lines 3–4) to the debate between technological determinists and social constructivists. In the second paragraph, Braverman is introduced as holding a position of social constructivism, a position that Clark takes issue with. In the final paragraph, the passage holds that Clark *refutes the extremes of the constructivists* (line 33), and Clark’s arguments challenging social constructivism are then described.

- A The passage takes no position on the merits of technological change but is concerned only with the role of such change in society.
- B The passage mentions telephone exchange workers as an example that helps illustrate the more central debate between determinists and constructivists.
- C Correct.** The passage is mainly concerned with portraying Clark’s view as a successful challenge to constructivism.
- D The passage describes Clark’s view as a successful challenge to social constructivism, not technological determinism.
- E The passage is concerned with describing a challenge to social constructivism and not with suggesting the context in which technological change ought to be studied.

The correct answer is C.

121. Which of the following statements about the modernization of the telephone exchange is supported by information in the passage?
- (A) The new technology reduced the role of managers in labor negotiations.
 - (B) The modernization was implemented without the consent of the employees directly affected by it.
 - (C) The modernization had an impact that went significantly beyond maintenance routines.
 - (D) Some of the maintenance workers felt victimized by the new technology.
 - (E) The modernization gave credence to the view of advocates of social constructivism.

Supporting ideas

This question requires recognizing information contained in the passage. The passage states in the first paragraph that Clark's study focused on the modernization of a telephone exchange and the effect this had on maintenance work and workers. After describing Braverman's analysis in the second paragraph as being at odds with Clark's views, the passage discusses Clark's views in more detail in the final paragraph. As part of this discussion, the passage notes that Clark shows how a change from *maintenance-intensive electromechanical switches to semielectronic switching systems* at the telephone exchange *altered work tasks, skills, training opportunities, administration, and organization of workers* (lines 41–46). Thus, the passage shows that the modernization of the telephone exchange affected much more than maintenance routines.

- A The passage does not discuss whether new technology reduces the role of managers in labor negotiations.
- B The passage does not discuss the role of employee consent in the modernization of the telephone exchange.
- C **Correct.** The passage states that the modernization of the telephone exchange affected tasks, skills, training, administration, and the organization of workers.
- D The passage does not suggest that maintenance workers felt victimized by the modernization of the telephone exchange.
- E The passage describes modernization as a fact viewable from a perspective of social constructivism or technological determinism, but that does not in itself support either view.

The correct answer is C.

122. Which of the following most accurately describes Clark's opinion of Braverman's position?

- (A) He respects its wide-ranging popularity.
- (B) He disapproves of its misplaced emphasis on the influence of managers.

- (C) He admires the consideration it gives to the attitudes of the workers affected.
- (D) He is concerned about its potential to impede the implementation of new technologies.
- (E) He is sympathetic to its concern about the impact of modern technology on workers.

Inference

Answering this question requires inferring what the passage's author likely believes. The passage describes Braverman's position as one of mainstream social constructivism (lines 23–24), a position that Clark takes issue with. Although it describes Braverman's position, the rest of the passage is devoted to showing how Clark's position takes issue with Braverman's. In the second paragraph, the passage describes Clark as holding that *technology can be a primary determinant of social and managerial organization* (lines 11–12), which suggests that managers are sometimes subordinate to technological change. In lines 16–19, however, Braverman is described as holding that *the shape of a technological system is subordinate to the manager's desire to wrest control of the labor process from the workers*, which shows that Clark and Braverman are at odds on this point.

- A Since the passage says that Clark believes an important insight *has been obscured by the recent sociological fashion* that Braverman's views exemplify (lines 12–15), one cannot infer that Clark respects the popularity of Braverman's views.
- B **Correct.** The passage shows that Clark believes managers to have less influence over how technology affects an organization than Braverman claims that they have.
- C The passage does not indicate that Clark admires any aspect of Braverman's position.
- D The passage does not indicate that Clark considers impediments to modernization.
- E The passage does not indicate that Clark is sympathetic to any concerns attributed to Braverman.

The correct answer is B.

123. The information in the passage suggests that which of the following statements from hypothetical sociological studies of change in industry most clearly exemplifies the social constructivists' version of technological determinism?

- (A) It is the available technology that determines workers' skills, rather than workers' skills influencing the application of technology.
- (B) All progress in industrial technology grows out of a continuing negotiation between technological possibility and human need.
- (C) Some organizational change is caused by people; some is caused by computer chips.
- (D) Most major technological advances in industry have been generated through research and development.
- (E) Some industrial technology eliminates jobs, but educated workers can create whole new skills areas by the adaptation of the technology.

Application

This question requires understanding different points of view discussed in the passage. In the first paragraph, the passage mentions the debate involving technological determinism and social constructivism. In the second and third paragraphs, the passage uses Braverman's analysis to illustrate the social constructivists' position and in the third paragraph suggests that the constructivists are *misrepresenting technological determinism* (lines 25–26). In lines 31–32, the constructivists are reported to hold that technological determinism views technology as *existing outside society, capable of directly influencing skills and work organization*.

- A Correct.** This statement is consistent with the constructivists' view that technological determinism sees technology as outside of society, influencing workers' skills.
- B** The passage states that the constructivists hold that *technological determinists are supposed to believe ... that machinery imposes appropriate forms of order on society* (lines 27–29), suggesting that no negotiation is present.

- C** According to the description of them in the passage, constructivists portray technological determinists as believing that technology, not people, drives organizational change.
- D** The passage does not portray either constructivists or determinists as being concerned with technological research and development.
- E** The passage does not portray either constructivists or determinists as being concerned with technology-driven job elimination or creation.

The correct answer is A.

124. The information in the passage suggests that Clark believes that which of the following would be true if social constructivism had not gained widespread acceptance?

- (A) Businesses would be more likely to modernize without considering the social consequences of their actions.
- (B) There would be greater understanding of the role played by technology in producing social change.
- (C) Businesses would be less likely to understand the attitudes of employees affected by modernization.
- (D) Modernization would have occurred at a slower rate.
- (E) Technology would have played a greater part in determining the role of business in society.

Inference

Answering this question involves understanding a point of view as it is described in the passage. The passage aligns Clark's study closely with the technological determinists, summarizing his view in lines 11–12: *technology can be a primary determinant of social and managerial organization*. In the following sentence, the passage states that Clark believes that *this possibility is obscured by the recent sociological fashion, exemplified by Braverman's analysis* (lines 12–15). After illustrating Braverman's analysis, the passage then states that it represents *social constructivism*.

- A According to the passage, Clark holds that constructivists obscure how modernization might have social consequences.
- B Correct.** According to the passage, Clark sees constructivism as obscuring the possibility that technology plays a primary role in social change.
- C The passage does not discuss how the attitudes of employees are perceived by their employers.
- D The passage describes a debate about the history and sociology of technology; it does not suggest that sociological analyses affect the pace of modernization.
- E The passage describes a debate about the history and sociology of technology; it does not suggest that sociological analyses affect the role that technology plays in business.

The correct answer is B.

125. According to the passage, constructivists employed which of the following to promote their argument?
- (A) Empirical studies of business situations involving technological change
 - (B) Citation of managers supportive of their position
 - (C) Construction of hypothetical situations that support their view
 - (D) Contrasts of their view with a misstatement of an opposing view
 - (E) Descriptions of the breadth of impact of technological change

Supporting ideas

Answering this question involves recognizing information given in the passage. The passage indicates that a debate exists between technological determinists and social constructivists, suggesting that these views are in opposition. The passage goes on to state that *constructivists gain acceptance by misrepresenting technological determinism* (lines 25–26). This misrepresentation is presented as the *alternative to constructivism* (lines 29–30), suggesting that constructivists promoted their own view by contrasting it with a misrepresentation of determinists' views.

- A The passage mentions empirical studies in relation to Clark's study but not Braverman's analysis.
- B The passage does not mention that managers were supportive of any particular point of view within the sociology of technology.
- C The passage does not mention any hypothetical situations as being used by the constructivists in support of their view.
- D Correct.** The passage indicates that the constructivists have come into fashion by contrasting their own views with a misrepresentation of the views of technological determinists.
- E The passage does not describe the constructivists as making determinations regarding the degree of impact that technological change has on social or managerial organization.

The correct answer is D.

126. The author of the passage uses the expression "are supposed to" in line 27 primarily in order to
- (A) suggest that a contention made by constructivists regarding determinists is inaccurate
 - (B) define the generally accepted position of determinists regarding the implementation of technology
 - (C) engage in speculation about the motivation of determinists
 - (D) lend support to a comment critical of the position of determinists
 - (E) contrast the historical position of determinists with their position regarding the exchange modernization

Evaluation

This question requires understanding how a particular phrase functions in the passage as a whole. In the third paragraph the passage states that *constructivists gain acceptance by misrepresenting technological determinism* (lines 25–26) and follows this claim with an example of this misrepresentation, stating that *technological determinists are supposed to believe, for example* (lines 27–28). This line implies that the constructivist view of the determinists is inaccurate.

- A **Correct.** The passage uses the expression in part to provide an example of the constructivists' misrepresentation of the determinists.
- B The passage indicates that the view attributed to the determinists is a misrepresentation, not one that is generally accepted by determinists.
- C The expression in the passage is part of a discussion about the motivation of constructivists, not determinists.
- D The expression in the passage is part of a discussion that is critical of the constructivists, not the determinists.
- E The passage does not describe either the historical position of determinists or their position on the exchange modernization.

The correct answer is A.

127. Which of the following statements about Clark's study of the telephone exchange can be inferred from information in the passage?
- (A) Clark's reason for undertaking the study was to undermine Braverman's analysis of the function of technology.
 - (B) Clark's study suggests that the implementation of technology should be discussed in the context of conflict between labor and management.
 - (C) Clark examined the impact of changes in the technology of switching at the exchange in terms of overall operations and organization.
 - (D) Clark concluded that the implementation of new switching technology was equally beneficial to management and labor.
 - (E) Clark's analysis of the change in switching systems applies only narrowly to the situation at the particular exchange that he studied.

Inference

This question requires understanding what the passage implies in its discussion of a point of view. The details of Clark's views are discussed primarily in the final paragraph. The passage states that on an empirical level, Clark demonstrates that technological change regarding switches at the telephone exchange *altered work tasks, skills, training opportunities, administration, and organization of workers* (lines 44–46). The passage goes on to state Clark's contention that these changes even influenced negotiations between management and labor unions.

- A The passage indicates that Clark's study addressed the extremes of both technological determinism and social constructivism. It cites Braverman as a proponent of social constructivism but provides no evidence that Clark's motivation in beginning his study was specifically to target an analysis offered by Braverman.
- B The passage indicates that Clark attributed some organizational change to the way labor and management negotiated the introduction of technology but does not mention conflict between them.
- C **Correct.** According to the passage, Clark concludes that changes to the technology of switches had an influence on several aspects of the overall operations and organization of the telephone exchange.
- D The passage does not indicate that Clark assesses the benefits of technological change to either labor or management.
- E The passage indicates that Clark believes the change in switching technology influenced many aspects of the overall operations of the telephone exchange.

The correct answer is C.

Questions 128–133 refer to the passage on page 404.

128. According to the passage, the five well-known plant hormones are not useful in controlling the growth of crops because
- (A) it is not known exactly what functions the hormones perform
 - (B) each hormone has various effects on plants
 - (C) none of the hormones can function without the others
 - (D) each hormone has different effects on different kinds of plants
 - (E) each hormone works on only a small subset of a cell's genes at any particular time

Supporting ideas

To answer this question, look for information that is provided in the passage. Lines 16–20 explain that each of the five plant hormones *has more than one effect on the growth and development of plants*; for this reason, they *are not very useful in artificially controlling the growth of crops*.

- A Lines 20–25 describe in detail the multiple functions of the hormone auxin.
- B Correct.** The hormones *have so many simultaneous effects* on plants that they are not useful in controlling the growth of crops.
- C The passage provides no evidence to support this reason.
- D No information is given in the passage to support this reason.
- E 'The hormones' multiple effects on plant growth, not their specific effect at the cellular level, make them ineffective at artificially controlling crop growth.

The correct answer is B.

129. The passage suggests that the place of hypothalamic hormones in the hormonal hierarchies of animals is similar to the place of which of the following in plants?

- (A) Plant cell walls
- (B) The complement of genes in each plant cell
- (C) A subset of a plant cell's gene complement
- (D) The five major hormones
- (E) The oligosaccharins

Inference

This question asks for information that is not directly stated in the passage. It requires examining the analogy between the action of hormones in animals and in plants, which is the subject of the third and fourth paragraphs. In animals, hypothalamic hormones stimulate the pituitary gland to synthesize and release many different hormones; this process causes hormones from the adrenal cortex to be released. A similar *hierarchy of hormones* may exist in plants. The pleiotropic plant hormones may activate the enzymes that, in turn, release oligosaccharins from the cell wall. It is reasonable to infer that, in triggering the action, the plant hormones may act in a way similar to the hypothalamic hormones in animals.

- A Plant cell walls do not activate enzymes as the hypothalamic hormones activate the pituitary gland.
- B The passage states that all cells of a plant start out with the same complement of genes (lines 1–2), but this statement is not part of the analogy.
- C Line 5 refers to the subset of genes, but it is not a part of the analogy.
- D Correct.** Like hypothalamic hormones in animals, the five major plant hormones may be responsible for releasing the catalysts for growth.
- E The oligosaccharins are part of the hierarchy, but they are not equivalent to the hypothalamic hormones in releasing other hormones.

The correct answer is D.

130. The passage suggests that which of the following is a function likely to be performed by an oligosaccharin?
- (A) To stimulate a particular plant cell to become part of a plant's root system
 - (B) To stimulate the walls of a particular cell to produce other oligosaccharins
 - (C) To activate enzymes that release specific chemical messengers from plant cell walls
 - (D) To duplicate the gene complement in a particular plant cell
 - (E) To produce multiple effects on a particular subsystem of plant cells

Inference

Answering this question requires making an inference based on the information in the passage. The analogy between animal and plant hormones describes a process that ends, in animals, with *specific effects on target organs all over the body* (lines 33–34). While the pleiotropic plant hormones have multiple effects, the oligosaccharins are described as *more specific chemical messengers* (lines 43–44). It is reasonable to infer that oligosaccharins affect a specific part of a plant's growth.

- A **Correct.** This is the only response that gives an example of an effect on a specific aspect of plant growth and development.
- B The last paragraph explains that enzymes release oligosaccharins. The passage provides no evidence that oligosaccharins stimulate the release of other oligosaccharins.
- C The pleiotropic plant hormones, not the oligosaccharins, may activate the enzymes (lines 41–43).
- D The passage does not discuss such duplication.
- E The oligosaccharins, as *more specific chemical messengers*, have a specific effect, not multiple effects, on plant growth.

The correct answer is A.

131. The author mentions specific effects that auxin has on plant development in order to illustrate the
- (A) point that some of the effects of plant hormones can be harmful
 - (B) way in which hormones are produced by plants
 - (C) hierarchical nature of the functioning of plant hormones
 - (D) differences among the best-known plant hormones
 - (E) concept of pleiotropy as it is exhibited by plant hormones

Logical structure

To answer this question, reread the section where auxin is discussed. The second paragraph explains that each of the five major pleiotropic hormones, including auxin, *has more than one effect on the growth and development of plants*. The author then lists auxin's multiple effects as an example of the principle of pleiotropy in plants.

- A The passage does not discuss harmful effects.
- B The passage discusses the effects of hormones, not their production.
- C Auxin is used to exemplify the many different effects of a pleiotropic hormone, not its role in a hierarchy of hormones.
- D The differences among the five major hormones are not discussed.
- E **Correct.** The author lists auxin's multiple effects to illustrate how pleiotropic hormones affect plant growth.

The correct answer is E.

132. According to the passage, which of the following best describes a function performed by oligosaccharins?
- (A) Regulating the daily functioning of a plant's cells
 - (B) Interacting with one another to produce different chemicals
 - (C) Releasing specific chemical messengers from a plant's cell walls
 - (D) Producing the hormones that cause plant cells to differentiate to perform different functions
 - (E) Influencing the development of a plant's cells by controlling the expression of the cells' genes

Supporting ideas

To answer this question, look for information that is provided in the passage. Oligosaccharins are *regulatory molecules* (line 13). They form part of the complex system that turns on, or expresses, a small subset of genes in a particular kind of cell. As explained in the first paragraph, this process allows plant cells to differentiate and form different plant structures. Unlike the five major plant hormones, the oligosaccharins affect a specific aspect of the plant's growth (lines 14–17).

- A The passage does not discuss the daily functioning of a plant's cells.
- B The passage provides no evidence of this interaction.
- C The oligosaccharins *are fragments of the cell wall* (line 39) and the *specific chemical messengers from the cell wall* (lines 43–44).
- D The oligosaccharins are not said to produce hormones.
- E **Correct.** Oligosaccharins are part of the system that turns on, or expresses, the subset of a cell's genes that allows cells to grow into different plant structures.

The correct answer is E.

133. The passage suggests that, unlike the pleiotropic hormones, oligosaccharins could be used effectively to
- (A) trace the passage of chemicals through the walls of cells
 - (B) pinpoint functions of other plant hormones
 - (C) artificially control specific aspects of the development of crops
 - (D) alter the complement of genes in the cells of plants
 - (E) alter the effects of the five major hormones on plant development

Inference

The passage does not explicitly state how oligosaccharins could be used, but a use can be inferred. The second paragraph establishes that the pleiotropic hormones are not useful in artificially controlling crop growth because of their multiple, diverse effects. Oligosaccharins are contrasted with the hormones because they have specific effects. Thus it is reasonable to infer that oligosaccharins might be used to control specific aspects of crop growth.

- A Passage of chemicals through cell walls is not discussed.
- B The passage does not indicate that oligosaccharins act in this way.
- C **Correct.** Because the oligosaccharins have specific rather than multiple effects, they might have the potential to be used to control specific aspects of a crop's growth.
- D The oligosaccharins are not said to alter the cells' complement of genes.
- E The passage does not show that oligosaccharins alter the hormones' effects.

The correct answer is C.

Questions 134–139 refer to the passage on page 406.

134. The author indicates explicitly that which of the following records has been a source of information in her investigation?
- (A) United States Immigration Service reports from 1914 to 1930
 - (B) Payrolls of southern manufacturing firms between 1910 and 1930
 - (C) The volume of cotton exports between 1898 and 1910
 - (D) The federal census of 1910
 - (E) Advertisements of labor recruiters appearing in southern newspapers after 1910

Supporting ideas

Since the question uses the word *explicitly*, it is clear that the answer can be found in the passage. In lines 27–30, the author refers to the number of African American workers in *manufacturing and mechanical pursuits*, a phrase cited as coming from the federal census and indicating that she was using census data. While she probably used other sources as well, no other source is explicitly mentioned.

- A Immigration Service reports are not mentioned in the passage.
- B Payroll records are not mentioned in the passage.
- C While the decline of the cotton industry is mentioned, records of exports are not.
- D Correct.** The federal census is indicated as a source of information on the employment of African American workers.
- E Labor recruiters and the African American press are mentioned, but there is no mention of data being collected from labor recruiting ads.

The correct answer is D.

135. In the passage, the author anticipates which of the following as a possible objection to her argument?
- (A) It is uncertain how many people actually migrated during the Great Migration.
 - (B) The eventual economic status of the Great Migration migrants has not been adequately traced.
 - (C) It is not likely that people with steady jobs would have reason to move to another area of the country.
 - (D) It is not true that the term “manufacturing and mechanical pursuits” actually encompasses the entire industrial sector.
 - (E) Of the African American workers living in southern cities, only those in a small number of trades were threatened by obsolescence.

Logical structure

Answering questions about the author’s line of argument requires following the steps in the logical structure of that argument. The author argues that many of the African American migrants to the North may have lived and worked in southern urban areas, not rural areas. In lines 33–36, she recognizes that some people may find it *surprising to argue* that African Americans with steady jobs would leave and proceeds to offer *an explanation* based on southern labor conditions. She thus anticipates the objection that workers would not leave steady jobs.

- A The actual number of people migrating is not part of the author’s argument, which concerns whether the migrants came from urban or rural backgrounds.
- B The eventual economic status is outside the scope of the argument.
- C Correct.** The author anticipates this objection and answers it by citing southern labor conditions.
- D The author claims that “*manufacturing and mechanical pursuits*” encompassed roughly *the entire industrial sector* (lines 29–31) but does not address—either explicitly or implicitly—any possible objections relating to this claim.

- E The number of industrial workers leaving southern cities specifically because of job obsolescence is not at issue and is thus not the basis for a potential objection. In the final paragraph, the author is simply presenting her case that wage pressures affected southern African American urban workers in general, in both artisan trades and newly developed industries.

The correct answer is C.

136. According to the passage, which of the following is true of wages in southern cities in 1910?
- (A) They were being pushed lower as a result of increased competition.
 - (B) They had begun to rise so that southern industry could attract rural workers.
 - (C) They had increased for skilled workers but decreased for unskilled workers.
 - (D) They had increased in large southern cities but decreased in small southern cities.
 - (E) They had increased in newly developed industries but decreased in the older trades.

Supporting ideas

The information that this question asks for is stated in the passage and can be found by careful rereading. The last paragraph is about working conditions in the South. Lines 52–55 show that an influx of rural workers had increased competition for the available industrial jobs and driven wages lower.

- A **Correct.** Lines 52–55 indicate that wages were going down as more workers arrived from rural areas and competed for jobs.
- B Rural workers arrived in the city because of the boll weevil infestation, not because of the promise of higher wages, and their arrival depressed wages.
- C The passage refers to wages for industrial jobs but does not distinguish between the wages of skilled workers and unskilled workers in this respect.

- D The passage does not discuss wage differences between large and small southern cities.
- E The passage provides no information on differences in wages between older trades and new industries.

The correct answer is A.

137. The author cites each of the following as possible influences in an African American worker's decision to migrate north in the Great Migration EXCEPT
- (A) wage levels in northern cities
 - (B) labor recruiters
 - (C) competition from rural workers
 - (D) voting rights in northern states
 - (E) the African American press

Supporting ideas

Use the process of elimination to answer this question regarding what specifically does NOT appear in the passage. Four of the five answers are mentioned as influences on migration, and one is not. Match each answer with its mention in the passage; the choice that does not have a match is the correct answer. In this case, the only answer not mentioned is *voting rights*.

- A Northern wage levels are mentioned in lines 49–51.
- B Labor recruiters are mentioned in line 48.
- C Competition from rural workers is mentioned in lines 52–54.
- D **Correct.** Voting rights in northern states are not mentioned in the passage; the author has not cited them as a possible influence on a migrant's decision.
- E The African American press is mentioned in lines 48–49.

The correct answer is D.

138. It can be inferred from the passage that the “easy conclusion” mentioned in line 58 is based on which of the following assumptions?

- (A) People who migrate from rural areas to large cities usually do so for economic reasons.
- (B) Most people who leave rural areas to take jobs in cities return to rural areas as soon as it is financially possible for them to do so.
- (C) People with rural backgrounds are less likely to succeed economically in cities than are those with urban backgrounds.
- (D) Most people who were once skilled workers are not willing to work as unskilled workers.
- (E) People who migrate from their birthplaces to other regions of a country seldom undertake a second migration.

Inference

The question directs one’s attention to line 58 and the phrase *easy conclusion*. In this context, *easy* has the negative connotation of “facile” or “simplistic” and suggests the author’s disagreement with the conclusion that the economic problems of the migrants to northern urban areas were linked to their rural backgrounds. The *conclusion* derived from this link is first discussed in lines 17–19, where lack of economic success in the North is tied to a rural background.

- A The author does assume economic motives for migration, but this assumption is not linked to the conclusion about difficulties arising from a rural background.
- B This point is not discussed in the passage and is not related to the conclusion that a rural background is linked to economic problems.
- C **Correct.** The conclusion referred to in line 58 is based on the assumption that rural background will hinder economic success in urban settings.
- D The conclusion refers to all people from rural backgrounds and does not distinguish between skilled and unskilled workers.
- E The conclusion about the economic difficulties of migrants from rural backgrounds makes no assumptions about whether people migrate more than once.

The correct answer is C.

139. The primary purpose of the passage is to

- (A) support an alternative to an accepted methodology
- (B) present evidence that resolves a contradiction
- (C) introduce a recently discovered source of information
- (D) challenge a widely accepted explanation
- (E) argue that a discarded theory deserves new attention

Main idea

Answering questions about primary purpose requires thinking about the underlying structure of the passage. In the first paragraph, the author describes the Great Migration and mentions the assumption that most migrants came from rural areas. Some people then concluded that the migrants’ economic difficulties were due to their rural background. In the second paragraph, the author speculates that many migrants could have come from urban areas, and in the third paragraph, she offers information that supports her position. Essentially, if the migrants came from urban areas, their subsequent economic difficulties cannot be attributed to their nonexistent rural background. An analysis of the structure of the passage thus reveals that the author is presenting a generally accepted view and then challenging it.

- A The author is showing the weakness in an explanation; there is no discussion of a methodology or of an alternative methodology.
- B The reasoning presented in the passage contradicts what the author describes as prevailing ideas but does not resolve any previous contradiction.
- C The author does not mention any source of information that was previously unavailable. While census records are briefly mentioned, they are hardly a recently discovered source of information.
- D **Correct.** The author first discusses a widely accepted explanation of the economic difficulties of African American migrants and then challenges that explanation.
- E The author argues against an explanation she thinks should be discarded. She does not discuss any previously discarded theory.

The correct answer is D.

To register for the GMAT test go to www.mba.com

8.0 Critical Reasoning

7.4 Practice Questions

Each of the **reading comprehension** questions is based on the content of a passage. After reading the passage answer all questions pertaining to it on the basis of what is stated or implied in the passage. For each question, select the best answer of the choices given.

- Line Biologists have advanced two theories to explain why schooling of fish occurs in so many fish species. Because schooling is particularly widespread among species of small fish, both theories assume that
- (5) schooling offers the advantage of some protection from predators.

- Proponents of theory A dispute the assumption that a school of thousands of fish is highly visible. Experiments have shown that any fish can be seen,
- (10) even in very clear water, only within a sphere of 200 meters in diameter. When fish are in a compact group, the spheres of visibility overlap. Thus the chance of a predator finding the school is only slightly greater than the chance of the predator finding a single fish
- (15) swimming alone. Schooling is advantageous to the individual fish because a predator's chance of finding any particular fish swimming in the school is much smaller than its chance of finding at least one of the same group of fish if the fish were dispersed
- (20) throughout an area.

- However, critics of theory A point out that some fish form schools even in areas where predators are abundant and thus little possibility of escaping detection exists. They argue that the school continues
- (25) to be of value to its members even after detection. They advocate theory B, the "confusion effect," which can be explained in two different ways.

- Sometimes, proponents argue, predators simply cannot decide which fish to attack. This indecision
- (30) supposedly results from a predator's preference for striking prey that is distinct from the rest of the school in appearance. In many schools the fish are almost identical in appearance, making it difficult for a predator to select one. The second explanation for
- (35) the "confusion effect" has to do with the sensory confusion caused by a large number of prey moving around the predator. Even if the predator

- makes the decision to attack a particular fish, the movement of other prey in the school can
- (40) be distracting. The predator's difficulty can be compared to that of a tennis player trying to hit a tennis ball when two are approaching simultaneously.

Questions 1–4 refer to the passage above.

1. According to the passage, theory B states that which of the following is a factor that enables a schooling fish to escape predators?
 - (A) The tendency of fish to form compact groups
 - (B) The movement of other fish within the school
 - (C) The inability of predators to detect schools
 - (D) The ability of fish to hide behind one another in a school
 - (E) The great speed with which a school can disperse
2. According to the passage, both theory A and theory B have been developed to explain how
 - (A) fish hide from predators by forming schools
 - (B) forming schools functions to protect fish from predators
 - (C) schooling among fish differs from other protective behaviors
 - (D) small fish are able to make rapid decisions
 - (E) small fish are able to survive in an environment densely populated by large predators
3. According to one explanation of the “confusion effect,” a fish that swims in a school will have greater advantages for survival if it
 - (A) tends to be visible for no more than 200 meters
 - (B) stays near either the front or the rear of a school
 - (C) is part of a small school rather than a large school
 - (D) is very similar in appearance to the other fish in the school
 - (E) is medium-sized
4. The author is primarily concerned with
 - (A) discussing different theories
 - (B) analyzing different techniques
 - (C) defending two hypotheses
 - (D) refuting established beliefs
 - (E) revealing new evidence

- Line Ecoefficiency (measures to minimize environmental impact through the reduction or elimination of waste from production processes) has become a goal for companies worldwide, with many realizing significant
- (5) cost savings from such innovations. Peter Senge and Goran Carstedt see this development as laudable but suggest that simply adopting ecoefficiency innovations could actually worsen environmental stresses in the future. Such innovations reduce
- (10) production waste but do not alter the number of products manufactured nor the waste generated from their use and discard; indeed, most companies invest in ecoefficiency improvements in order to increase profits and growth. Moreover, there is no
- (15) guarantee that increased economic growth from ecoefficiency will come in similarly ecoefficient ways, since in today's global markets, greater profits may be turned into investment capital that could easily be reinvested in old-style eco-inefficient industries. Even
- (20) a vastly more ecoefficient industrial system could, were it to grow much larger, generate more total waste and destroy more habitat and species than would a smaller, less ecoefficient economy. Senge and Carstedt argue that to preserve the global
- (25) environment and sustain economic growth, businesses must develop a new systemic approach that reduces total material use and total accumulated waste. Focusing exclusively on ecoefficiency, which offers a compelling business case according to
- (30) established thinking, may distract companies from pursuing radically different products and business models.

Questions 5–7 refer to the passage above.

5. The primary purpose of the passage is to
- (A) explain why a particular business strategy has been less successful than was once anticipated
 - (B) propose an alternative to a particular business strategy that has inadvertently caused ecological damage
 - (C) present a concern about the possible consequences of pursuing a particular business strategy
 - (D) make a case for applying a particular business strategy on a larger scale than is currently practiced
 - (E) suggest several possible outcomes of companies' failure to understand the economic impact of a particular business strategy
6. The passage mentions which of the following as a possible consequence of companies' realization of greater profits through ecoefficiency?
- (A) The companies may be able to sell a greater number of products by lowering prices.
 - (B) The companies may be better able to attract investment capital in the global market.
 - (C) The profits may be reinvested to increase economic growth through ecoefficiency.
 - (D) The profits may be used as investment capital for industries that are not ecoefficient.
 - (E) The profits may encourage companies to make further innovations in reducing production waste.

7. The passage implies that which of the following is a possible consequence of a company's adoption of innovations that increase its ecoefficiency?
- (A) Company profits resulting from such innovations may be reinvested in that company with no guarantee that the company will continue to make further improvements in ecoefficiency.
 - (B) Company growth fostered by cost savings from such innovations may allow that company to manufacture a greater number of products that will be used and discarded, thus worsening environmental stress.
 - (C) A company that fails to realize significant cost savings from such innovations may have little incentive to continue to minimize the environmental impact of its production processes.
 - (D) A company that comes to depend on such innovations to increase its profits and growth may be vulnerable in the global market to competition from old-style eco-inefficient industries.
 - (E) A company that meets its ecoefficiency goals is unlikely to invest its increased profits in the development of new and innovative ecoefficiency measures.

Line Archaeology as a profession faces two major problems. First, it is the poorest of the poor. Only paltry sums are available for excavating and even less is available for publishing the results

(5) and preserving the sites once excavated. Yet archaeologists deal with priceless objects every day. Second, there is the problem of illegal excavation, resulting in museum-quality pieces being sold to the highest bidder.

(10) I would like to make an outrageous suggestion that would at one stroke provide funds for archaeology and reduce the amount of illegal digging. I would propose that scientific archaeological expeditions and governmental

(15) authorities sell excavated artifacts on the open market. Such sales would provide substantial funds for the excavation and preservation of archaeological sites and the publication of results. At the same time, they would break the illegal

(20) excavator's grip on the market, thereby decreasing the inducement to engage in illegal activities.

You might object that professionals excavate to acquire knowledge, not money. Moreover, ancient artifacts are part of our global cultural heritage,

(25) which should be available for all to appreciate, not sold to the highest bidder. I agree. Sell nothing that has unique artistic merit or scientific value. But, you might reply, everything that comes out of the ground has scientific value. Here we part company.

(30) Theoretically, you may be correct in claiming that every artifact has potential scientific value. Practically, you are wrong.

I refer to the thousands of pottery vessels and ancient lamps that are essentially duplicates of

(35) one another. In one small excavation in Cyprus, archaeologists recently uncovered 2,000 virtually indistinguishable small jugs in a single courtyard. Even precious royal seal impressions known as l'melekh handles have been found in abundance

(40) —more than 4,000 examples so far.

The basements of museums are simply not large enough to store the artifacts that are likely to be discovered in the future. There is not enough money even to catalog the finds; as a result, they

(45) cannot be found again and become as inaccessible as if they had never been discovered. Indeed, with the help of a computer, sold artifacts could be more accessible than are the pieces stored in bulging museum basements. Prior to sale, each could be

(50) photographed and the list of the purchasers could be maintained on the computer. A purchaser could even be required to agree to return the piece if it should become needed for scientific purposes.

It would be unrealistic to suggest that illegal

(55) digging would stop if artifacts were sold on the open market. But the demand for the clandestine product would be substantially reduced. Who would want an unmarked pot when another was available whose provenance was known, and that was dated

(60) stratigraphically by the professional archaeologist who excavated it?

Questions 8–10 refer to the passage above.

8. The primary purpose of the passage is to propose
- (A) an alternative to museum display of artifacts
 - (B) a way to curb illegal digging while benefiting the archaeological profession
 - (C) a way to distinguish artifacts with scientific value from those that have no such value
 - (D) the governmental regulation of archaeological sites
 - (E) a new system for cataloging duplicate artifacts
9. The author implies that all of the following statements about duplicate artifacts are true EXCEPT
- (A) a market for such artifacts already exists
 - (B) such artifacts seldom have scientific value
 - (C) there is likely to be a continuing supply of such artifacts
 - (D) museums are well supplied with examples of such artifacts
 - (E) such artifacts frequently exceed in quality those already cataloged in museum collections
10. Which of the following is mentioned in the passage as a disadvantage of storing artifacts in museum basements?
- (A) Museum officials rarely allow scholars access to such artifacts.
 - (B) Space that could be better used for display is taken up for storage.
 - (C) Artifacts discovered in one excavation often become separated from each other.
 - (D) Such artifacts are often damaged by variations in temperature and humidity.
 - (E) Such artifacts often remain uncataloged and thus cannot be located once they are put in storage.

- Line Io and Europa, the inner two of Jupiter's four
largest moons, are about the size of Earth's moon
and are composed mostly or entirely of rock and
metal. Ganymede and Callisto are larger and roughly
(5) half ice. Thus, these four moons are somewhat
analogous to the planets of the solar system, in which
the rock- and metal-rich inner planets are distinct from
the much larger gas- and ice-rich outer planets.
Jupiter's moons are, however, more "systematic":
(10) many of their properties vary continuously with
distance from Jupiter. For example, Io is ice-free,
Europa has a surface shell of ice, and while
Ganymede and Callisto are both ice-rich, outermost
Callisto has more.
- (15) This compositional gradient has geological
parallels. Io is extremely geologically active, Europa
seems to be active on a more modest scale, and
Ganymede has undergone bouts of activity in its
geological past. Only Callisto reveals no geological
(20) activity. In similar fashion, Callisto's surface is very
heavily cratered from the impact of comets and
asteroids; Ganymede, like Earth's moon, is heavily
cratered in parts; Europa is very lightly cratered; and
no craters have been detected on Io, even though
(25) Jupiter's gravity attracts comets and asteroids
passing near it, substantially increasing the
bombardment rate of the inner moons compared to
that of the outer ones. But because of Io's high
degree of geological activity, its surface undergoes
(30) more-or-less continuous volcanic resurfacing.

Questions 11–13 refer to the passage above.

11. According to the passage, the difference in the amount of cratering on Callisto's and Io's respective surfaces can probably be explained by the difference between these two moons with respect to which of the following factors?
- (A) Size
 - (B) Ice content
 - (C) The rate of bombardment by comets and asteroids
 - (D) The influence of Jupiter's other moons
 - (E) The level of geological activity
12. Which of the following best describes the purpose of the second paragraph of the passage?
- (A) To provide further evidence of the systematic variation in the characteristics of Jupiter's four largest moons
 - (B) To present a comprehensive theory to explain the systematic variation in the characteristics of Jupiter's four largest moons
 - (C) To explain the significance of the systematic variation in the characteristics of Jupiter's four largest moons
 - (D) To introduce facts that contradict conventional assumptions about Jupiter's four largest moons
 - (E) To contrast the characteristics of Jupiter's four largest moons with the characteristics of the planets of the solar system

13. The author's reference to Jupiter's gravity in line 25 serves primarily to
- (A) indicate why the absence of craters on Io's surface is surprising
 - (B) explain the presence of craters on the surface of Jupiter's four largest moons
 - (C) provide an explanation for the lack of geological activity on Callisto
 - (D) contrast Jupiter's characteristics with the characteristics of its four largest moons
 - (E) illustrate the similarity between Jupiter's four largest moons and the planets of the solar system

- Line When Jamaican-born social activist Marcus Garvey came to the United States in 1916, he arrived at precisely the right historical moment. What made the moment right was the return of
- (5) African American soldiers from the First World War in 1918, which created an ideal constituency for someone with Garvey's message of unity, pride, and improved conditions for African American communities.
- (10) Hoping to participate in the traditional American ethos of individual success, many African American people entered the armed forces with enthusiasm, only to find themselves segregated from white troops and subjected to numerous indignities. They
- (15) returned to a United States that was as segregated as it had been before the war. Considering similar experiences, anthropologist Anthony F. C. Wallace has argued that when a perceptible gap arises between a culture's expectations and the reality of
- (20) that culture, the resulting tension can inspire a revitalization movement: an organized, conscious effort to construct a culture that fulfills long-standing expectations.
- Some scholars have argued that Garvey created
- (25) the consciousness from which he built, in the 1920s, the largest revitalization movement in African American history. But such an argument only tends to obscure the consciousness of identity, strength, and sense of history that already
- (30) existed in the African American community. Garvey did not create this consciousness; rather, he gave this consciousness its political expression.

Questions 14–17 refer to the passage above.

14. According to the passage, which of the following contributed to Marcus Garvey's success?
- (A) He introduced cultural and historical consciousness to the African American community.
- (B) He believed enthusiastically in the traditional American success ethos.
- (C) His audience had already formed a consciousness that made it receptive to his message.
- (D) His message appealed to critics of African American support for United States military involvement in the First World War.
- (E) He supported the movement to protest segregation that had emerged prior to his arrival in the United States.
15. The passage suggests that many African American people responded to their experiences in the armed forces in which of the following ways?
- (A) They maintained as civilians their enthusiastic allegiance to the armed forces.
- (B) They questioned United States involvement in the First World War.
- (C) They joined political organizations to protest the segregation of African American troops and the indignities they suffered in the military.
- (D) They became aware of the gap between their expectations and the realities of American culture.
- (E) They repudiated Garvey's message of pride and unity.

16. It can be inferred from the passage that the “scholars” mentioned in line 24 believe which of the following to be true?
- (A) Revitalization resulted from the political activism of returning African American soldiers following the First World War.
 - (B) Marcus Garvey had to change a number of prevailing attitudes in order for his mass movement to find a foothold in the United States.
 - (C) The prevailing sensibility of the African American community provided the foundation of Marcus Garvey’s political appeal.
 - (D) Marcus Garvey hoped to revitalize consciousness of cultural and historical identity in the African American community.
 - (E) The goal of the mass movement that Marcus Garvey helped bring into being was to build on the pride and unity among African Americans.
17. According to the passage, many African American people joined the armed forces during the First World War for which of the following reasons?
- (A) They wished to escape worsening economic conditions in African American communities.
 - (B) They expected to fulfill ideals of personal attainment.
 - (C) They sought to express their loyalty to the United States.
 - (D) They hoped that joining the military would help advance the cause of desegregation.
 - (E) They saw military service as an opportunity to fulfill Marcus Garvey’s political vision.

Line In terrestrial environments, gravity places special demands on the cardiovascular systems of animals. Gravitational pressure can cause blood to pool in the lower regions of the body, making it

(5) difficult to circulate blood to critical organs such as the brain. Terrestrial snakes, in particular, exhibit adaptations that aid in circulating blood against the force of gravity.

The problem confronting terrestrial snakes is best

(10) illustrated by what happens to sea snakes when removed from their supportive medium. Because the vertical pressure gradients within the blood vessels are counteracted by similar pressure gradients in the surrounding water, the distribution of blood

(15) throughout the body of sea snakes remains about the same regardless of their orientation in space, provided they remain in the ocean. When removed from the water and tilted at various angles with the head up, however, blood pressure at their midpoint

(20) drops significantly, and at brain level falls to zero. That many terrestrial snakes in similar spatial orientations do not experience this kind of circulatory failure suggests that certain adaptations enable them to regulate blood pressure more effectively in those

(25) orientations.

One such adaptation is the closer proximity of the terrestrial snake's heart to its head, which helps to ensure circulation to the brain, regardless of the snake's orientation in space. The heart of sea snakes

(30) can be located near the middle of the body, a position that minimizes the work entailed in circulating blood to both extremities. In arboreal snakes, however, which dwell in trees and often assume a vertical posture, the average distance

(35) from the heart to the head can be as little as 15 percent of overall body length. Such a location requires that blood circulated to the tail of the snake travel a greater distance back to the heart, a problem solved by another adaptation. When

(40) climbing, arboreal snakes often pause momentarily to wiggle their bodies, causing waves of muscle contraction that advance from the lower torso to the head. By compressing the veins and forcing blood forward, these contractions

(45) apparently improve the flow of venous blood returning to the heart.

Questions 18–25 refer to the passage above.

18. The passage provides information in support of which of the following assertions?
- (A) The disadvantages of an adaptation to a particular feature of an environment often outweigh the advantages of such an adaptation.
 - (B) An organism's reaction to being placed in an environment to which it is not well adapted can sometimes illustrate the problems that have been solved by the adaptations of organisms indigenous to that environment.
 - (C) The effectiveness of an organism's adaptation to a particular feature of its environment can only be evaluated by examining the effectiveness with which organisms of other species have adapted to a similar feature of a different environment.
 - (D) Organisms of the same species that inhabit strikingly different environments will often adapt in remarkably similar ways to the few features of those environments that are common.
 - (E) Different species of organisms living in the same environment will seldom adapt to features of that environment in the same way.
19. According to the passage, one reason that the distribution of blood in the sea snake changes little while the creature remains in the ocean is that
- (A) the heart of the sea snake tends to be located near the center of its body
 - (B) pressure gradients in the water surrounding the sea snake counter the effects of vertical pressure gradients within its blood vessels
 - (C) the sea snake assumes a vertical posture less frequently than do the terrestrial and the arboreal snake
 - (D) the sea snake often relies on waves of muscle contractions to help move blood from the torso to the head
 - (E) the force of pressure gradients in the water surrounding the sea snake exceeds that of vertical pressure gradients within its circulatory system
20. It can be inferred from the passage that which of the following is true of species of terrestrial snakes that often need to assume a vertical posture?
- (A) They are more likely to be susceptible to circulatory failure in vertical postures than are sea snakes.
 - (B) Their hearts are less likely to be located at the midpoint of their bodies than is the case with sea snakes.
 - (C) They cannot counteract the pooling of blood in lower regions of their bodies as effectively as sea snakes can.
 - (D) The blood pressure at their midpoint decreases significantly when they are tilted with their heads up.
 - (E) They are unable to rely on muscle contractions to move venous blood from the lower torso to the head.

21. The author describes the behavior of the circulatory system of sea snakes when they are removed from the ocean (see lines 17–20) primarily in order to
- (A) illustrate what would occur in the circulatory system of terrestrial snakes without adaptations that enable them to regulate their blood pressure in vertical orientations
 - (B) explain why arboreal snakes in vertical orientations must rely on muscle contractions to restore blood pressure to the brain
 - (C) illustrate the effects of circulatory failure on the behavior of arboreal snakes
 - (D) illustrate the superiority of the circulatory system of the terrestrial snake to that of the sea snake
 - (E) explain how changes in spatial orientation can adversely affect the circulatory system of snakes with hearts located in relatively close proximity to their heads
22. It can be inferred from the passage that which of the following is a true statement about sea snakes?
- (A) They frequently rely on waves of muscle contractions from the lower torso to the head to supplement the work of the heart.
 - (B) They cannot effectively regulate their blood pressure when placed in seawater and tilted at an angle with the head pointed downward.
 - (C) They are more likely to have a heart located in close proximity to their heads than are arboreal snakes.
 - (D) They become acutely vulnerable to the effects of gravitational pressure on their circulatory system when they are placed in a terrestrial environment.
 - (E) Their cardiovascular system is not as complicated as that of arboreal snakes.
23. The author suggests that which of the following is a disadvantage that results from the location of a snake's heart in close proximity to its head?
- (A) A decrease in the efficiency with which the snake regulates the flow of blood to the brain
 - (B) A decrease in the number of orientations in space that a snake can assume without loss of blood flow to the brain
 - (C) A decrease in blood pressure at the snake's midpoint when it is tilted at various angles with its head up
 - (D) An increase in the tendency of blood to pool at the snake's head when the snake is tilted at various angles with its head down
 - (E) An increase in the amount of effort required to distribute blood to and from the snake's tail
24. The primary purpose of the third paragraph is to
- (A) introduce a topic that is not discussed earlier in the passage
 - (B) describe a more efficient method of achieving an effect discussed in the previous paragraph
 - (C) draw a conclusion based on information elaborated in the previous paragraph
 - (D) discuss two specific examples of phenomena mentioned at the end of the previous paragraph
 - (E) introduce evidence that undermines a view reported earlier in the passage

25. In the passage, the author is primarily concerned with doing which of the following?
- (A) Explaining adaptations that enable the terrestrial snake to cope with the effects of gravitational pressure on its circulatory system
 - (B) Comparing the circulatory system of the sea snake with that of the terrestrial snake
 - (C) Explaining why the circulatory system of the terrestrial snake is different from that of the sea snake
 - (D) Pointing out features of the terrestrial snake's cardiovascular system that make it superior to that of the sea snake
 - (E) Explaining how the sea snake is able to neutralize the effects of gravitational pressure on its circulatory system

Line In 1988 services moved ahead of
 manufacturing as the main product of the United
 States economy. But what is meant by “services”?
 Some economists define a service as something
 (5) that is produced and consumed simultaneously, for
 example, a haircut. The broader, classical definition
 is that a service is an intangible something that
 cannot be touched or stored. Yet electric utilities
 can store energy, and computer programmers
 (10) save information electronically. Thus, the classical
 definition is hard to sustain.

The United States government’s definition is
 more practical: services are the residual category
 that includes everything that is not agriculture or
 (15) industry. Under this definition, services includes
 activities as diverse as engineering and driving a
 bus. However, besides lacking a strong conceptual
 framework, this definition fails to recognize the
 distinction between service industries and service
 (20) occupations. It categorizes workers based on their
 company’s final product rather than on the actual
 work the employees perform. Thus, the many
 service workers employed by manufacturers—
 bookkeepers or janitors, for example—would
 (25) fall under the industrial rather than the services
 category. Such ambiguities reveal the arbitrariness
 of this definition and suggest that, although
 practical for government purposes, it does not
 accurately reflect the composition of the current
 (30) United States economy.

Questions 26–30 refer to the passage above.

26. The author of the passage is primarily concerned with
 - (A) discussing research data underlying several definitions
 - (B) arguing for the adoption of a particular definition
 - (C) exploring definitions of a concept
 - (D) comparing the advantages of several definitions
 - (E) clarifying some ambiguous definitions
27. In comparing the United States government’s definition of services with the classical definition, the author suggests that the classical definition is
 - (A) more pragmatic
 - (B) more difficult to apply
 - (C) less ambiguous
 - (D) more widely used
 - (E) more arbitrary
28. The passage suggests which of the following about service workers in the United States?
 - (A) The number of service workers may be underestimated by the definition of services used by the government.
 - (B) There were fewer service workers than agricultural workers before 1988.
 - (C) The number of service workers was almost equal to the number of workers employed in manufacturing until 1988.
 - (D) Most service workers are employed in service occupations rather than in service industries.
 - (E) Most service workers are employed in occupations where they provide services that do not fall under the classical definition of services.

29. The author of the passage mentions which of the following as one disadvantage of the United States government's definition of services?
- (A) It is less useful than the other definitions mentioned in the passage.
 - (B) It is narrower in scope than the other definitions mentioned in the passage.
 - (C) It is based on the final product produced rather than on the type of work performed.
 - (D) It does not recognize the diversity of occupations within the service industries.
 - (E) It misclassifies many workers who are employed in service industries.
30. The author refers to "service workers employed by manufacturers" (line 23) primarily in order to point out
- (A) a type of worker not covered by the United States government's system of classifying occupations
 - (B) a flaw in the United States government's definition of services
 - (C) a factor that has influenced the growth of the service economy in the United States
 - (D) a type of worker who is classified on the basis of work performed rather than on the basis of the company's final product
 - (E) the diversity of the workers who are referred to as service workers

- Line Current feminist theory, in validating women's own stories of their experience, has encouraged scholars of women's history to view the use of women's oral narratives as the methodology, next to the use of
- (5) women's written autobiography, that brings historians closest to the "reality" of women's lives. Such narratives, unlike most standard histories, represent experience from the perspective of women, affirm the importance of women's contributions, and furnish
- (10) present-day women with historical continuity that is essential to their identity, individually and collectively.
- Scholars of women's history should, however, be as cautious about accepting oral narratives at face value as they already are about written memories.
- (15) Oral narratives are no more likely than are written narratives to provide a disinterested commentary on events or people. Moreover, the stories people tell to explain themselves are shaped by narrative devices and storytelling conventions, as well as by other
- (20) cultural and historical factors, in ways that the storytellers may be unaware of. The political rhetoric of a particular era, for example, may influence women's interpretations of the significance of their experience. Thus a woman who views the Second
- (25) World War as pivotal in increasing the social acceptance of women's paid work outside the home may reach that conclusion partly and unwittingly because of wartime rhetoric encouraging a positive view of women's participation in such work.

Questions 31–36 refer to the passage above.

31. The passage is primarily concerned with
- (A) contrasting the benefits of one methodology with the benefits of another
 - (B) describing the historical origins and inherent drawbacks of a particular methodology
 - (C) discussing the appeal of a particular methodology and some concerns about its use
 - (D) showing that some historians' adoption of a particular methodology has led to criticism of recent historical scholarship
 - (E) analyzing the influence of current feminist views on women's interpretations of their experience
32. According to the passage, which of the following shapes the oral narratives of women storytellers?
- (A) The conventions for standard histories in the culture in which a woman storyteller lives
 - (B) The conventions of storytelling in the culture in which a woman storyteller lives
 - (C) A woman storyteller's experience with distinctive traditions of storytelling developed by the women in her family of origin
 - (D) The cultural expectations and experiences of those who listen to oral narratives
 - (E) A woman storyteller's familiarity with the stories that members of other groups in her culture tell to explain themselves

33. The author of the passage would be most likely to make which of the following recommendations to scholars of women's history?
- (A) They should take into account their own life experiences when interpreting the oral accounts of women's historical experiences.
 - (B) They should assume that the observations made in women's oral narratives are believed by the intended audience of the story.
 - (C) They should treat skeptically observations reported in oral narratives unless the observations can be confirmed in standard histories.
 - (D) They should consider the cultural and historical context in which an oral narrative was created before arriving at an interpretation of such a narrative.
 - (E) They should rely on information gathered from oral narratives only when equivalent information is not available in standard histories.
34. Which of the following best describes the function of the last sentence of the passage?
- (A) It describes an event that historians view as crucial in recent women's history.
 - (B) It provides an example of how political rhetoric may influence the interpretations of experience reported in women's oral narratives.
 - (C) It provides an example of an oral narrative that inaccurately describes women's experience during a particular historical period.
 - (D) It illustrates the point that some women are more aware than others of the social forces that shape their oral narratives.
 - (E) It identifies the historical conditions that led to the social acceptance of women's paid work outside the home.
35. According to the passage, scholars of women's history should refrain from doing which of the following?
- (A) Relying on traditional historical sources when women's oral narratives are unavailable
 - (B) Focusing on the influence of political rhetoric on women's perceptions to the exclusion of other equally important factors
 - (C) Attempting to discover the cultural and historical factors that influence the stories women tell
 - (D) Assuming that the conventions of women's written autobiographies are similar to the conventions of women's oral narratives
 - (E) Accepting women's oral narratives less critically than they accept women's written histories
36. According to the passage, each of the following is a difference between women's oral narratives and most standard histories EXCEPT:
- (A) Women's oral histories validate the significance of women's achievements.
 - (B) Women's oral histories depict experience from the point of view of women.
 - (C) Women's oral histories acknowledge the influence of well-known women.
 - (D) Women's oral histories present today's women with a sense of their historical relationship to women of the past.
 - (E) Women's oral histories are crucial to the collective identity of today's women.

- Line Manufacturers have to do more than build large manufacturing plants to realize economies of scale. It is true that as the capacity of a manufacturing operation rises, costs per unit of output fall as plant
- (5) size approaches “minimum efficient scale,” where the cost per unit of output reaches a minimum, determined roughly by the state of existing technology and size of the potential market. However, minimum efficient scale cannot be fully realized unless a steady
- (10) “throughput” (the flow of materials through a plant) is attained. The throughput needed to maintain the optimal scale of production requires careful coordination not only of the flow of goods through the production process, but also of the flow of input from
- (15) suppliers and the flow of output to wholesalers and final consumers. If throughput falls below a critical point, unit costs rise sharply and profits disappear. A manufacturer’s fixed costs and “sunk costs” (original capital investment in the physical plant) do not
- (20) decrease when production declines due to inadequate supplies of raw materials, problems on the factory floor, or inefficient sales networks. Consequently, potential economies of scale are based on the physical and engineering characteristics of the
- (25) production facilities—that is, on tangible capital—but realized economies of scale are operational and organizational, and depend on knowledge, skills, experience, and teamwork—that is, on organized human capabilities, or intangible capital.
- (30) The importance of investing in intangible capital becomes obvious when one looks at what happens in new capital-intensive manufacturing industries. Such industries are quickly dominated, not by the first firms to acquire technologically sophisticated plants of
- (35) theoretically optimal size, but rather by the first to exploit the full potential of such plants. Once some firms achieve this, a market becomes extremely hard to enter. Challengers must construct comparable plants and do so after the first movers have already
- (40) worked out problems with suppliers or with new production processes. Challengers must create distribution networks and marketing systems in markets where first movers have all the contacts and know-how. And challengers must recruit management
- (45) teams to compete with those that have already mastered these functional and strategic activities.

Questions 37–41 refer to the passage above.

37. The passage suggests that in order for a manufacturer in a capital-intensive industry to have a decisive advantage over competitors making similar products, the manufacturer must
- (A) be the first in the industry to build production facilities of theoretically optimal size
 - (B) make every effort to keep fixed and sunk costs as low as possible
 - (C) be one of the first to operate its manufacturing plants at minimum efficient scale
 - (D) produce goods of higher quality than those produced by direct competitors
 - (E) stockpile raw materials at production sites in order to ensure a steady flow of such materials
38. The passage suggests that which of the following is true of a manufacturer’s fixed and sunk costs?
- (A) The extent to which they are determined by market conditions for the goods being manufactured is frequently underestimated.
 - (B) If they are kept as low as possible, the manufacturer is very likely to realize significant profits.
 - (C) They are the primary factor that determines whether a manufacturer will realize economies of scale.
 - (D) They should be on a par with the fixed and sunk costs of the manufacturer’s competitors.
 - (E) They are not affected by fluctuations in a manufacturing plant’s throughput.
39. In the context of the passage as a whole, the second paragraph serves primarily to
- (A) provide an example to support the argument presented in the first paragraph
 - (B) evaluate various strategies discussed in the first paragraph
 - (C) introduce evidence that undermines the argument presented in the first paragraph
 - (D) anticipate possible objections to the argument presented in the first paragraph
 - (E) demonstrate the potential dangers of a commonly used strategy

40. The passage LEAST supports the inference that a manufacturer's throughput could be adversely affected by
- (A) a mistake in judgment regarding the selection of a wholesaler
 - (B) a breakdown in the factory's machinery
 - (C) a labor dispute on the factory floor
 - (D) an increase in the cost per unit of output
 - (E) a drop in the efficiency of the sales network
41. The primary purpose of the passage is to
- (A) point out the importance of intangible capital for realizing economies of scale in manufacturing
 - (B) show that manufacturers frequently gain a competitive advantage from investment in large manufacturing facilities
 - (C) argue that large manufacturing facilities often fail because of inadequate investment in both tangible and intangible capital
 - (D) suggest that most new industries are likely to be dominated by firms that build large manufacturing plants early
 - (E) explain why large manufacturing plants usually do not help manufacturers achieve economies of scale

Line In the seventeenth-century Florentine textile industry, women were employed primarily in low-paying, low-skill jobs. To explain this segregation of labor by gender, economists have relied on

(5) the useful theory of human capital. According to this theory, investment in human capital—the acquisition of difficult job-related skills—generally benefits individuals by making them eligible to engage in well-paid occupations. Women’s role as

(10) child bearers, however, results in interruptions in their participation in the job market (as compared with men’s) and thus reduces their opportunities to acquire training for highly skilled work. In addition, the human capital theory explains why

(15) there was a high concentration of women workers in certain low-skill jobs, such as weaving, but not in others, such as combing or carding, by positing that because of their primary responsibility in child rearing women took occupations that could be

(20) carried out in the home.

There were, however, differences in pay scales that cannot be explained by the human capital theory. For example, male construction workers were paid significantly higher wages than female

(25) taffeta weavers. The wage difference between these two low-skill occupations stems from the segregation of labor by gender: because a limited number of occupations were open to women, there was a large supply of workers in their fields, and

(30) this “overcrowding” resulted in women receiving lower wages and men receiving higher wages.

Questions 42–44 refer to the passage above.

42. The passage suggests that combing and carding differ from weaving in that combing and carding were
- (A) low-skill jobs performed primarily by women employees
 - (B) low-skill jobs that were not performed in the home
 - (C) low-skill jobs performed by both male and female employees
 - (D) high-skill jobs performed outside the home
 - (E) high-skill jobs performed by both male and female employees
43. Which of the following, if true, would most weaken the explanation provided by the human capital theory for women’s concentration in certain occupations in seventeenth-century Florence?
- (A) Women were unlikely to work outside the home even in occupations whose hours were flexible enough to allow women to accommodate domestic tasks as well as paid labor.
 - (B) Parents were less likely to teach occupational skills to their daughters than they were to their sons.
 - (C) Women’s participation in the Florentine paid labor force grew steadily throughout the sixteenth and seventeenth centuries.
 - (D) The vast majority of female weavers in the Florentine wool industry had children.
 - (E) Few women worked as weavers in the Florentine silk industry, which was devoted to making cloths that required a high degree of skill to produce.

44. The author of the passage would be most likely to describe the explanation provided by the human capital theory for the high concentration of women in certain occupations in the seventeenth-century Florentine textile industry as
- (A) well founded though incomplete
 - (B) difficult to articulate
 - (C) plausible but poorly substantiated
 - (D) seriously flawed
 - (E) contrary to recent research

(This passage was adapted from an article written in 1992.)

- Line Some observers have attributed the dramatic growth in temporary employment that occurred in the United States during the 1980s to increased participation in the workforce by certain groups,
- (5) such as first-time or reentering workers, who supposedly prefer such arrangements. However, statistical analyses reveal that demographic changes in the workforce did not correlate with variations in the total number of temporary
- (10) workers. Instead, these analyses suggest that factors affecting employers account for the rise in temporary employment. One factor is product demand: temporary employment is favored by employers who are adapting to fluctuating demand
- (15) for products while at the same time seeking to reduce overall labor costs. Another factor is labor's reduced bargaining strength, which allows employers more control over the terms of employment. Given the analyses, which reveal that
- (20) growth in temporary employment now far exceeds the level explainable by recent workforce entry rates of groups said to prefer temporary jobs, firms should be discouraged from creating excessive numbers of temporary positions. Government
- (25) policymakers should consider mandating benefit coverage for temporary employees, promoting pay equity between temporary and permanent workers, assisting labor unions in organizing temporary workers, and encouraging firms to assign temporary
- (30) jobs primarily to employees who explicitly indicate that preference.

Questions 45–51 refer to the passage above.

45. The primary purpose of the passage is to
- (A) present the results of statistical analyses and propose further studies
 - (B) explain a recent development and predict its eventual consequences
 - (C) identify the reasons for a trend and recommend measures to address it
 - (D) outline several theories about a phenomenon and advocate one of them
 - (E) describe the potential consequences of implementing a new policy and argue in favor of that policy
46. According to the passage, which of the following is true of the “factors affecting employers” that are mentioned in lines 10–19?
- (A) Most experts cite them as having initiated the growth in temporary employment that occurred during the 1980s.
 - (B) They may account for the increase in the total number of temporary workers during the 1980s.
 - (C) They were less important than demographic change in accounting for the increase of temporary employment during the 1980s.
 - (D) They included a sharp increase in the cost of labor during the 1980s.
 - (E) They are more difficult to account for than are other factors involved in the growth of temporary employment during the 1980s.

47. The passage suggests which of the following about the use of temporary employment by firms during the 1980s?
- (A) It enabled firms to deal with fluctuating product demand far more efficiently than they did before the 1980s.
 - (B) It increased as a result of increased participation in the workforce by certain demographic groups.
 - (C) It was discouraged by government-mandated policies.
 - (D) It was a response to preferences indicated by certain employees for more flexible working arrangements.
 - (E) It increased partly as a result of workers' reduced ability to control the terms of their employment.
48. The passage suggests which of the following about the workers who took temporary jobs during the 1980s?
- (A) Their jobs frequently led to permanent positions within firms.
 - (B) They constituted a less demographically diverse group than has been suggested.
 - (C) They were occasionally involved in actions organized by labor unions.
 - (D) Their pay declined during the decade in comparison with the pay of permanent employees.
 - (E) They did not necessarily prefer temporary employment to permanent employment.
49. The first sentence in the passage suggests that the "observers" mentioned in line 1 would be most likely to predict which of the following?
- (A) That the number of new temporary positions would decline as fewer workers who preferred temporary employment entered the workforce
 - (B) That the total number of temporary positions would increase as fewer workers were able to find permanent positions
 - (C) That employers would have less control over the terms of workers' employment as workers increased their bargaining strength
 - (D) That more workers would be hired for temporary positions as product demand increased
 - (E) That the number of workers taking temporary positions would increase as more workers in any given demographic group entered the workforce
50. In the context of the passage, the word "excessive" (line 23) most closely corresponds to which of the following phrases?
- (A) Far more than can be justified by worker preferences
 - (B) Far more than can be explained by fluctuations in product demand
 - (C) Far more than can be beneficial to the success of the firms themselves
 - (D) Far more than can be accounted for by an expanding national economy
 - (E) Far more than can be attributed to increases in the total number of people in the workforce
51. The passage mentions each of the following as an appropriate kind of governmental action EXCEPT
- (A) getting firms to offer temporary employment primarily to a certain group of people
 - (B) encouraging equitable pay for temporary and permanent employees
 - (C) facilitating the organization of temporary workers by labor unions
 - (D) establishing guidelines on the proportion of temporary workers that firms should employ
 - (E) ensuring that temporary workers obtain benefits from their employers

- Line Among the myths taken as fact by the
environmental managers of most corporations is
the belief that environmental regulations affect all
competitors in a given industry uniformly. In reality,
- (5) regulatory costs—and therefore compliance—fall
unevenly, economically disadvantaging some
companies and benefiting others. For example,
a plant situated near a number of larger
noncompliant competitors is less likely to attract
- (10) the attention of local regulators than is an isolated
plant, and less attention means lower costs.
Additionally, large plants can spread compliance
costs such as waste treatment across a larger
revenue base; on the other hand, some smaller
- (15) plants may not even be subject to certain
provisions such as permit or reporting
requirements by virtue of their size. Finally, older
production technologies often continue to generate
toxic wastes that were not regulated when the
- (20) technology was first adopted. New regulations
have imposed extensive compliance costs on
companies still using older industrial coal-fired
burners that generate high sulfur dioxide and
nitrogen oxide outputs, for example, whereas new
- (25) facilities generally avoid processes that would
create such waste products. By realizing that they
have discretion and that not all industries are
affected equally by environmental regulation,
environmental managers can help their companies
- (30) to achieve a competitive edge by anticipating
regulatory pressure and exploring all possibilities
for addressing how changing regulations will affect
their companies specifically.

Questions 52–55 refer to the passage above.

52. It can be inferred from the passage that a large plant might have to spend more than a similar but smaller plant on environmental compliance because the larger plant is
- (A) more likely to attract attention from local regulators
 - (B) less likely to be exempt from permit and reporting requirements
 - (C) less likely to have regulatory costs passed on to it by companies that supply its raw materials
 - (D) more likely to employ older production technologies
 - (E) more likely to generate wastes that are more environmentally damaging than those generated by smaller plants
53. According to the passage, which of the following statements about sulfur dioxide and nitrogen oxide outputs is true?
- (A) Older production technologies cannot be adapted so as to reduce production of these outputs as waste products.
 - (B) Under the most recent environmental regulations, industrial plants are no longer permitted to produce these outputs.
 - (C) Although these outputs are environmentally hazardous, some plants still generate them as waste products despite the high compliance costs they impose.
 - (D) Many older plants have developed innovative technological processes that reduce the amounts of these outputs generated as waste products.
 - (E) Since the production processes that generate these outputs are less costly than alternative processes, these less expensive processes are sometimes adopted despite their acknowledged environmental hazards.

54. Which of the following best describes the relationship of the statement about large plants (lines 12–17) to the passage as a whole?
- (A) It presents a hypothesis that is disproved later in the passage.
 - (B) It highlights an opposition between two ideas mentioned in the passage.
 - (C) It provides examples to support a claim made earlier in the passage.
 - (D) It exemplifies a misconception mentioned earlier in the passage.
 - (E) It draws an analogy between two situations described in the passage.
55. The primary purpose of the passage is to
- (A) address a widespread environmental management problem and suggest possible solutions
 - (B) illustrate varying levels of compliance with environmental regulation among different corporations
 - (C) describe the various alternatives to traditional methods of environmental management
 - (D) advocate increased corporate compliance with environmental regulation
 - (E) correct a common misconception about the impact of environmental regulations

Line In *Winters v. United States* (1908), the Supreme Court held that the right to use waters flowing through or adjacent to the Fort Belknap Indian Reservation was reserved to American Indians by the treaty

(5) establishing the reservation. Although this treaty did not mention water rights, the Court ruled that the federal government, when it created the reservation, intended to deal fairly with American Indians by reserving for them the waters without which their

(10) lands would have been useless. Later decisions, citing *Winters*, established that courts can find federal rights to reserve water for particular purposes if (1) the land in question lies within an enclave under exclusive federal jurisdiction, (2) the land has been formally

(15) withdrawn from federal public lands—i.e., withdrawn from the stock of federal lands available for private use under federal land use laws—and set aside or reserved, and (3) the circumstances reveal the government intended to reserve water as well as land

(20) when establishing the reservation.

Some American Indian tribes have also established water rights through the courts based on their traditional diversion and use of certain waters prior to the United States' acquisition of sovereignty. For

(25) example, the Rio Grande pueblos already existed when the United States acquired sovereignty over New Mexico in 1848. Although they at that time became part of the United States, the pueblo lands never formally constituted a part of federal public lands; in

(30) any event, no treaty, statute, or executive order has ever designated or withdrawn the pueblos from public lands as American Indian reservations. This fact, however, has not barred application of the *Winters* doctrine. What constitutes an American Indian

(35) reservation is a question of practice, not of legal definition, and the pueblos have always been treated as reservations by the United States. This pragmatic approach is buttressed by *Arizona v. California* (1963), wherein the Supreme Court indicated that the manner

(40) in which any type of federal reservation is created does not affect the application to it of the *Winters* doctrine. Therefore, the reserved water rights of Pueblo Indians have priority over other citizens' water rights as of 1848, the year in which pueblos must be

(45) considered to have become reservations.

Questions 56–62 refer to the passage above.

56. According to the passage, which of the following was true of the treaty establishing the Fort Belknap Indian Reservation?
- (A) It was challenged in the Supreme Court a number of times.
 - (B) It was rescinded by the federal government, an action that gave rise to the *Winters* case.
 - (C) It cited American Indians' traditional use of the land's resources.
 - (D) It failed to mention water rights to be enjoyed by the reservation's inhabitants.
 - (E) It was modified by the Supreme Court in *Arizona v. California*.
57. The passage suggests that, if the criteria discussed in lines 10–20 were the only criteria for establishing a reservation's water rights, which of the following would be true?
- (A) The water rights of the inhabitants of the Fort Belknap Indian Reservation would not take precedence over those of other citizens.
 - (B) Reservations established before 1848 would be judged to have no water rights.
 - (C) There would be no legal basis for the water rights of the Rio Grande pueblos.
 - (D) Reservations other than American Indian reservations could not be created with reserved water rights.
 - (E) Treaties establishing reservations would have to mention water rights explicitly in order to reserve water for a particular purpose.

58. Which of the following most accurately summarizes the relationship between *Arizona v. California* in lines 38–42, and the criteria citing the *Winters* doctrine in lines 10–20?
- (A) *Arizona v. California* abolishes these criteria and establishes a competing set of criteria for applying the *Winters* doctrine.
 - (B) *Arizona v. California* establishes that the *Winters* doctrine applies to a broader range of situations than those defined by these criteria.
 - (C) *Arizona v. California* represents the sole example of an exception to the criteria as they were set forth in the *Winters* doctrine.
 - (D) *Arizona v. California* does not refer to the *Winters* doctrine to justify water rights, whereas these criteria do rely on the *Winters* doctrine.
 - (E) *Arizona v. California* applies the criteria derived from the *Winters* doctrine only to federal lands other than American Indian reservations.
59. The “pragmatic approach” mentioned in lines 37–38 of the passage is best defined as one that
- (A) grants recognition to reservations that were never formally established but that have traditionally been treated as such
 - (B) determines the water rights of all citizens in a particular region by examining the actual history of water usage in that region
 - (C) gives federal courts the right to reserve water along with land even when it is clear that the government originally intended to reserve only the land
 - (D) bases the decision to recognize the legal rights of a group on the practical effect such a recognition is likely to have on other citizens
 - (E) dictates that courts ignore precedents set by such cases as *Winters v. United States* in deciding what water rights belong to reserved land
60. The author cites the fact that the Rio Grande pueblos were never formally withdrawn from public lands primarily in order to do which of the following?
- (A) Suggest why it might have been argued that the *Winters* doctrine ought not to apply to pueblo lands
 - (B) Imply that the United States never really acquired sovereignty over pueblo lands
 - (C) Argue that the pueblo lands ought still to be considered part of federal public lands
 - (D) Support the argument that the water rights of citizens other than American Indians are limited by the *Winters* doctrine
 - (E) Suggest that federal courts cannot claim jurisdiction over cases disputing the traditional diversion and use of water by Pueblo Indians
61. The primary purpose of the passage is to
- (A) trace the development of laws establishing American Indian reservations
 - (B) explain the legal basis for the water rights of American Indian tribes
 - (C) question the legal criteria often used to determine the water rights of American Indian tribes
 - (D) discuss evidence establishing the earliest date at which the federal government recognized the water rights of American Indians
 - (E) point out a legal distinction between different types of American Indian reservations
62. The passage suggests that the legal rights of citizens other than American Indians to the use of water flowing into the Rio Grande pueblos are
- (A) guaranteed by the precedent set in *Arizona v. California*
 - (B) abolished by the *Winters* doctrine
 - (C) deferred to the Pueblo Indians whenever treaties explicitly require this
 - (D) guaranteed by federal land-use laws
 - (E) limited by the prior claims of the Pueblo Indians

Line Milankovitch proposed in the early twentieth century that the ice ages were caused by variations in the Earth's orbit around the Sun. For some time this theory was considered untestable,

(5) largely because there was no sufficiently precise chronology of the ice ages with which the orbital variations could be matched.

To establish such a chronology it is necessary to determine the relative amounts of land ice that

(10) existed at various times in the Earth's past. A recent discovery makes such a determination possible: relative land-ice volume for a given period can be deduced from the ratio of two oxygen isotopes, 16 and 18, found in ocean sediments. Almost

(15) all the oxygen in water is oxygen 16, but a few molecules out of every thousand incorporate the heavier isotope 18. When an ice age begins, the continental ice sheets grow, steadily reducing the amount of water evaporated from the ocean that

(20) will eventually return to it. Because heavier isotopes tend to be left behind when water evaporates from the ocean surfaces, the remaining ocean water becomes progressively enriched in oxygen 18. The degree of enrichment can be determined

(25) by analyzing ocean sediments of the period, because these sediments are composed of calcium carbonate shells of marine organisms, shells that were constructed with oxygen atoms drawn from the surrounding ocean. The higher the ratio of

(30) oxygen 18 to oxygen 16 in a sedimentary specimen, the more land ice there was when the sediment was laid down.

As an indicator of shifts in the Earth's climate, the isotope record has two advantages. First, it is

(35) a global record: there is remarkably little variation in isotope ratios in sedimentary specimens taken from different continental locations. Second, it is a more continuous record than that taken from rocks on land. Because of these advantages,

(40) sedimentary evidence can be dated with sufficient accuracy by radiometric methods to establish a precise chronology of the ice ages. The dated isotope record shows that the fluctuations in global ice volume over the past several hundred

(45) thousand years have a pattern: an ice age occurs roughly once every 100,000 years. These data have established a strong connection between variations in the Earth's orbit and the periodicity of the ice ages.

(50) However, it is important to note that other factors, such as volcanic particulates or variations in the amount of sunlight received by the Earth, could potentially have affected the climate. The advantage of the Milankovitch theory is that it

(55) is testable; changes in the Earth's orbit can be calculated and dated by applying Newton's laws of gravity to progressively earlier configurations of the bodies in the solar system. Yet the lack of information about other possible factors affecting

(60) global climate does not make them unimportant.

Questions 63–68 refer to the passage above.

63. In the passage, the author is primarily interested in
- (A) suggesting an alternative to an outdated research method
 - (B) introducing a new research method that calls an accepted theory into question
 - (C) emphasizing the instability of data gathered from the application of a new scientific method
 - (D) presenting a theory and describing a new method to test that theory
 - (E) initiating a debate about a widely accepted theory
64. The author of the passage would be most likely to agree with which of the following statements about the Milankovitch theory?
- (A) It is the only possible explanation for the ice ages.
 - (B) It is too limited to provide a plausible explanation for the ice ages, despite recent research findings.
 - (C) It cannot be tested and confirmed until further research on volcanic activity is done.
 - (D) It is one plausible explanation, though not the only one, for the ice ages.
 - (E) It is not a plausible explanation for the ice ages, although it has opened up promising possibilities for future research.

65. It can be inferred from the passage that the isotope record taken from ocean sediments would be less useful to researchers if which of the following were true?
- (A) It indicated that lighter isotopes of oxygen predominated at certain times.
 - (B) It had far more gaps in its sequence than the record taken from rocks on land.
 - (C) It indicated that climate shifts did not occur every 100,000 years.
 - (D) It indicated that the ratios of oxygen 16 and oxygen 18 in ocean water were not consistent with those found in fresh water.
 - (E) It stretched back for only a million years.
66. According to the passage, which of the following is true of the ratios of oxygen isotopes in ocean sediments?
- (A) They indicate that sediments found during an ice age contain more calcium carbonate than sediments formed at other times.
 - (B) They are less reliable than the evidence from rocks on land in determining the volume of land ice.
 - (C) They can be used to deduce the relative volume of land ice that was present when the sediment was laid down.
 - (D) They are more unpredictable during an ice age than in other climatic conditions.
 - (E) They can be used to determine atmospheric conditions at various times in the past.
67. It can be inferred from the passage that precipitation formed from evaporated ocean water has
- (A) the same isotopic ratio as ocean water
 - (B) less oxygen 18 than does ocean water
 - (C) less oxygen 18 than has the ice contained in continental ice sheets
 - (D) a different isotopic composition than has precipitation formed from water on land
 - (E) more oxygen 16 than has precipitation formed from fresh water
68. It can be inferred from the passage that calcium carbonate shells
- (A) are not as susceptible to deterioration as rocks
 - (B) are less common in sediments formed during an ice age
 - (C) are found only in areas that were once covered by land ice
 - (D) contain radioactive material that can be used to determine a sediment's isotopic composition
 - (E) reflect the isotopic composition of the water at the time the shells were formed

- Line Two works published in 1984 demonstrate contrasting approaches to writing the history of United States women. Buel and Buel's biography of Mary Fish (1736–1818) makes little effort to place
- (5) her story in the context of recent historiography on women. Lebsack, meanwhile, attempts not only to write the history of women in one southern community, but also to redirect two decades of historiographical debate as to whether women
- (10) gained or lost status in the nineteenth century as compared with the eighteenth century. Although both books offer the reader the opportunity to assess this controversy regarding women's status, only Lebsack's deals with it directly. She examines
- (15) several different aspects of women's status, helping to refine and resolve the issues. She concludes that while women gained autonomy in some areas, especially in the private sphere, they lost it in many aspects of the economic sphere. More importantly,
- (20) she shows that the debate itself depends on frame of reference: in many respects, women lost power in relation to men, for example, as certain jobs (delivering babies, supervising schools) were taken over by men. Yet women also gained power in
- (25) comparison with their previous status, owning a higher proportion of real estate, for example. In contrast, Buel and Buel's biography provides ample raw material for questioning the myth, fostered by some historians, of a colonial golden age in the
- (30) eighteenth century but does not give the reader much guidance in analyzing the controversy over women's status.

Questions 69–74 refer to the passage above.

69. The primary purpose of the passage is to
- (A) examine two sides of a historiographical debate
 - (B) call into question an author's approach to a historiographical debate
 - (C) examine one author's approach to a historiographical debate
 - (D) discuss two authors' works in relationship to a historiographical debate
 - (E) explain the prevalent perspective on a historiographical debate
70. The author of the passage mentions the supervision of schools primarily in order to
- (A) remind readers of the role education played in the cultural changes of the nineteenth century in the United States
 - (B) suggest an area in which nineteenth-century American women were relatively free to exercise power
 - (C) provide an example of an occupation for which accurate data about women's participation are difficult to obtain
 - (D) speculate about which occupations were considered suitable for United States women of the nineteenth century
 - (E) illustrate how the answers to questions about women's status depend on particular contexts

71. With which of the following characterizations of Lebsock's contribution to the controversy concerning women's status in the nineteenth-century United States would the author of the passage be most likely to agree?
- (A) Lebsock has studied women from a formerly neglected region and time period.
 - (B) Lebsock has demonstrated the importance of frame of reference in answering questions about women's status.
 - (C) Lebsock has addressed the controversy by using women's current status as a frame of reference.
 - (D) Lebsock has analyzed statistics about occupations and property that were previously ignored.
 - (E) Lebsock has applied recent historiographical methods to the biography of a nineteenth-century woman.
72. According to the passage, Lebsock's work differs from Buel and Buel's work in that Lebsock's work
- (A) uses a large number of primary sources
 - (B) ignores issues of women's legal status
 - (C) refuses to take a position on women's status in the eighteenth century
 - (D) addresses larger historiographical issues
 - (E) fails to provide sufficient material to support its claims
73. The passage suggests that Lebsock believes that compared to nineteenth-century American women, eighteenth-century American women were
- (A) in many respects less powerful in relation to men
 - (B) more likely to own real estate
 - (C) generally more economically independent
 - (D) more independent in conducting their private lives
 - (E) less likely to work as school superintendents
74. The passage suggests that Buel and Buel's biography of Mary Fish provides evidence for which of the following views of women's history?
- (A) Women have lost power in relation to men since the colonial era.
 - (B) Women of the colonial era were not as likely to be concerned with their status as were women in the nineteenth century.
 - (C) The colonial era was not as favorable for women as some historians have believed.
 - (D) Women had more economic autonomy in the colonial era than in the nineteenth century.
 - (E) Women's occupations were generally more respected in the colonial era than in the nineteenth century.

Line It was once believed that the brain was independent of metabolic processes occurring elsewhere in the body. In recent studies, however, we have discovered that the production and release

(5) in brain neurons of the neurotransmitter serotonin (neurotransmitters are compounds that neurons use to transmit signals to other cells) depend directly on the food that the body processes.

Our first studies sought to determine whether

(10) the increase in serotonin observed in rats given a large injection of the amino acid tryptophan might also occur after rats ate meals that change tryptophan levels in the blood. We found that, immediately after the rats began to eat, parallel

(15) elevations occurred in blood tryptophan, brain tryptophan, and brain serotonin levels. These findings suggested that the production and release of serotonin in brain neurons were normally coupled with blood-tryptophan increases. In later studies we

(20) found that injecting insulin into a rat's bloodstream also caused parallel elevations in blood and brain tryptophan levels and in serotonin levels. We then decided to see whether the secretion of the animal's own insulin similarly affected serotonin production.

(25) We gave the rats a carbohydrate-containing meal that we knew would elicit insulin secretion. As we had hypothesized, the blood tryptophan level and the concentrations of tryptophan and of serotonin in the brain increased after the meal.

(30) Surprisingly, however, when we added a large amount of protein to the meal, brain tryptophan and serotonin levels fell. Since protein contains tryptophan, why should it depress brain tryptophan levels? The answer lies in the mechanism that

(35) provides blood tryptophan to the brain cells. This same mechanism also provides the brain cells with other amino acids found in protein, such as tyrosine and leucine. The consumption of protein increases blood concentration of the other amino acids much

(40) more, proportionately, than it does that of tryptophan. The more protein is in a meal, the lower is the ratio of the resulting blood-tryptophan concentration to the concentration of competing amino acids, and the more slowly is tryptophan provided to the brain.

(45) Thus the more protein in a meal, the less serotonin subsequently produced and released.

Questions 75–83 refer to the passage above.

75. Which of the following titles best summarizes the contents of the passage?
- (A) Neurotransmitters: Their Crucial Function in Cellular Communication
 - (B) Diet and Survival: An Old Relationship Reexamined
 - (C) The Blood Supply and the Brain: A Reciprocal Dependence
 - (D) Amino Acids and Neurotransmitters: The Connection between Serotonin Levels and Tyrosine
 - (E) The Effects of Food Intake on the Production and Release of Serotonin: Some Recent Findings
76. According to the passage, the speed with which tryptophan is provided to the brain cells of a rat varies with the
- (A) amount of protein present in a meal
 - (B) concentration of serotonin in the brain before a meal
 - (C) concentration of leucine in the blood rather than with the concentration of tyrosine in the blood after a meal
 - (D) concentration of tryptophan in the brain before a meal
 - (E) number of serotonin-containing neurons
77. According to the passage, when the authors began their first studies, they were aware that
- (A) they would eventually need to design experiments that involved feeding rats high concentrations of protein
 - (B) tryptophan levels in the blood were difficult to monitor with accuracy
 - (C) serotonin levels increased after rats were fed meals rich in tryptophan
 - (D) there were many neurotransmitters whose production was dependent on metabolic processes elsewhere in the body
 - (E) serotonin levels increased after rats were injected with a large amount of tryptophan

78. According to the passage, one reason that the authors gave rats carbohydrates was to
- (A) depress the rats' tryptophan levels
 - (B) prevent the rats from contracting diseases
 - (C) cause the rats to produce insulin
 - (D) demonstrate that insulin is the most important substance secreted by the body
 - (E) compare the effect of carbohydrates with the effect of proteins
79. According to the passage, the more protein a rat consumes, the lower will be the
- (A) ratio of the rat's blood-tryptophan concentration to the amount of serotonin produced and released in the rat's brain
 - (B) ratio of the rat's blood-tryptophan concentration to the concentration in its blood of the other amino acids contained in the protein
 - (C) ratio of the rat's blood-tyrosine concentration to its blood-leucine concentration
 - (D) number of neurotransmitters of any kind that the rat will produce and release
 - (E) number of amino acids the rat's blood will contain
80. The authors' discussion of the "mechanism that provides blood tryptophan to the brain cells" (lines 34–35) is meant to
- (A) stimulate further research studies
 - (B) summarize an area of scientific investigation
 - (C) help explain why a particular research finding was obtained
 - (D) provide supporting evidence for a controversial scientific theory
 - (E) refute the conclusions of a previously mentioned research study
81. According to the passage, an injection of insulin was most similar in its effect on rats to an injection of
- (A) tyrosine
 - (B) leucine
 - (C) blood
 - (D) tryptophan
 - (E) protein
82. It can be inferred from the passage that which of the following would be LEAST likely to be a potential source of aid to a patient who was not adequately producing and releasing serotonin?
- (A) Meals consisting almost exclusively of protein
 - (B) Meals consisting almost exclusively of carbohydrates
 - (C) Meals that would elicit insulin secretion
 - (D) Meals that had very low concentrations of tyrosine
 - (E) Meals that had very low concentrations of leucine
83. It can be inferred from the passage that the authors initially held which of the following hypotheses about what would happen when they fed large amounts of protein to rats?
- (A) The rats' brain serotonin levels would not decrease.
 - (B) The rats' brain tryptophan levels would decrease.
 - (C) The rats' tyrosine levels would increase less quickly than would their leucine levels.
 - (D) The rats would produce more insulin.
 - (E) The rats would produce neurotransmitters other than serotonin.

- Line Acting on the recommendation of a British government committee investigating the high incidence in white lead factories of illness among employees, most of whom were women, the Home
- (5) Secretary proposed in 1895 that Parliament enact legislation that would prohibit women from holding most jobs in white lead factories. Although the Women's Industrial Defence Committee (WIDC), formed in 1892 in response to earlier legislative
- (10) attempts to restrict women's labor, did not discount the white lead trade's potential health dangers, it opposed the proposal, viewing it as yet another instance of limiting women's work opportunities. Also opposing the proposal was the Society for
- (15) Promoting the Employment of Women (SPEW), which attempted to challenge it by investigating the causes of illness in white lead factories. SPEW contended, and WIDC concurred, that controllable conditions in such factories were responsible for the
- (20) development of lead poisoning. SPEW provided convincing evidence that lead poisoning could be avoided if workers were careful and clean and if already extant workplace safety regulations were stringently enforced. However, the Women's Trade
- (25) Union League (WTUL), which had ceased in the late 1880s to oppose restrictions on women's labor, supported the eventually enacted proposal, in part because safety regulations were generally not being enforced in white lead factories, where there were
- (30) no unions (and little prospect of any) to pressure employers to comply with safety regulations.

Questions 84–86 refer to the passage above.

84. The passage suggests that WIDC differed from WTUL in which of the following ways?
- (A) WIDC believed that the existing safety regulations were adequate to protect women's health, whereas WTUL believed that such regulations needed to be strengthened.
- (B) WIDC believed that unions could not succeed in pressuring employers to comply with such regulations, whereas WTUL believed that unions could succeed in doing so.
- (C) WIDC believed that lead poisoning in white lead factories could be avoided by controlling conditions there, whereas WTUL believed that lead poisoning in such factories could not be avoided no matter how stringently safety regulations were enforced.
- (D) At the time that the legislation concerning white lead factories was proposed, WIDC was primarily concerned with addressing health conditions in white lead factories, whereas WTUL was concerned with improving working conditions in all types of factories.
- (E) At the time that WIDC was opposing legislative attempts to restrict women's labor, WTUL had already ceased to do so.

85. Which of the following, if true, would most clearly support the contention attributed to SPEW in lines 17–20?
- (A) Those white lead factories that most strongly enforced regulations concerning worker safety and hygiene had the lowest incidences of lead poisoning among employees.
 - (B) The incidence of lead poisoning was much higher among women who worked in white lead factories than among women who worked in other types of factories.
 - (C) There were many household sources of lead that could have contributed to the incidence of lead poisoning among women who also worked outside the home in the late nineteenth century.
 - (D) White lead factories were more stringent than were certain other types of factories in their enforcement of workplace safety regulations.
 - (E) Even brief exposure to the conditions typically found in white lead factories could cause lead poisoning among factory workers.
86. The passage is primarily concerned with
- (A) presenting various groups' views of the motives of those proposing certain legislation
 - (B) contrasting the reasoning of various groups concerning their positions on certain proposed legislation
 - (C) tracing the process whereby certain proposed legislation was eventually enacted
 - (D) assessing the success of tactics adopted by various groups with respect to certain proposed legislation
 - (E) evaluating the arguments of various groups concerning certain proposed legislation

Line In 1955 Maurice Duverger published *The*
Political Role of Women, the first behavioralist,
 multinational comparison of women's electoral
 participation ever to use election data and survey
 (5) data together. His study analyzed women's patterns
 of voting, political candidacy, and political activism
 in four European countries during the first half of
 the twentieth century. Duverger's research findings
 were that women voted somewhat less frequently
 (10) than men (the difference narrowing the longer
 women had the vote) and were slightly more
 conservative.

Duverger's work set an early standard for the
 sensitive analysis of women's electoral activities.
 (15) Moreover, to Duverger's credit, he placed his
 findings in the context of many of the historical
 processes that had shaped these activities.
 However, since these contexts have changed
 over time, Duverger's approach has proved more
 (20) durable than his actual findings. In addition,
 Duverger's discussion of his findings was hampered
 by his failure to consider certain specific factors
 important to women's electoral participation
 at the time he collected his data: the influence
 (25) of political regimes, the effects of economic
 factors, and the ramifications of political and
 social relations between women and men. Given
 this failure, Duverger's study foreshadowed the
 enduring limitations of the behavioralist approach
 (30) to the multinational study of women's political
 participation.

Questions 87–92 refer to the passage above.

87. The primary purpose of the passage is to
- (A) evaluate a research study
 - (B) summarize the history of a research area
 - (C) report new research findings
 - (D) reinterpret old research findings
 - (E) reconcile conflicting research findings
88. According to the passage, Duverger's study was unique in 1955 in that it
- (A) included both election data and survey data
 - (B) gathered data from sources never before used in political studies
 - (C) included an analysis of historical processes
 - (D) examined the influence on voting behavior of the relationships between women and men
 - (E) analyzed not only voting and political candidacy but also other political activities
89. Which of the following characteristics of a country is most clearly an example of a factor that Duverger, as described in the passage, failed to consider in his study?
- (A) A large population
 - (B) A predominantly Protestant population
 - (C) A predominantly urban population
 - (D) A one-party government
 - (E) Location in the heart of Europe

90. The author implies that Duverger's actual findings are
- (A) limited because they focus on only four countries
 - (B) inaccurate in their description of the four countries in the early 1950s
 - (C) out-of-date in that they are inapplicable in the four countries today
 - (D) flawed because they are based on unsound data
 - (E) biased by Duverger's political beliefs
91. The passage implies that, in comparing four European countries, Duverger found that the voting rates of women and men were most different in the country in which women
- (A) were most politically active
 - (B) ran for office most often
 - (C) held the most conservative political views
 - (D) had the most egalitarian relations with men
 - (E) had possessed the right to vote for the shortest time
92. The author implies that some behavioralist research involving the multinational study of women's political participation that followed Duverger's study did which of the following?
- (A) Ignored Duverger's approach
 - (B) Suffered from faults similar to those in Duverger's study
 - (C) Focused on political activism
 - (D) Focused on the influences of political regimes
 - (E) Focused on the political and social relations between women and men

Line The majority of successful senior managers do not closely follow the classical rational model of first clarifying goals, assessing the problem, formulating options, estimating likelihoods of success, making a
(5) decision, and only then taking action to implement the decision. Rather, in their day-by-day tactical maneuvers, these senior executives rely on what is vaguely termed “intuition” to manage a network of interrelated problems that require them to deal with
(10) ambiguity, inconsistency, novelty, and surprise; and to integrate action into the process of thinking.

Generations of writers on management have recognized that some practicing managers rely heavily on intuition. In general, however, such
(15) writers display a poor grasp of what intuition is. Some see it as the opposite of rationality; others view it as an excuse for capriciousness.

Isenberg’s recent research on the cognitive processes of senior managers reveals that
(20) managers’ intuition is neither of these. Rather, senior managers use intuition in at least five distinct ways. First, they intuitively sense when a problem exists. Second, managers rely on intuition to perform well-learned behavior patterns rapidly. This
(25) intuition is not arbitrary or irrational, but is based on years of painstaking practice and hands-on experience that build skills. A third function of intuition is to synthesize isolated bits of data and practice into an integrated picture, often in
(30) an “Aha!” experience. Fourth, some managers use intuition as a check on the results of more rational analysis. Most senior executives are familiar with the formal decision analysis models and tools, and those who use such systematic methods
(35) for reaching decisions are occasionally leery of solutions suggested by these methods which run counter to their sense of the correct course of action. Finally, managers can use intuition to bypass in-depth analysis and move rapidly to engender a
(40) plausible solution. Used in this way, intuition is an almost instantaneous cognitive process in which a manager recognizes familiar patterns.

One of the implications of the intuitive style of executive management is that “thinking” is
(45) inseparable from acting. Since managers often “know” what is right before they can analyze and explain it, they frequently act first and explain later. Analysis is inextricably tied to action in thinking/acting cycles, in which managers develop thoughts about their

(50) companies and organizations not by analyzing a problematic situation and then acting, but by acting and analyzing in close concert. Given the great uncertainty of many of the management issues that they face, senior managers often instigate a course
(55) of action simply to learn more about an issue. They then use the results of the action to develop a more complete understanding of the issue. One implication of thinking/acting cycles is that action is often part of defining the problem, not just of
(60) implementing the solution.

Questions 93–98 refer to the passage above.

93. According to the passage, senior managers use intuition in all of the following ways EXCEPT to
- (A) speed up the creation of a solution to a problem
 - (B) identify a problem
 - (C) bring together disparate facts
 - (D) stipulate clear goals
 - (E) evaluate possible solutions to a problem
94. The passage suggests which of the following about the “writers on management” mentioned in line 12?
- (A) They have criticized managers for not following the classical rational model of decision analysis.
 - (B) They have not based their analyses on a sufficiently large sample of actual managers.
 - (C) They have relied in drawing their conclusions on what managers say rather than on what managers do.
 - (D) They have misunderstood how managers use intuition in making business decisions.
 - (E) They have not acknowledged the role of intuition in managerial practice.

95. Which of the following best exemplifies “an ‘Aha!’ experience” (line 30) as it is presented in the passage?
- (A) A manager risks taking an action whose outcome is unpredictable to discover whether the action changes the problem at hand.
 - (B) A manager performs well-learned and familiar behavior patterns in creative and uncharacteristic ways to solve a problem.
 - (C) A manager suddenly connects seemingly unrelated facts and experiences to create a pattern relevant to the problem at hand.
 - (D) A manager rapidly identifies the methodology used to compile data yielded by systematic analysis.
 - (E) A manager swiftly decides which of several sets of tactics to implement in order to deal with the contingencies suggested by a problem.
96. According to the passage, the classical model of decision analysis includes all of the following EXCEPT
- (A) evaluation of a problem
 - (B) creation of possible solutions to a problem
 - (C) establishment of clear goals to be reached by the decision
 - (D) action undertaken in order to discover more information about a problem
 - (E) comparison of the probable effects of different solutions to a problem
97. It can be inferred from the passage that which of the following would most probably be one major difference in behavior between Manager X, who uses intuition to reach decisions, and Manager Y, who uses only formal decision analysis?
- (A) Manager X analyzes first and then acts; Manager Y does not.
 - (B) Manager X checks possible solutions to a problem by systematic analysis; Manager Y does not.
 - (C) Manager X takes action in order to arrive at the solution to a problem; Manager Y does not.
 - (D) Manager Y draws on years of hands-on experience in creating a solution to a problem; Manager X does not.
 - (E) Manager Y depends on day-to-day tactical maneuvering; Manager X does not.
98. The passage provides support for which of the following statements?
- (A) Managers who rely on intuition are more successful than those who rely on formal decision analysis.
 - (B) Managers cannot justify their intuitive decisions.
 - (C) Managers’ intuition works contrary to their rational and analytical skills.
 - (D) Logical analysis of a problem increases the number of possible solutions.
 - (E) Intuition enables managers to employ their practical experience more efficiently.

Line Frazier and Mosteller assert that medical research could be improved by a move toward larger, simpler clinical trials of medical treatments. Currently, researchers collect far more background

(5) information on patients than is strictly required for their trials—substantially more than hospitals collect—thereby escalating costs of data collection, storage, and analysis. Although limiting information collection could increase the risk that

(10) researchers will overlook facts relevant to a study, Frazier and Mosteller contend that such risk, never entirely eliminable from research, would still be small in most studies. Only in research on entirely new treatments are new and unexpected variables

(15) likely to arise.

Frazier and Mosteller propose not only that researchers limit data collection on individual patients but also that researchers enroll more patients in clinical trials, thereby obtaining a more

(20) representative sample of the total population with the disease under study. Often researchers restrict study participation to patients who have no ailments besides those being studied. A treatment judged successful under these ideal conditions can

(25) then be evaluated under normal conditions. Broadening the range of trial participants, Frazier and Mosteller suggest, would enable researchers to evaluate a treatment's efficacy for diverse patients under various conditions and to evaluate its

(30) effectiveness for different patient subgroups. For example, the value of a treatment for a progressive disease may vary according to a patient's stage of disease. Patients' ages may also affect a treatment's efficacy.

Questions 99–103 refer to the passage above.

99. The passage is primarily concerned with
- (A) identifying two practices in medical research that may affect the accuracy of clinical trials
 - (B) describing aspects of medical research that tend to drive up costs
 - (C) evaluating an analysis of certain shortcomings of current medical research practices
 - (D) describing proposed changes to the ways in which clinical trials are conducted
 - (E) explaining how medical researchers have traditionally conducted clinical trials and how such trials are likely to change
100. Which of the following can be inferred from the passage about a study of the category of patients referred to in lines 21–23?
- (A) Its findings might have limited applicability.
 - (B) It would be prohibitively expensive in its attempt to create ideal conditions.
 - (C) It would be the best way to sample the total population of potential patients.
 - (D) It would allow researchers to limit information collection without increasing the risk that important variables could be overlooked.
 - (E) Its findings would be more accurate if it concerned treatments for a progressive disease than if it concerned treatments for a nonprogressive disease.

101. It can be inferred from the passage that a study limited to patients like those mentioned in lines 21–23 would have which of the following advantages over the kind of study proposed by Frazier and Mosteller?
- (A) It would yield more data and its findings would be more accurate.
 - (B) It would cost less in the long term, though it would be more expensive in its initial stages.
 - (C) It would limit the number of variables researchers would need to consider when evaluating the treatment under study.
 - (D) It would help researchers to identify subgroups of patients with secondary conditions that might also be treatable.
 - (E) It would enable researchers to assess the value of an experimental treatment for the average patient.
102. The author mentions patients' ages (line 33) primarily in order to
- (A) identify the most critical variable differentiating subgroups of patients
 - (B) cast doubt on the advisability of implementing Frazier and Mosteller's proposals about medical research
 - (C) indicate why progressive diseases may require different treatments at different stages
 - (D) illustrate a point about the value of enrolling a wide range of patients in clinical trials
 - (E) substantiate an argument about the problems inherent in enrolling large numbers of patients in clinical trials
103. According to the passage, which of the following describes a result of the way in which researchers generally conduct clinical trials?
- (A) They expend resources on the storage of information likely to be irrelevant to the study they are conducting.
 - (B) They sometimes compromise the accuracy of their findings by collecting and analyzing more information than is strictly required for their trials.
 - (C) They avoid the risk of overlooking variables that might affect their findings, even though doing so raises their research costs.
 - (D) Because they attempt to analyze too much information, they overlook facts that could emerge as relevant to their studies.
 - (E) In order to approximate the conditions typical of medical treatment, they base their methods of information collection on those used by hospitals.

- Line According to a recent theory, Archean-age gold-quartz vein systems were formed more than two billion years ago from magmatic fluids that originated from molten granite-like bodies deep
- (5) beneath the surface of the Earth. This theory is contrary to the widely held view that the systems were deposited from metamorphic fluids, that is, from fluids that formed during the dehydration of wet sedimentary rocks.
- (10) The recently developed theory has considerable practical importance. Most of the gold deposits discovered during the original gold rushes were exposed at the Earth's surface and were found because they had shed trails of alluvial gold
- (15) that were easily traced by simple prospecting methods. Although these same methods still lead to an occasional discovery, most deposits not yet discovered have gone undetected because they are buried and have no surface expression.
- (20) The challenge in exploration is therefore to unravel the subsurface geology of an area and pinpoint the position of buried minerals. Methods widely used today include analysis of aerial images that yield a broad geological overview; geophysical
- (25) techniques that provide data on the magnetic, electrical, and mineralogical properties of the rocks being investigated; and sensitive chemical tests that are able to detect the subtle chemical halos that often envelop mineralization. However,
- (30) none of these high-technology methods are of any value if the sites to which they are applied have never mineralized, and to maximize the chances of discovery the explorer must therefore pay particular attention to selecting the ground formations most
- (35) likely to be mineralized. Such ground selection relies to varying degrees on conceptual models, which take into account theoretical studies of relevant factors.
- These models are constructed primarily from
- (40) empirical observations of known mineral deposits and from theories of ore-forming processes. The explorer uses the models to identify those geological features that are critical to the formation of the mineralization being modeled, and then tries
- (45) to select areas for exploration that exhibit as many of the critical features as possible.

Questions 104–110 refer to the passage above.

104. The author is primarily concerned with
- (A) advocating a return to an older methodology
 - (B) explaining the importance of a recent theory
 - (C) enumerating differences between two widely used methods
 - (D) describing events leading to a discovery
 - (E) challenging the assumptions on which a theory is based
105. According to the passage, the widely held view of Archean-age gold-quartz vein systems is that such systems
- (A) were formed from metamorphic fluids
 - (B) originated in molten granite-like bodies
 - (C) were formed from alluvial deposits
 - (D) generally have surface expression
 - (E) are not discoverable through chemical tests
106. The passage implies that which of the following steps would be the first performed by explorers who wish to maximize their chances of discovering gold?
- (A) Surveying several sites known to have been formed more than two billion years ago
 - (B) Limiting exploration to sites known to have been formed from metamorphic fluid
 - (C) Using an appropriate conceptual model to select a site for further exploration
 - (D) Using geophysical methods to analyze rocks over a broad area
 - (E) Limiting exploration to sites where alluvial gold has previously been found

107. Which of the following statements about discoveries of gold deposits is supported by information in the passage?
- (A) The number of gold discoveries made annually has increased between the time of the original gold rushes and the present.
 - (B) New discoveries of gold deposits are likely to be the result of exploration techniques designed to locate buried mineralization.
 - (C) It is unlikely that newly discovered gold deposits will ever yield as much as did those deposits discovered during the original gold rushes.
 - (D) Modern explorers are divided on the question of the utility of simple prospecting methods as a source of new discoveries of gold deposits.
 - (E) Models based on the theory that gold originated from magmatic fluids have already led to new discoveries of gold deposits.
108. It can be inferred from the passage that which of the following is easiest to detect?
- (A) A gold-quartz vein system originating in magmatic fluids
 - (B) A gold-quartz vein system originating in metamorphic fluids
 - (C) A gold deposit that is mixed with granite
 - (D) A gold deposit that has shed alluvial gold
 - (E) A gold deposit that exhibits chemical halos
109. The theory mentioned in lines 1–5 relates to the conceptual models discussed in the passage in which of the following ways?
- (A) It may furnish a valid account of ore-forming processes, and, hence, can support conceptual models that have great practical significance.
 - (B) It suggests that certain geological formations, long believed to be mineralized, are in fact mineralized, thus confirming current conceptual models.
 - (C) It suggests that there may not be enough similarity across Archean-age gold-quartz vein systems to warrant the formulation of conceptual models.
 - (D) It corrects existing theories about the chemical halos of gold deposits, and thus provides a basis for correcting current conceptual models.
 - (E) It suggests that simple prospecting methods still have a higher success rate in the discovery of gold deposits than do more modern methods.
110. According to the passage, methods of exploring for gold that are widely used today are based on which of the following facts?
- (A) Most of the Earth's remaining gold deposits are still molten.
 - (B) Most of the Earth's remaining gold deposits are exposed at the surface.
 - (C) Most of the Earth's remaining gold deposits are buried and have no surface expression.
 - (D) Only one type of gold deposit warrants exploration, since the other types of gold deposits are found in regions difficult to reach.
 - (E) Only one type of gold deposit warrants exploration, since the other types of gold deposits are unlikely to yield concentrated quantities of gold.

- Line While the most abundant and dominant species within a particular ecosystem is often crucial in perpetuating the ecosystem, a “keystone” species, here defined as one whose effects are much larger
- (5) than would be predicted from its abundance, can also play a vital role. But because complex species interactions may be involved, identifying a keystone species by removing the species and observing changes in the ecosystem is problematic. It might
- (10) seem that certain traits would clearly define a species as a keystone species; for example, *Pisaster ochraceus* is often a keystone predator because it consumes and suppresses mussel populations, which in the absence of this starfish
- (15) can be a dominant species. But such predation on a dominant or potentially dominant species occurs in systems that do as well as in systems that do not have species that play keystone roles. Moreover, whereas *P. ochraceus* occupies an unambiguous
- (20) keystone role on wave-exposed rocky headlands, in more wave-sheltered habitats the impact of *P. ochraceus* predation is weak or nonexistent, and at certain sites sand burial is responsible for eliminating mussels. Keystone status appears to
- (25) depend on context, whether of particular geography or of such factors as community diversity (for example, a reduction in species diversity may thrust more of the remaining species into keystone roles) and length of species
- (30) interaction (since newly arrived species in particular may dramatically affect ecosystems).

Questions 111–114 refer to the passage above.

111. The passage mentions which of the following as a factor that affects the role of *P. ochraceus* as a keystone species within different habitats?
- (A) The degree to which the habitat is sheltered from waves
 - (B) The degree to which other animals within a habitat prey on mussels
 - (C) The fact that mussel populations are often not dominant within some habitats occupied by *P. ochraceus*
 - (D) The size of the *P. ochraceus* population within the habitat
 - (E) The fact that there is great species diversity within some habitats occupied by *P. ochraceus*
112. Which of the following hypothetical experiments most clearly exemplifies the method of identifying species’ roles that the author considers problematic?
- (A) A population of seals in an Arctic habitat is counted in order to determine whether it is the dominant species in that ecosystem.
 - (B) A species of fish that is a keystone species in one marine ecosystem is introduced into another marine ecosystem to see whether the species will come to occupy a keystone role.
 - (C) In order to determine whether a species of monkey is a keystone species within a particular ecosystem, the monkeys are removed from that ecosystem and the ecosystem is then studied.
 - (D) Different mountain ecosystems are compared to determine how geography affects a particular species’ ability to dominate its ecosystem.
 - (E) In a grassland experiencing a changing climate, patterns of species extinction are traced in order to evaluate the effect of climate changes on keystone species in that grassland.

113. Which of the following, if true, would most clearly support the argument about keystone status advanced in the last sentence of the passage (lines 24–31)?
- (A) A species of bat is primarily responsible for keeping insect populations within an ecosystem low, and the size of the insect population in turn affects bird species within that ecosystem.
 - (B) A species of iguana occupies a keystone role on certain tropical islands, but does not play that role on adjacent tropical islands that are inhabited by a greater number of animal species.
 - (C) Close observation of a savannah ecosystem reveals that more species occupy keystone roles within that ecosystem than biologists had previously believed.
 - (D) As a keystone species of bee becomes more abundant, it has a larger effect on the ecosystem it inhabits.
 - (E) A species of moth that occupies a keystone role in a prairie habitat develops coloration patterns that camouflage it from potential predators.
114. The passage suggests which of the following about the identification of a species as a keystone species?
- (A) Such an identification depends primarily on the species' relationship to the dominant species.
 - (B) Such an identification can best be made by removing the species from a particular ecosystem and observing changes that occur in the ecosystem.
 - (C) Such an identification is likely to be less reliable as an ecosystem becomes less diverse.
 - (D) Such an identification seems to depend on various factors within the ecosystem.
 - (E) Such an identification can best be made by observing predation behavior.

Line After evidence was obtained in the 1920s that
the universe is expanding, it became reasonable
to ask: Will the universe continue to expand
indefinitely, or is there enough mass in it for the
(5) mutual attraction of its constituents to bring this
expansion to a halt? It can be calculated that
the critical density of matter needed to brake the
expansion and “close” the universe is equivalent
to three hydrogen atoms per cubic meter. But the
(10) density of the observable universe—luminous matter
in the form of galaxies—comes to only a fraction
of this. If the expansion of the universe is to stop,
there must be enough invisible matter in the
universe to exceed the luminous matter in density
(15) by a factor of roughly 70.

Our contribution to the search for this “missing
matter” has been to study the rotational velocity
of galaxies at various distances from their center
of rotation. It has been known for some time that
(20) outside the bright nucleus of a typical spiral galaxy
luminosity falls off rapidly with distance from the
center. If luminosity were a true indicator of mass,
most of the mass would be concentrated toward
the center. Outside the nucleus the rotational
(25) velocity would decrease geometrically with distance
from the center, in conformity with Kepler’s law.
Instead we have found that the rotational velocity
in spiral galaxies either remains constant with
increasing distance from the center or increases
(30) slightly. This unexpected result indicates that the
falloff in luminous mass with distance from the
center is balanced by an increase in nonluminous
mass.

Our findings suggest that as much as 90
(35) percent of the mass of the universe is not radiating
at any wavelength with enough intensity to be
detected on the Earth. Such dark matter could be
in the form of extremely dim stars of low mass,
of large planets like Jupiter, or of black holes,
(40) either small or massive. While it has not yet been
determined whether this mass is sufficient to
close the universe, some physicists consider it
significant that estimates are converging on the
critical value.

Questions 115–119 refer to the passage above.

115. The passage is primarily concerned with
- (A) defending a controversial approach
 - (B) criticizing an accepted view
 - (C) summarizing research findings
 - (D) contrasting competing theories
 - (E) describing an innovative technique
116. The authors’ study indicates that, in comparison with the outermost regions of a typical spiral galaxy, the region just outside the nucleus can be characterized as having
- (A) higher rotational velocity and higher luminosity
 - (B) lower rotational velocity and higher luminosity
 - (C) lower rotational velocity and lower luminosity
 - (D) similar rotational velocity and higher luminosity
 - (E) similar rotational velocity and similar luminosity
117. The authors’ suggestion that “as much as 90 percent of the mass of the universe is not radiating at any wavelength with enough intensity to be detected on the Earth” (lines 34–37) would be most weakened if which of the following were discovered to be true?
- (A) Spiral galaxies are less common than types of galaxies that contain little nonluminous matter.
 - (B) Luminous and nonluminous matter are composed of the same basic elements.
 - (C) The bright nucleus of a typical spiral galaxy also contains some nonluminous matter.
 - (D) The density of the observable universe is greater than most previous estimates have suggested.
 - (E) Some galaxies do not rotate or rotate too slowly for their rotational velocity to be measured.

118. It can be inferred from information presented in the passage that if the density of the universe were equivalent to significantly less than three hydrogen atoms per cubic meter, which of the following would be true as a consequence?
- (A) Luminosity would be a true indicator of mass.
 - (B) Different regions in spiral galaxies would rotate at the same velocity.
 - (C) The universe would continue to expand indefinitely.
 - (D) The density of the invisible matter in the universe would have to be more than 70 times the density of the luminous matter.
 - (E) More of the invisible matter in spiral galaxies would have to be located in their nuclei than in their outer regions.
119. The authors propose all of the following as possibly contributing to the “missing matter” in spiral galaxies EXCEPT
- (A) massive black holes
 - (B) small black holes
 - (C) small, dim stars
 - (D) massive stars
 - (E) large planets

Line Jon Clark's study of the effect of the modernization of a telephone exchange on exchange maintenance work and workers is a solid contribution to a debate that encompasses two

(5) lively issues in the history and sociology of technology: technological determinism and social constructivism.

Clark makes the point that the characteristics of a technology have a decisive influence on job skills

(10) and work organization. Put more strongly, technology can be a primary determinant of social and managerial organization. Clark believes this possibility has been obscured by the recent sociological fashion, exemplified by Braverman's

(15) analysis, that emphasizes the way machinery reflects social choices. For Braverman, the shape of a technological system is subordinate to the manager's desire to wrest control of the labor process from the workers. Technological change is

(20) construed as the outcome of negotiations among interested parties who seek to incorporate their own interests into the design and configuration of the machinery. This position represents the new mainstream called social constructivism.

(25) The constructivists gain acceptance by misrepresenting technological determinism: technological determinists are supposed to believe, for example, that machinery imposes appropriate forms of order on society. The alternative to

(30) constructivism, in other words, is to view technology as existing outside society, capable of directly influencing skills and work organization.

Clark refutes the extremes of the constructivists by both theoretical and empirical arguments.

(35) Theoretically he defines "technology" in terms of relationships between social and technical variables. Attempts to reduce the meaning of technology to cold, hard metal are bound to fail, for machinery is just scrap unless it is organized functionally and

(40) supported by appropriate systems of operation and maintenance. At the empirical level Clark shows how a change at the telephone exchange from maintenance-intensive electromechanical switches to semielectronic switching systems altered work

(45) tasks, skills, training opportunities, administration, and organization of workers. Some changes Clark attributes to the particular way management and labor unions negotiated the introduction of the technology, whereas others are seen as arising from

(50) the capabilities and nature of the technology itself. Thus Clark helps answer the question: "When is social choice decisive and when are the concrete characteristics of technology more important?"

Questions 120–127 refer to the passage above.

120. The primary purpose of the passage is to

- (A) advocate a more positive attitude toward technological change
- (B) discuss the implications for employees of the modernization of a telephone exchange
- (C) consider a successful challenge to the constructivist view of technological change
- (D) challenge the position of advocates of technological determinism
- (E) suggest that the social causes of technological change should be studied in real situations

121. Which of the following statements about the modernization of the telephone exchange is supported by information in the passage?

- (A) The new technology reduced the role of managers in labor negotiations.
- (B) The modernization was implemented without the consent of the employees directly affected by it.
- (C) The modernization had an impact that went significantly beyond maintenance routines.
- (D) Some of the maintenance workers felt victimized by the new technology.
- (E) The modernization gave credence to the view of advocates of social constructivism.

122. Which of the following most accurately describes Clark's opinion of Braverman's position?

- (A) He respects its wide-ranging popularity.
- (B) He disapproves of its misplaced emphasis on the influence of managers.
- (C) He admires the consideration it gives to the attitudes of the workers affected.
- (D) He is concerned about its potential to impede the implementation of new technologies.
- (E) He is sympathetic to its concern about the impact of modern technology on workers.

123. The information in the passage suggests that which of the following statements from hypothetical sociological studies of change in industry most clearly exemplifies the social constructivists' version of technological determinism?
- (A) It is the available technology that determines workers' skills, rather than workers' skills influencing the application of technology.
 - (B) All progress in industrial technology grows out of a continuing negotiation between technological possibility and human need.
 - (C) Some organizational change is caused by people; some is caused by computer chips.
 - (D) Most major technological advances in industry have been generated through research and development.
 - (E) Some industrial technology eliminates jobs, but educated workers can create whole new skills areas by the adaptation of the technology.
124. The information in the passage suggests that Clark believes that which of the following would be true if social constructivism had not gained widespread acceptance?
- (A) Businesses would be more likely to modernize without considering the social consequences of their actions.
 - (B) There would be greater understanding of the role played by technology in producing social change.
 - (C) Businesses would be less likely to understand the attitudes of employees affected by modernization.
 - (D) Modernization would have occurred at a slower rate.
 - (E) Technology would have played a greater part in determining the role of business in society.
125. According to the passage, constructivists employed which of the following to promote their argument?
- (A) Empirical studies of business situations involving technological change
 - (B) Citation of managers supportive of their position
 - (C) Construction of hypothetical situations that support their view
 - (D) Contrasts of their view with a misstatement of an opposing view
 - (E) Descriptions of the breadth of impact of technological change
126. The author of the passage uses the expression "are supposed to" in line 27 primarily in order to
- (A) suggest that a contention made by constructivists regarding determinists is inaccurate
 - (B) define the generally accepted position of determinists regarding the implementation of technology
 - (C) engage in speculation about the motivation of determinists
 - (D) lend support to a comment critical of the position of determinists
 - (E) contrast the historical position of determinists with their position regarding the exchange modernization
127. Which of the following statements about Clark's study of the telephone exchange can be inferred from information in the passage?
- (A) Clark's reason for undertaking the study was to undermine Braverman's analysis of the function of technology.
 - (B) Clark's study suggests that the implementation of technology should be discussed in the context of conflict between labor and management.
 - (C) Clark examined the impact of changes in the technology of switching at the exchange in terms of overall operations and organization.
 - (D) Clark concluded that the implementation of new switching technology was equally beneficial to management and labor.
 - (E) Clark's analysis of the change in switching systems applies only narrowly to the situation at the particular exchange that he studied.

- Line All the cells in a particular plant start out with the same complement of genes. How then can these cells differentiate and form structures as different as roots, stems, leaves, and fruits? The
- (5) answer is that only a small subset of the genes in a particular kind of cell are expressed, or turned on, at a given time. This is accomplished by a complex system of chemical messengers that in plants include hormones and other regulatory molecules.
- (10) Five major hormones have been identified: auxin, abscisic acid, cytokinin, ethylene, and gibberellin. Studies of plants have now identified a new class of regulatory molecules called oligosaccharins.
- Unlike the oligosaccharins, the five well-known
- (15) plant hormones are pleiotropic rather than specific; that is, each has more than one effect on the growth and development of plants. The five have so many simultaneous effects that they are not very useful in artificially controlling the growth of
- (20) crops. Auxin, for instance, stimulates the rate of cell elongation, causes shoots to grow up and roots to grow down, and inhibits the growth of lateral shoots. Auxin also causes the plant to develop a vascular system, to form lateral roots, and to
- (25) produce ethylene.
- The pleiotropy of the five well-studied plant hormones is somewhat analogous to that of certain hormones in animals. For example, hormones from the hypothalamus in the brain stimulate the anterior
- (30) lobe of the pituitary gland to synthesize and release many different hormones, one of which stimulates the release of hormones from the adrenal cortex. These hormones have specific effects on target organs all over the body. One hormone stimulates
- (35) the thyroid gland, for example, another the ovarian follicle cells, and so forth. In other words, there is a hierarchy of hormones.
- Such a hierarchy may also exist in plants. Oligosaccharins are fragments of the cell wall released
- (40) by enzymes: different enzymes release different oligosaccharins. There are indications that pleiotropic plant hormones may actually function by activating the enzymes that release these other, more specific chemical messengers from the cell wall.

Questions 128–133 refer to the passage above.

128. According to the passage, the five well-known plant hormones are not useful in controlling the growth of crops because
- (A) it is not known exactly what functions the hormones perform
- (B) each hormone has various effects on plants
- (C) none of the hormones can function without the others
- (D) each hormone has different effects on different kinds of plants
- (E) each hormone works on only a small subset of a cell's genes at any particular time
129. The passage suggests that the place of hypothalamic hormones in the hormonal hierarchies of animals is similar to the place of which of the following in plants?
- (A) Plant cell walls
- (B) The complement of genes in each plant cell
- (C) A subset of a plant cell's gene complement
- (D) The five major hormones
- (E) The oligosaccharins
130. The passage suggests that which of the following is a function likely to be performed by an oligosaccharin?
- (A) To stimulate a particular plant cell to become part of a plant's root system
- (B) To stimulate the walls of a particular cell to produce other oligosaccharins
- (C) To activate enzymes that release specific chemical messengers from plant cell walls
- (D) To duplicate the gene complement in a particular plant cell
- (E) To produce multiple effects on a particular subsystem of plant cells

131. The author mentions specific effects that auxin has on plant development in order to illustrate the
- (A) point that some of the effects of plant hormones can be harmful
 - (B) way in which hormones are produced by plants
 - (C) hierarchical nature of the functioning of plant hormones
 - (D) differences among the best-known plant hormones
 - (E) concept of pleiotropy as it is exhibited by plant hormones
132. According to the passage, which of the following best describes a function performed by oligosaccharins?
- (A) Regulating the daily functioning of a plant's cells
 - (B) Interacting with one another to produce different chemicals
 - (C) Releasing specific chemical messengers from a plant's cell walls
 - (D) Producing the hormones that cause plant cells to differentiate to perform different functions
 - (E) Influencing the development of a plant's cells by controlling the expression of the cells' genes
133. The passage suggests that, unlike the pleiotropic hormones, oligosaccharins could be used effectively to
- (A) trace the passage of chemicals through the walls of cells
 - (B) pinpoint functions of other plant hormones
 - (C) artificially control specific aspects of the development of crops
 - (D) alter the complement of genes in the cells of plants
 - (E) alter the effects of the five major hormones on plant development

- Line In the two decades between 1910 and 1930,
more than ten percent of the black population
of the United States left the South, where the
preponderance of the black population had been
(5) located, and migrated to northern states, with the
largest number moving, it is claimed, between 1916
and 1918. It has been frequently assumed, but not
proved, that the majority of the migrants in
(10) what has come to be called the Great Migration
came from rural areas and were motivated by two
concurrent factors: the collapse of the cotton
industry following the boll weevil infestation, which
began in 1898, and increased demand in the North
for labor following the cessation of European
(15) immigration caused by the outbreak of the First
World War in 1914. This assumption has led to
the conclusion that the migrants' subsequent lack
of economic mobility in the North is tied to rural
background, a background that implies unfamiliarity
(20) with urban living and a lack of industrial skills.

- But the question of who actually left the South
has never been rigorously investigated. Although
numerous investigations document an exodus from
rural southern areas to southern cities prior to the
(25) Great Migration, no one has considered whether the
same migrants then moved on to northern cities.
In 1910 more than 600,000 black workers, or ten
percent of the black workforce, reported themselves
to be engaged in "manufacturing and mechanical
(30) pursuits," the federal census category roughly
encompassing the entire industrial sector. The Great
Migration could easily have been made up entirely
of this group and their families. It is perhaps
surprising to argue that an employed population
(35) could be enticed to move, but an explanation lies in
the labor conditions then prevalent in the South.

- About thirty-five percent of the urban black
population in the South was engaged in skilled
trades. Some were from the old artisan class of
(40) slavery—blacksmiths, masons, carpenters—which
had had a monopoly of certain trades, but they
were gradually being pushed out by competition,
mechanization, and obsolescence. The remaining
sixty-five percent, more recently urbanized, worked in
(45) newly developed industries—tobacco, lumber, coal
and iron manufacture, and railroads. Wages in
the South, however, were low, and black workers
were aware, through labor recruiters and the black
press, that they could earn more even as unskilled

- (50) workers in the North than they could as artisans
in the South. After the boll weevil infestation,
urban black workers faced competition from the
continuing influx of both black and white rural
workers, who were driven to undercut the wages
(55) formerly paid for industrial jobs. Thus, a move north
would be seen as advantageous to a group that was
already urbanized and steadily employed, and the
easy conclusion tying their subsequent economic
problems in the North to their rural background
(60) comes into question.

Questions 134–139 refer to the passage above.

134. The author indicates explicitly that which of the
following records has been a source of information in
her investigation?
- (A) United States Immigration Service reports from
1914 to 1930
 - (B) Payrolls of southern manufacturing firms
between 1910 and 1930
 - (C) The volume of cotton exports between 1898
and 1910
 - (D) The federal census of 1910
 - (E) Advertisements of labor recruiters appearing in
southern newspapers after 1910
135. In the passage, the author anticipates which of the
following as a possible objection to her argument?
- (A) It is uncertain how many people actually
migrated during the Great Migration.
 - (B) The eventual economic status of the Great
Migration migrants has not been adequately
traced.
 - (C) It is not likely that people with steady jobs would
have reason to move to another area of the
country.
 - (D) It is not true that the term "manufacturing and
mechanical pursuits" actually encompasses the
entire industrial sector.
 - (E) Of the African American workers living in
southern cities, only those in a small number of
trades were threatened by obsolescence.

136. According to the passage, which of the following is true of wages in southern cities in 1910?
- (A) They were being pushed lower as a result of increased competition.
 - (B) They had begun to rise so that southern industry could attract rural workers.
 - (C) They had increased for skilled workers but decreased for unskilled workers.
 - (D) They had increased in large southern cities but decreased in small southern cities.
 - (E) They had increased in newly developed industries but decreased in the older trades.
137. The author cites each of the following as possible influences in an African American worker's decision to migrate north in the Great Migration EXCEPT
- (A) wage levels in northern cities
 - (B) labor recruiters
 - (C) competition from rural workers
 - (D) voting rights in northern states
 - (E) the African American press
138. It can be inferred from the passage that the "easy conclusion" mentioned in line 58 is based on which of the following assumptions?
- (A) People who migrate from rural areas to large cities usually do so for economic reasons.
 - (B) Most people who leave rural areas to take jobs in cities return to rural areas as soon as it is financially possible for them to do so.
 - (C) People with rural backgrounds are less likely to succeed economically in cities than are those with urban backgrounds.
 - (D) Most people who were once skilled workers are not willing to work as unskilled workers.
 - (E) People who migrate from their birthplaces to other regions of a country seldom undertake a second migration.
139. The primary purpose of the passage is to
- (A) support an alternative to an accepted methodology
 - (B) present evidence that resolves a contradiction
 - (C) introduce a recently discovered source of information
 - (D) challenge a widely accepted explanation
 - (E) argue that a discarded theory deserves new attention

7.5 Answer Key

1. B	29. C	57. C	85. A	113. B
2. B	30. B	58. B	86. B	114. D
3. D	31. C	59. A	87. A	115. C
4. A	32. B	60. A	88. A	116. D
5. C	33. D	61. B	89. D	117. A
6. D	34. B	62. E	90. C	118. C
7. B	35. E	63. D	91. E	119. D
8. B	36. C	64. D	92. B	120. C
9. E	37. C	65. B	93. D	121. C
10. E	38. E	66. C	94. D	122. B
11. E	39. A	67. B	95. C	123. A
12. A	40. D	68. E	96. D	124. B
13. A	41. A	69. D	97. C	125. D
14. C	42. B	70. E	98. E	126. A
15. D	43. A	71. B	99. D	127. C
16. B	44. A	72. D	100. A	128. B
17. B	45. C	73. C	101. C	129. D
18. B	46. B	74. C	102. D	130. A
19. B	47. E	75. E	103. A	131. E
20. B	48. E	76. A	104. B	132. E
21. A	49. A	77. E	105. A	133. C
22. D	50. A	78. C	106. C	134. D
23. E	51. D	79. B	107. B	135. C
24. D	52. B	80. C	108. D	136. A
25. A	53. C	81. D	109. A	137. D
26. C	54. C	82. A	110. C	138. C
27. B	55. E	83. A	111. A	139. D
28. A	56. D	84. E	112. C	

7.6 Answer Explanations

The following discussion of reading comprehension is intended to familiarize you with the most efficient and effective approaches to the kinds of problems common to reading comprehension. The particular questions in this chapter are generally representative of the kinds of reading comprehension questions you will encounter on the GMAT exam. Remember that it is the problem solving strategy that is important, not the specific details of a particular question.

Questions 1–4 refer to the passage on page 364.

1. According to the passage, theory B states that which of the following is a factor that enables a schooling fish to escape predators?

(A) The tendency of fish to form compact groups
(B) The movement of other fish within the school
(C) The inability of predators to detect schools
(D) The ability of fish to hide behind one another in a school
(E) The great speed with which a school can disperse

Supporting idea

This question depends on understanding what the passage states about theory B, the “confusion effect.” One element of theory B is that predators may experience sensory confusion created by large numbers of moving fish in a school.

- A The compactness of groups of schooling fish is an element of theory A, not theory B.
- B Correct.** It is the movement of schooling fish around a predator that creates sensory confusion in the predator; this movement may distract the predator and help protect individual fish in the school.
- C According to the passage’s description of theory A, predators are actually slightly more likely to detect schools than they are to detect individual fish.
- D Theory B does not involve fish hiding behind one another but rather moving around the predator.
- E The passage does not discuss the speed of dispersal of schools of fish.

The correct answer is B.

2. According to the passage, both theory A and theory B have been developed to explain how

(A) fish hide from predators by forming schools
(B) forming schools functions to protect fish from predators
(C) schooling among fish differs from other protective behaviors
(D) small fish are able to make rapid decisions
(E) small fish are able to survive in an environment densely populated by large predators

Supporting idea

The passage states in its first paragraph that two theories were developed to explain why schooling occurs in so many fish species and that they both assume that schooling helps protect fish from predators.

- A While theory A involves an explanation of how schooling makes an individual fish less likely to be found by predators, theory B explains how schooling protects fish even when they are detected by predators.
- B Correct.** Both theory A and theory B begin with the assumption that schooling provides protection from predators, and each theory offers a different explanation for how that protection occurs.
- C The passage does not discuss protective behaviors other than schooling.
- D The decision-making ability of predators, not schooling fish, is discussed in the passage; schooling is presented as an instinctive behavior.
- E The passage suggests that only theory B helps explain schooling behavior in environments where many predators, large or otherwise, are found, and that theory A explains schooling in areas where predators are not as abundant.

The correct answer is B.

3. According to one explanation of the “confusion effect,” a fish that swims in a school will have greater advantages for survival if it
- (A) tends to be visible for no more than 200 meters
 - (B) stays near either the front or the rear of a school
 - (C) is part of a small school rather than a large school
 - (D) is very similar in appearance to the other fish in the school
 - (E) is medium-sized

Inference

The “confusion effect” is discussed in the third and fourth paragraphs. The first explanation of the “confusion effect” proposes that because predators prefer to select distinctive prey, they find it difficult to select one fish from among many that look the same.

- A The 200-meter visibility of fish is part of the explanation for theory A, not theory B (the “confusion effect”).
- B The location of an individual fish within a school is not discussed in the passage as being important to the “confusion effect.”
- C The size of a school of fish is not discussed as an element of the “confusion effect.”
- D Correct.** Because predators, according to the “confusion effect,” prefer to select prey that is distinct from the rest of the school, a fish that is similar in appearance to the other fish in its school would most likely enjoy a survival advantage.
- E The size of a fish relative to the other fish in its school would most likely contribute to its ability to survive: that is, if it resembled other fish in size, it would be safer, based on what the passage says about the “confusion effect.” Furthermore, the passage gives no reason to think that merely being medium-sized would confer any advantage (unless the other fish were medium-sized as well).

The correct answer is D.

4. The author is primarily concerned with
- (A) discussing different theories
 - (B) analyzing different techniques
 - (C) defending two hypotheses
 - (D) refuting established beliefs
 - (E) revealing new evidence

Main idea

Determining the author’s primary concern depends on understanding the focus of the passage as a whole. The author presents two theories that purport to account for why fish, particularly small fish, tend to school and explains the arguments of proponents of each theory.

- A Correct.** The author discusses two theories—identified as theory A and theory B—that account for the tendency of fish to school.
- B The author is not concerned with different techniques in the passage.
- C The two theories of why fish school could be referred to as hypotheses, but the author is not primarily concerned with defending them; rather, the passage explains how each attempts to account for the phenomenon in question.
- D The author presents, rather than refutes, beliefs about why fish tend to school.
- E The author reveals no evidence, new or otherwise, in the passage. The passage is a general discussion of scientific opinions based on existing evidence.

The correct answer is A.

Questions 5–7 refer to the passage on page 366.

5. The primary purpose of the passage is to
- (A) explain why a particular business strategy has been less successful than was once anticipated
 - (B) propose an alternative to a particular business strategy that has inadvertently caused ecological damage
 - (C) present a concern about the possible consequences of pursuing a particular business strategy
 - (D) make a case for applying a particular business strategy on a larger scale than is currently practiced
 - (E) suggest several possible outcomes of companies' failure to understand the economic impact of a particular business strategy

Main idea

This question requires understanding the passage as a whole. The passage starts out defining a goal—ecoefficiency—that has become popular among companies throughout the world and that would be expected to bring overall ecological benefits. It then immediately introduces Senge and Carstedt, who have concerns about this idea. The rest of the passage is devoted to explaining their concerns, though the passage does not present a particular alternative strategy.

- A The passage never discusses whether ecoefficiency is or is not successful but only the possible consequences of it.
- B Lines 26–28 state that Senge and Carstedt believe that a *new systemic approach* must be found, but a particular alternative strategy is never offered.
- C **Correct.** After defining ecoefficiency, the rest of the passage is devoted to describing the concerns Senge and Carstedt have about it as a goal for companies.
- D The passage reports on particular concerns about the strategy and does not advocate expanding its adoption.
- E The passage is concerned with environmental impact, not economic impact.

The correct answer is C.

6. The passage mentions which of the following as a possible consequence of companies' realization of greater profits through ecoefficiency?
- (A) The companies may be able to sell a greater number of products by lowering prices.
 - (B) The companies may be better able to attract investment capital in the global market.
 - (C) The profits may be reinvested to increase economic growth through ecoefficiency.
 - (D) The profits may be used as investment capital for industries that are not ecoefficient.
 - (E) The profits may encourage companies to make further innovations in reducing production waste.

Supporting ideas

This question asks for identification of an example given in the passage of what could result from the greater profits that may come with ecoefficiency. Such profits are specifically mentioned only in lines 14 and 17. The increased growth and profits referred to in line 14 are associated with increased waste generated indirectly by ecoefficient companies. The growth and profits referred to in line 17 are associated with investment of this capital in industries that may not be ecoefficient.

- A The prices of companies' products are not mentioned in the passage.
- B Greater investment in ecoefficient companies by outside sources is not mentioned in the passage.
- C The passage mentions increased profits from ecoefficiency but not the use of these profits to then increase growth through further ecoefficiency.
- D **Correct.** Lines 14–19 state explicitly that company profits from ecoefficiency may be invested in eco-inefficient industries.
- E The passage does not discuss whether companies will use increased profits from ecoefficiency to become more ecoefficient.

The correct answer is D.

7. The passage implies that which of the following is a possible consequence of a company's adoption of innovations that increase its ecoefficiency?
- (A) Company profits resulting from such innovations may be reinvested in that company with no guarantee that the company will continue to make further improvements in ecoefficiency.
 - (B) Company growth fostered by cost savings from such innovations may allow that company to manufacture a greater number of products that will be used and discarded, thus worsening environmental stress.
 - (C) A company that fails to realize significant cost savings from such innovations may have little incentive to continue to minimize the environmental impact of its production processes.
 - (D) A company that comes to depend on such innovations to increase its profits and growth may be vulnerable in the global market to competition from old-style eco-inefficient industries.
 - (E) A company that meets its ecoefficiency goals is unlikely to invest its increased profits in the development of new and innovative ecoefficiency measures.

Inference

The answer to this question will be an inference about what may result from a company's increased ecoefficiency. The passage suggests several outcomes from such an increase: a general worsening of the environment; a tendency for companies to manufacture more of particular products, which will then be thrown away by consumers; the possibility that increased profits will result in greater investment in industries that are not ecoefficient; and even the possibility that ecoefficiency might allow so much growth that more total waste will be produced and more overall wildlife habitat destroyed.

- A The passage suggests generally that ecoefficiency will increase companies' profits, but there is no suggestion that these companies will therefore then abandon ecoefficiency as a goal.

- B **Correct.** Lines 6–12 strongly suggest that it is possible that the increased growth that may come from ecoefficiency may result in more products being manufactured, which may result in more waste as those products are discarded by consumers.
- C The passage does not suggest that ecoefficiency may fail to increase a company's profits.
- D The passage suggests that ecoefficiency has allowed many companies to increase profits, but it does not suggest that eco-inefficient companies are more profitable or competitive in the global marketplace.
- E As with answer choice (A), there is no suggestion that companies are likely to abandon ecoefficient strategies once they have realized increased profits from such strategies.

The correct answer is B.

Questions 8–10 refer to the passage on page 368.

8. The primary purpose of the passage is to propose
- (A) an alternative to museum display of artifacts
 - (B) a way to curb illegal digging while benefiting the archaeological profession
 - (C) a way to distinguish artifacts with scientific value from those that have no such value
 - (D) the governmental regulation of archaeological sites
 - (E) a new system for cataloging duplicate artifacts

Main idea

After identifying in the first paragraph two problems that the field of archaeology faces, the author begins the second paragraph by explicitly stating the purpose of the essay: *I would propose that scientific archaeological expeditions and governmental authorities sell excavated artifacts on the open market.* According to the author, this proposal would both benefit the field of archaeology (line 12) and reduce illegal digging for antiquities (lines 12–13).

- A While explaining in paragraph 5 that museums often store countless artifacts unseen in their basements, the author proposes no alternative for museum display of these artifacts.
- B Correct.** The author argues that selling some antiquities would help archaeology and reduce illegal digging.
- C No proposal for the grading of the artifacts is made in the passage.
- D The author does not discuss governmental regulation of the sites.
- E While the author supports one part of the proposal for selling antiquities by noting that sold artifacts could be cataloged on a computer, this is a detail rather than the main purpose of the passage.

The correct answer is B.

9. The author implies that all of the following statements about duplicate artifacts are true EXCEPT
- (A) a market for such artifacts already exists
 - (B) such artifacts seldom have scientific value
 - (C) there is likely to be a continuing supply of such artifacts
 - (D) museums are well supplied with examples of such artifacts
 - (E) such artifacts frequently exceed in quality those already cataloged in museum collections

Inference

Duplicate artifacts are discussed throughout the passage. Because this question asks the reader to find the one statement that is NOT stated or implied in the passage, the best approach is to eliminate the four statements that are supported by the passage.

- A In the closing sentence of the passage, the author implies that the market already exists.

- B In lines 27–32, the author suggests selling artifacts that do not have *unique artistic merit or scientific value* and then states that while theoretically every artifact may have potential scientific value, in practice this is not the case. Paragraph 4 illustrates this by mentioning the many thousands of artifacts that are *essentially duplicates of one another*. Lines 51–53 imply that there are rare instances when duplicates do *become needed for scientific purposes*, so duplicates *seldom have scientific value*.
- C This statement is implied in lines 41–43, where the author notes that museum basements are *simply not large enough to store the artifacts that are likely to be discovered in the future*.
- D It can be inferred that if the duplicates cited in paragraph 4 are typical of the kinds of artifacts *stored in bulging museum basements* (lines 48–49), then museums are well supplied with such artifacts.
- E Correct.** The passage does not support the assertion that the quality of duplicate objects is higher than that of museum pieces.

The correct answer is E.

10. Which of the following is mentioned in the passage as a disadvantage of storing artifacts in museum basements?
- (A) Museum officials rarely allow scholars access to such artifacts.
 - (B) Space that could be better used for display is taken up for storage.
 - (C) Artifacts discovered in one excavation often become separated from each other.
 - (D) Such artifacts are often damaged by variations in temperature and humidity.
 - (E) Such artifacts often remain uncataloged and thus cannot be located once they are put in storage.

Supporting ideas

This question asks for specific information stated in the passage, so begin by finding the discussion of museum storage in the fifth paragraph. There, the author exposes the problems museums face: too little room and too little money. Not enough funding exists to catalog artifacts, so the artifacts *become as inaccessible as if they had never been discovered* (lines 45–46).

- A Restrictions on scholars' access to the museums' artifacts are not mentioned in the passage.
- B The author does not argue that museums should use space differently.
- C No mention is made of the separation of objects from the same excavation.
- D The author does not discuss the conditions of storage.
- E **Correct.** The author contends that many artifacts are left uncataloged and so, once shelved in the basements, they cannot be found.

The correct answer is E.

Questions 11–13 refer to the passage on page 370.

11. According to the passage, the difference in the amount of cratering on Callisto's and Io's respective surfaces can probably be explained by the difference between these two moons with respect to which of the following factors?
- (A) Size
 - (B) Ice content
 - (C) The rate of bombardment by comets and asteroids
 - (D) The influence of Jupiter's other moons
 - (E) The level of geological activity

Supporting idea

Cratering is discussed in the second paragraph. The passage states that Callisto is heavily cratered, while Io has no detectable craters. Io is the moon closest to Jupiter, and Callisto is the farthest away. Their relative positions are accompanied by a corresponding difference in geological activity: Io is very geologically active, while Callisto is not active at all. Io's geological activity means that it is being regularly resurfaced, so it is unlikely to retain any evidence of cratering—unlike Callisto, which experiences no resurfacing, leaving its craters intact.

- A While the passage makes clear that Callisto is larger than Io, it does not address whether their relative size explains the difference in their respective amounts of cratering.
- B According to the passage, Callisto and Io differ in terms of their ice content, but nothing in the passage indicates that that content affects the cratering on their surfaces.
- C The passage states that Io experiences a higher rate of bombardment than Callisto does, but while that bombardment most likely causes cratering on Io, its surface does not retain those craters. Thus, the rate of bombardment does not, in itself, explain the difference in cratering on the surface of the two moons.
- D The only other moons of Jupiter discussed in the passage are Ganymede and Europa, and the passage does not consider their effect on the cratering of Callisto and Io.
- E **Correct.** Because Io experiences a high degree of geological activity, its surface is continuously resurfaced, which means that the surface shows no craters. Callisto, on the other hand, is not geologically active and thus is not resurfaced regularly, which explains why its surface is heavily cratered.

The correct answer is E.

12. Which of the following best describes the purpose of the second paragraph of the passage?
- (A) To provide further evidence of the systematic variation in the characteristics of Jupiter's four largest moons
 - (B) To present a comprehensive theory to explain the systematic variation in the characteristics of Jupiter's four largest moons
 - (C) To explain the significance of the systematic variation in the characteristics of Jupiter's four largest moons
 - (D) To introduce facts that contradict conventional assumptions about Jupiter's four largest moons
 - (E) To contrast the characteristics of Jupiter's four largest moons with the characteristics of the planets of the solar system

Evaluation

This question depends on understanding how the second paragraph functions in the context of the passage as a whole. The first paragraph discusses the way in which the composition of Jupiter's four largest moons varies with distance from Jupiter, and the second paragraph extends the idea of distance-based variation to geological activity and surface appearance.

- A Correct.** The second paragraph presents evidence related to the amount of geological activity and surface cratering in order to extend the first paragraph's suggestion that the characteristics of Jupiter's four largest moons vary systematically based on their distance from Jupiter.
- B** The passage does not offer a theory to account for the systematic variation in the characteristics of Jupiter's largest moons; it merely describes several instances of that variation.
- C** The second paragraph provides more examples of the systematic variation in the characteristics of Jupiter's largest moons rather than explaining that variation's significance.

- D** The passage describes Jupiter's moons but does not identify any conventional assumptions about those moons that are contradicted by facts introduced in the passage.
- E** The first paragraph suggests that Jupiter's moons exhibit differences in characteristics that are more "systematic" than are those of the planets in the solar system, but the characteristics are not themselves contrasted; in fact, the first paragraph suggests that they are similar. The second paragraph does not discuss the planets of the solar system at all.

The correct answer is A.

13. The author's reference to Jupiter's gravity in line 25 serves primarily to
- (A) indicate why the absence of craters on Io's surface is surprising
 - (B) explain the presence of craters on the surface of Jupiter's four largest moons
 - (C) provide an explanation for the lack of geological activity on Callisto
 - (D) contrast Jupiter's characteristics with the characteristics of its four largest moons
 - (E) illustrate the similarity between Jupiter's four largest moons and the planets of the solar system

Evaluation

The reference to Jupiter's gravity is part of the author's discussion of cratering on Jupiter's moons; Jupiter's gravity is strong enough to attract comets and asteroids that then bombard its inner moons. A high bombardment rate would seem to indicate that a great deal of cratering would occur on those inner moons, and yet the passage reports that, unexpectedly, on the innermost moon, Io, no craters have been detected.

- A **Correct.** Jupiter's gravity attracts comets and asteroids, which increases the bombardment rate of its inner moons, including Io. This bombardment makes it surprising that Io's surface shows no cratering.
- B The passage discusses the likely effect of Jupiter's gravity on its inner moons but not its outer moons; two of the large moons the passage discusses are outer moons.
- C According to the passage, Callisto, an outer moon, lacks geological activity because of its distance from Jupiter; Jupiter's gravity is not offered as a contributing factor to this inactivity.
- D The passage does not contrast Jupiter with its moons; rather, it compares the moons to one another.
- E The first paragraph of the passage suggests that Jupiter's moons vary in a way similar to that of the planets of the solar system, but the author does not refer to Jupiter's gravity to illustrate the similarity in this variation.

The correct answer is A.

Questions 14–17 refer to the passage on page 372.

14. According to the passage, which of the following contributed to Marcus Garvey's success?
- (A) He introduced cultural and historical consciousness to the African American community.
 - (B) He believed enthusiastically in the traditional American success ethos.
 - (C) His audience had already formed a consciousness that made it receptive to his message.
 - (D) His message appealed to critics of African American support for United States military involvement in the First World War.
 - (E) He supported the movement to protest segregation that had emerged prior to his arrival in the United States.

Supporting idea

To answer this question, find what the passage states explicitly about how Marcus Garvey achieved his success. The passage begins by stating that Garvey arrived at the right time: that returning African American soldiers were primed to receive what he had to say about the African American community. These soldiers already held strong beliefs about their rights to opportunities for success; the passage concludes that the divide between the soldiers' expectations and their experiences led to Garvey's success.

- A The passage states that African American people were in possession of a strong cultural and historical consciousness prior to Garvey's arrival in the United States.
- B The passage attributes belief in the traditional American success ethos to African American people who joined the armed forces; it does not mention Garvey's beliefs on this subject.
- C **Correct.** African American soldiers who had experienced segregation during the First World War were ready to hear what Garvey had to say.
- D Critics of African American support for United States involvement in the First World War are not mentioned in the passage.
- E While Garvey most likely would have supported a movement to protest segregation, such a movement is not discussed in the passage.

The correct answer is C.

15. The passage suggests that many African American people responded to their experiences in the armed forces in which of the following ways?
- (A) They maintained as civilians their enthusiastic allegiance to the armed forces.
 - (B) They questioned United States involvement in the First World War.
 - (C) They joined political organizations to protest the segregation of African American troops and the indignities they suffered in the military.
 - (D) They became aware of the gap between their expectations and the realities of American culture.
 - (E) They repudiated Garvey's message of pride and unity.

Inference

According to the passage, African Americans enthusiastically joined the armed services but were confronted with continued segregation, both in the military and when they returned home. The passage does not explicitly state their response to these experiences, but a response can be inferred. The second paragraph, refers to anthropologist Anthony F. C. Wallace, who argued that a revitalization movement may be brought about by the perception of a gap between expectations and reality, and such a revitalization did occur in African American communities following the First World War; thus, many African American people may have become aware of a gap such as Wallace described.

- A The passage states that African American troops experienced segregation and other indignities while in the military; these experiences could reasonably be inferred to have dampened their enthusiasm for the armed forces. Regardless, the passage does not suggest an enthusiastic allegiance.
- B The passage describes African American people's enthusiasm about joining the military. Although they experienced segregation and other indignities while in the military, the passage does not suggest that their opinion about involvement in the war changed.

- C While African American troops may have joined political organizations, the passage does not provide any actual evidence of this having occurred.
- D **Correct.** The fact that, as the passage states, a revitalization movement occurred in the African American community following the First World War suggests that the returning soldiers did become aware of the gap between their expectations of an improved situation with regard to segregation and the reality of continued segregation in the United States.
- E The passage does not suggest that African American troops repudiated Garvey's message. On the contrary, it states that Garvey built *the largest revitalization movement in African American history*. This suggests that the members of the African American community, including the returning soldiers, were extremely receptive to Garvey's message.

The correct answer is D.

16. It can be inferred from the passage that the "scholars" mentioned in line 24 believe which of the following to be true?
- (A) Revitalization resulted from the political activism of returning African American soldiers following the First World War.
 - (B) Marcus Garvey had to change a number of prevailing attitudes in order for his mass movement to find a foothold in the United States.
 - (C) The prevailing sensibility of the African American community provided the foundation of Marcus Garvey's political appeal.
 - (D) Marcus Garvey hoped to revitalize consciousness of cultural and historical identity in the African American community.
 - (E) The goal of the mass movement that Marcus Garvey helped bring into being was to build on the pride and unity among African Americans.

Inference

To determine what it is logical to infer regarding the scholars discussed in the third paragraph, look at the context in which they are mentioned. According to the passage, these scholars argue that Garvey was responsible for creating a particular consciousness within the African American community, a consciousness that the passage identifies as *identity, strength, and [a] sense of history*. Unlike the passage author, these scholars believe strongly in Garvey's responsibility for this consciousness, so they would most likely reject any suggestion that it existed prior to his arrival and activism.

- A According to the passage, the scholars believe that Garvey was responsible for the creation of the consciousness that led to revitalization, which suggests that revitalization resulted from Garvey's activism, not soldiers' activism.
- B Correct.** According to the passage, the scholars believe that Garvey created the consciousness that led to his revitalization movement. This suggests that he had to change prevailing attitudes in order to foster this new consciousness.
- C According to the passage, the scholars believe that Garvey created a new consciousness in the African American community; thus, the prevailing sensibility could not have provided a foundation for his appeal.
- D According to the passage, the scholars believe that Garvey built his revitalization movement on a new consciousness of cultural and historical identity, not a previously existing one.
- E According to the passage, the scholars' position is that Garvey's movement was built on a new sense of pride and unity that he provided, and that that sense did not precede Garvey's work.

The correct answer is B.

17. According to the passage, many African American people joined the armed forces during the First World War for which of the following reasons?
- (A) They wished to escape worsening economic conditions in African American communities.
 - (B) They expected to fulfill ideals of personal attainment.
 - (C) They sought to express their loyalty to the United States.
 - (D) They hoped that joining the military would help advance the cause of desegregation.
 - (E) They saw military service as an opportunity to fulfill Marcus Garvey's political vision.

Supporting idea

This question depends on identifying what the passage states directly about African American people's reasons for joining the armed forces. The reason offered by the passage is that the African American people who entered the armed forces did so because they were *hoping to participate in the traditional American ethos of individual success*.

- A Although this is a plausible reason for entering the armed forces, the passage does not discuss economic conditions.
- B Correct.** The passage states that African American people who joined the armed forces during the First World War wanted to achieve individual success.
- C The passage does not discuss African American people's loyalty to the United States.
- D The passage states that African American troops experienced segregation, but it does not suggest that they had hoped their joining the military would promote desegregation.
- E The passage suggests that African American troops did not become aware of Marcus Garvey's political vision until after they returned from the First World War.

The correct answer is B.

Questions 18–25 refer to the passage on page 374.

18. The passage provides information in support of which of the following assertions?
- (A) The disadvantages of an adaptation to a particular feature of an environment often outweigh the advantages of such an adaptation.
 - (B) An organism's reaction to being placed in an environment to which it is not well adapted can sometimes illustrate the problems that have been solved by the adaptations of organisms indigenous to that environment.
 - (C) The effectiveness of an organism's adaptation to a particular feature of its environment can only be evaluated by examining the effectiveness with which organisms of other species have adapted to a similar feature of a different environment.
 - (D) Organisms of the same species that inhabit strikingly different environments will often adapt in remarkably similar ways to the few features of those environments that are common.
 - (E) Different species of organisms living in the same environment will seldom adapt to features of that environment in the same way.

Application

This question requires recognizing a principle underlying the passage's overall discussion. The passage makes a general claim about terrestrial animals' need to overcome the effect of gravity on their blood circulation systems, and it then uses the specific example of terrestrial snakes to illustrate this claim. To help identify the adaptations used by terrestrial snakes, the passage describes what happens to sea snakes, which are aquatic and less affected by gravity's influence, when they are subjected to a terrestrial environment. The specific problems faced by these snakes strongly suggest that terrestrial snakes have developed ways to overcome these problems. The passage then identifies specific physiological differences between sea snakes and terrestrial snakes that demonstrate how terrestrial snakes overcome gravity's influence.

- A The passage discusses how species have successfully adapted to their specific environments and does not mention that these adaptations create disadvantages in that environment.
- B Correct.** The passage discusses the problems faced by sea snakes when they are subjected to a terrestrial environment and then examines terrestrial snakes to illustrate how certain adaptations solved these problems.
- C The passage is not concerned with evaluating the effectiveness of species' adaptations to their environments; it takes for granted that these adaptations are effective.
- D The passage is concerned with how species adapt differently to different environments and not with how adaptations to different environments are similar.
- E The passage discusses how different environments affect how species have adapted, not how different species adapt to a similar environment.

The correct answer is B.

19. According to the passage, one reason that the distribution of blood in the sea snake changes little while the creature remains in the ocean is that
- (A) the heart of the sea snake tends to be located near the center of its body
 - (B) pressure gradients in the water surrounding the sea snake counter the effects of vertical pressure gradients within its blood vessels
 - (C) the sea snake assumes a vertical posture less frequently than do the terrestrial and the arboreal snake
 - (D) the sea snake often relies on waves of muscle contractions to help move blood from the torso to the head
 - (E) the force of pressure gradients in the water surrounding the sea snake exceeds that of vertical pressure gradients within its circulatory system

Supporting ideas

This question asks for an identification of factual information in the passage. Given that the contrast between sea snakes and terrestrial snakes is being used to identify adaptations used by terrestrial animals to overcome the effect of gravity on their circulation systems, the passage needs initially to illustrate why it is that sea snakes are not confronted with the same problems that gravity causes for terrestrial snakes. This information therefore needs to come fairly early in the passage.

- A The passage identifies the location of a sea snake's heart as a factor that minimizes the effort required to pump blood to both extremities but not as a cause of the even distribution of blood in sea snakes.
- B Correct.** The passage states explicitly in lines 11–17 that while sea snakes are in the ocean, the vertical pressure gradients in their blood vessels are counteracted by the pressure gradients in the water.
- C The passage does not discuss the frequency with which any snakes assume certain postures.
- D The passage discusses muscle contractions only in relation to arboreal snakes.
- E The passage states that the vertical pressures within sea snakes' blood vessels are *counteracted* (line 13) by the water's pressure, which suggests that the pressures are equalized, not that one force exceeds the other.

The correct answer is B.

20. It can be inferred from the passage that which of the following is true of species of terrestrial snakes that often need to assume a vertical posture?
- (A) They are more likely to be susceptible to circulatory failure in vertical postures than are sea snakes.
 - (B) Their hearts are less likely to be located at the midpoint of their bodies than is the case with sea snakes.
 - (C) They cannot counteract the pooling of blood in lower regions of their bodies as effectively as sea snakes can.

- (D) The blood pressure at their midpoint decreases significantly when they are tilted with their heads up.
- (E) They are unable to rely on muscle contractions to move venous blood from the lower torso to the head.

Inference

This question requires using information given about how arboreal snakes, which are frequently in vertical postures, have adapted to gravity's influence to make an assumption that other terrestrial snakes that are frequently in these postures are likely to have similar adaptations. The passage implies that sea snakes have hearts at the midpoint of their bodies because the water's pressure gradients help distribute blood evenly. It then illustrates that arboreal snakes have hearts closer to their heads to help keep blood flowing to their brain when they are in vertical postures.

- A The passage does not suggest that any of the snakes mentioned are ill-adapted to their particular environments.
- B Correct.** The passage states that arboreal snakes have hearts close to their heads and not at the midpoints of their bodies, so it is reasonable to conclude that any terrestrial snake that frequently assumes vertical postures would be unlikely to have hearts at their bodies' midpoint.
- C As with answer choice (A), the passage does not suggest that any species of snake is ill-adapted to its environment.
- D The passage states that sea snakes lose pressure at their midpoints when they are tilted on land with heads up but that terrestrial snakes do not have this problem.
- E Because arboreal snakes use muscle contractions to circulate blood when they are vertical, it is likely that most terrestrial snakes that frequently assume vertical postures also have this capability.

The correct answer is B.

21. The author describes the behavior of the circulatory system of sea snakes when they are removed from the ocean (see lines 17–20) primarily in order to
- (A) illustrate what would occur in the circulatory system of terrestrial snakes without adaptations that enable them to regulate their blood pressure in vertical orientations
 - (B) explain why arboreal snakes in vertical orientations must rely on muscle contractions to restore blood pressure to the brain
 - (C) illustrate the effects of circulatory failure on the behavior of arboreal snakes
 - (D) illustrate the superiority of the circulatory system of the terrestrial snake to that of the sea snake
 - (E) explain how changes in spatial orientation can adversely affect the circulatory system of snakes with hearts located in relatively close proximity to their heads

Evaluation

Answering this question requires understanding why sea snakes have been brought into the passage's overall discussion about how terrestrial animals have overcome the influence of gravity on their blood circulation. The passage uses the effects that gravity has on sea snakes when they are taken out of water to identify problems that terrestrial snakes must have adapted to in order to survive.

- A **Correct.** The passage uses the problems sea snakes have when taken out of water to illustrate that without certain adaptations, terrestrial snakes would likely have similar problems.
- B The passage discusses sea snakes to illustrate problems faced by terrestrial snakes, not to explain how terrestrial snakes have adapted to gravity's influence.
- C The passage does not discuss the effects of circulatory failure on arboreal snakes.
- D The passage does not compare or contrast the effectiveness of the various adaptations used by different snakes.
- E The passage does not imply that snakes with hearts close to their heads are adversely affected by spatial positions.

The correct answer is A.

22. It can be inferred from the passage that which of the following is a true statement about sea snakes?
- (A) They frequently rely on waves of muscle contractions from the lower torso to the head to supplement the work of the heart.
 - (B) They cannot effectively regulate their blood pressure when placed in seawater and tilted at an angle with the head pointed downward.
 - (C) They are more likely to have a heart located in close proximity to their heads than are arboreal snakes.
 - (D) They become acutely vulnerable to the effects of gravitational pressure on their circulatory system when they are placed in a terrestrial environment.
 - (E) Their cardiovascular system is not as complicated as that of arboreal snakes.

Inference

Answering this question requires understanding why sea snakes are discussed in the passage and what happens to them when they are taken out of water and subjected to the force of gravity. The second paragraph implies strongly that sea snakes will not survive certain terrestrial situations for which they are not adapted.

- A The passage associates muscle contractions to circulate blood with arboreal snakes only.
- B According to the passage, sea snakes' inability to regulate blood pressure occurs only when they are taken out of water.
- C The passage states clearly that arboreal snakes have hearts closer to their heads than do sea snakes.
- D **Correct.** The passage states that in certain postures, sea snakes placed in a terrestrial environment will lose all blood pressure at their brains, which is an acute vulnerability.
- E The passage does not provide the information needed to compare the complexity of the various snakes discussed.

The correct answer is D.

23. The author suggests that which of the following is a disadvantage that results from the location of a snake's heart in close proximity to its head?
- (A) A decrease in the efficiency with which the snake regulates the flow of blood to the brain
 - (B) A decrease in the number of orientations in space that a snake can assume without loss of blood flow to the brain
 - (C) A decrease in blood pressure at the snake's midpoint when it is tilted at various angles with its head up
 - (D) An increase in the tendency of blood to pool at the snake's head when the snake is tilted at various angles with its head down
 - (E) An increase in the amount of effort required to distribute blood to and from the snake's tail

Inference

This question asks for an inference about the location of a snake's heart being closer to the brain than to the midpoint of its body. In the third paragraph, the passage states that in terrestrial snakes, which must fight the influence of gravity, the closer proximity of the heart to the head ensures blood circulation to the brain. The passage notes, however, that this makes it more difficult for such snakes to maintain blood circulation to the tail.

- A The passage states that snakes have brains closer to their heads to more efficiently circulate blood to the brain.
- B The passage suggests that having the heart close to the head increases the spatial orientations a snake can assume without losing blood flow to the brain, rather than decreases the number of orientations.
- C The passage indicates that this is true only of sea snakes with hearts near their body's midpoint.
- D The passage mentions blood pooling in the lower portions of a terrestrial organism's body but does not imply that blood can pool at a snake's head.
- E **Correct.** Because, as the passage states, it is more difficult for a snake with its heart close to its head to circulate blood to the tail, and therefore its body is likely to put more effort into circulating blood to the tail.

The correct answer is E.

24. The primary purpose of the third paragraph is to
- (A) introduce a topic that is not discussed earlier in the passage
 - (B) describe a more efficient method of achieving an effect discussed in the previous paragraph
 - (C) draw a conclusion based on information elaborated in the previous paragraph
 - (D) discuss two specific examples of phenomena mentioned at the end of the previous paragraph
 - (E) introduce evidence that undermines a view reported earlier in the passage

Evaluation

Answering this question requires recognizing how the passage develops its main point. The first paragraph sets up a general claim about gravity's influence on terrestrial organisms. The second paragraph then describes the ill effects that gravity has on sea snakes to identify problems that terrestrial snakes have had to adapt to. The third paragraph then uses examples to illustrate how terrestrial snakes have adapted to gravity's influence.

- A The topic of the third paragraph is the adaptations developed by terrestrial snakes to survive gravity's influence, which is part of the discussion in both the first and second paragraphs.
- B There is no comparison in the passage of the efficiency of the different methods used by snakes to adapt to gravity's influence.
- C The third paragraph is concerned with illustrating certain adaptations used by snakes and offers no conclusions about the problems terrestrial snakes have had to adapt to, which is the topic of the second paragraph.
- D **Correct.** The end of the second paragraph refers to *certain adaptations* (line 23) that the third paragraph then goes on to identify and discuss.
- E The third paragraph supports the main idea of the passage and is not used to counter any claim made earlier.

The correct answer is D.

25. In the passage, the author is primarily concerned with doing which of the following?

- (A) Explaining adaptations that enable the terrestrial snake to cope with the effects of gravitational pressure on its circulatory system
- (B) Comparing the circulatory system of the sea snake with that of the terrestrial snake
- (C) Explaining why the circulatory system of the terrestrial snake is different from that of the sea snake
- (D) Pointing out features of the terrestrial snake's cardiovascular system that make it superior to that of the sea snake
- (E) Explaining how the sea snake is able to neutralize the effects of gravitational pressure on its circulatory system

Main idea

Answering this question involves assessing what the passage as a whole is attempting to do. While the passage begins by making a general claim about gravity's influence on the cardiovascular systems of terrestrial animals, it immediately points to terrestrial snakes as a good example supporting this claim. The rest of the passage is then devoted to illustrating, using the observations involving sea snakes, how gravity's influence has shaped the cardiovascular systems of terrestrial snakes.

- A Correct.** The entire passage is devoted to an explanation of how terrestrial snakes have adapted to gravity's influence.
- B** While the passage does compare the systems of the two snakes, it does so for the larger purpose of demonstrating gravity's influence on terrestrial snakes.
- C** The passage is more concerned with *how* the systems of the two snakes are different, rather than *why*, in order to identify how terrestrial snakes have adapted to gravity's influence.
- D** There is no judgment in the passage as to the superiority of one snake's system over the other.
- E** While the passage does explain how sea snakes do this, it does so only for the larger purpose of identifying how terrestrial snakes have adapted to gravity's influence.

The correct answer is A.

Questions 26–30 refer to the passage on page 378.

26. The author of the passage is primarily concerned with

- (A) discussing research data underlying several definitions
- (B) arguing for the adoption of a particular definition
- (C) exploring definitions of a concept
- (D) comparing the advantages of several definitions
- (E) clarifying some ambiguous definitions

Main idea

The author's primary concern is found by considering the passage as a whole. In the first paragraph, the author raises the central question regarding the meaning of *services* and then examines two definitions. The second paragraph analyzes the United States government's definition of *services* in more detail. The author is primarily interested in exploring different definitions of *services*.

- A** No research data are presented.
- B** The author points out the weakness of several definitions rather than giving reasons to adopt a particular one.
- C Correct.** The author considers several definitions of *services*.
- D** The author largely analyzes the disadvantages of the definitions.
- E** The author points out problems in the definitions rather than providing clarifications of the definitions themselves.

The correct answer is C.

27. In comparing the United States government's definition of services with the classical definition, the author suggests that the classical definition is

- (A) more pragmatic
- (B) more difficult to apply
- (C) less ambiguous
- (D) more widely used
- (E) more arbitrary

Inference

This question asks the reader to find information that is suggested but not directly stated in the passage. The author discusses the classical definition at the end of the first paragraph, pointing out two examples in which it does not apply and concluding that this definition is *hard to sustain*. By comparison, the government's definition is *more practical* because it is easy to apply; everything that is not agriculture or industry is defined as a service. An examination of the analysis of both definitions reveals that, according to the author, the classical definition is harder to apply.

- A The author describes the United States government's definition as *more practical* or pragmatic.
- B Correct.** Citing two cases in which the classical definition does not apply, the author implies that this definition is harder to apply than the government's.
- C Although the United States government's definition is said to lead to *ambiguities*, the examples given to suggest difficulties with the classical definition indicate that it may be at least as ambiguous.
- D The author does not say that the classical definition is more widely used.
- E The author calls the government's definition arbitrary.

The correct answer is B.

28. The passage suggests which of the following about service workers in the United States?
- (A) The number of service workers may be underestimated by the definition of services used by the government.
 - (B) There were fewer service workers than agricultural workers before 1988.
 - (C) The number of service workers was almost equal to the number of workers employed in manufacturing until 1988.
 - (D) Most service workers are employed in service occupations rather than in service industries.
 - (E) Most service workers are employed in occupations where they provide services that do not fall under the classical definition of services.

Inference

The question's use of the word *suggests* means that the answer depends on making an inference. According to the author, one of the failures of the government's definition of services is that *the many service workers employed by manufacturers—bookkeepers or janitors, for example—would fall under the industrial rather than the services category* (lines 22–26). This example shows that the number of service workers is likely to be underestimated.

- A Correct.** Because some service workers are included in the industrial category, it is possible that the total number of service workers may be underestimated.
- B The passage does not provide the information to support this statement.
- C The author says that services moved ahead of manufacturing as the *main product* in 1988 but does not discuss the number of workers in either area.
- D The passage does not provide the information to support this statement.
- E The passage does not provide the information to support this statement.

The correct answer is A.

29. The author of the passage mentions which of the following as one disadvantage of the United States government's definition of services?
- (A) It is less useful than the other definitions mentioned in the passage.
 - (B) It is narrower in scope than the other definitions mentioned in the passage.
 - (C) It is based on the final product produced rather than on the type of work performed.
 - (D) It does not recognize the diversity of occupations within the service industries.
 - (E) It misclassifies many workers who are employed in service industries.

Supporting ideas

This question is based on specific information explicitly stated in the passage. According to the author, the government's definition fails because *it categorizes workers based on their company's final product rather than on the actual work the employees perform* (lines 20–22).

- A The author calls this definition *practical for government purposes*, so for the government it is more useful than other definitions.
- B The definition *includes everything that is not agriculture or industry*, while the classical definition does not include occupations that are clearly services; the government's definition is thus not narrower.
- C **Correct.** Workers are categorized by the final product of their company rather than by the type of work they perform at that company.
- D Diversity of occupations within the service industries is not discussed.
- E The definition misclassifies service workers employed in manufacturing, not service industries.

The correct answer is C.

30. The author refers to “service workers employed by manufacturers” (line 23) primarily in order to point out
- (A) a type of worker not covered by the United States government's system of classifying occupations
 - (B) a flaw in the United States government's definition of services
 - (C) a factor that has influenced the growth of the service economy in the United States
 - (D) a type of worker who is classified on the basis of work performed rather than on the basis of the company's final product
 - (E) the diversity of the workers who are referred to as service workers

Logical structure

The author discusses *the many service workers employed by manufacturers* to illustrate the failure of the government's definition to distinguish between service industries and service occupations. The resulting ambiguities, in the author's view, reveal the *arbitrariness* of the definition and its inaccuracy in reflecting the composition of the economy.

- A The worker is covered but misclassified.
- B **Correct.** The author uses this example to point out a serious shortcoming in the government's definition.
- C The author mentions the growth of services at the beginning of the passage but does not explore the reasons for it.
- D The situation of service workers employed by manufacturers is just the reverse; they are categorized by the company's final product, not by the work they do.
- E The author had earlier cited and illustrated the diversity of service activities that are included in the government's residual category of services; the focus here is instead the arbitrariness and inaccuracy, in the author's view, of the government's definition.

The correct answer is B.

Questions 31–36 refer to the passage on page 380.

31. The passage is primarily concerned with
- (A) contrasting the benefits of one methodology with the benefits of another
 - (B) describing the historical origins and inherent drawbacks of a particular methodology
 - (C) discussing the appeal of a particular methodology and some concerns about its use
 - (D) showing that some historians' adoption of a particular methodology has led to criticism of recent historical scholarship
 - (E) analyzing the influence of current feminist views on women's interpretations of their experience

Main idea

This question asks for an abstract view of what the passage as a whole is primarily doing. The passage introduces a particular methodology that scholars of women's history have been encouraged to employ, explaining why the use of the methodology is supported. The passage then goes on to raise some concerns about the use of the methodology and cites one example in which caution is needed.

- A The passage is primarily concerned with only one methodology.
- B The passage mentions why the methodology had been encouraged but does not give the history of its origins; while it cautions historians to employ the methodology carefully, it is not concerned with drawbacks of its proper use.
- C **Correct.** The passage discusses why the use of a methodology is being encouraged and then offers some concerns about its use.
- D The passage does not discuss any criticism of recent scholarship in women's history.
- E There is no mention in the passage that feminist theory is influencing how women in general think about their experiences.

The correct answer is C.

32. According to the passage, which of the following shapes the oral narratives of women storytellers?
- (A) The conventions for standard histories in the culture in which a woman storyteller lives
 - (B) The conventions of storytelling in the culture in which a woman storyteller lives
 - (C) A woman storyteller's experience with distinctive traditions of storytelling developed by the women in her family of origin
 - (D) The cultural expectations and experiences of those who listen to oral narratives
 - (E) A woman storyteller's familiarity with the stories that members of other groups in her culture tell to explain themselves

Supporting ideas

This question asks for an identification of specific information provided by the passage. In the second paragraph, the passage describes certain concerns about using oral narratives. One of these concerns is that *the stories people tell to explain themselves are shaped by ... storytelling conventions* (lines 17–19) and other influences tied to the teller's cultural and historical context.

- A The passage uses *standard histories* (line 7) to refer to the usual work of scholars and not to something that influences oral narratives.
- B **Correct.** The passage raises as a concern that oral narratives may be influenced by storytelling conventions present in the culture of the speaker.
- C The passage does not mention the family of origin of women storytellers.
- D The passage does not mention the expectations of the listeners of oral narratives.
- E The passage does not discuss women storytellers' familiarity with the oral narratives belonging to other groups of women.

The correct answer is B.

33. The author of the passage would be most likely to make which of the following recommendations to scholars of women's history?
- (A) They should take into account their own life experiences when interpreting the oral accounts of women's historical experiences.
 - (B) They should assume that the observations made in women's oral narratives are believed by the intended audience of the story.
 - (C) They should treat skeptically observations reported in oral narratives unless the observations can be confirmed in standard histories.
 - (D) They should consider the cultural and historical context in which an oral narrative was created before arriving at an interpretation of such a narrative.
 - (E) They should rely on information gathered from oral narratives only when equivalent information is not available in standard histories.

Application

Answering this question involves recognizing what the author believes about oral narratives and then applying this belief to a hypothetical situation in which the author makes recommendations to scholars of women's history. While acknowledging the appeal of oral narratives to these scholars, in the second paragraph the author urges caution when using these narratives as sources of *disinterested commentary* (line 16). The passage then states that people's oral narratives are shaped by *cultural and historical factors* (line 20), which presumably relate to the cultural and historical context within which the narratives are spoken.

- A The passage does not mention the personal life experiences of scholars.
- B The passage does not mention the intended audiences of oral narratives.
- C The passage mentions *standard histories* (line 7) only as a reference to scholarly works that often have shortcomings.
- D **Correct.** The passage cautions that oral narratives may be biased due to cultural and historical factors, and it is therefore reasonable to suppose that the author would recommend that scholars consider this when using such information.
- E The passage does not refer to oral narratives as being valuable only for filling a gap in the available historical record.

The correct answer is D.

34. Which of the following best describes the function of the last sentence of the passage?
- (A) It describes an event that historians view as crucial in recent women's history.
 - (B) It provides an example of how political rhetoric may influence the interpretations of experience reported in women's oral narratives.
 - (C) It provides an example of an oral narrative that inaccurately describes women's experience during a particular historical period.

- (D) It illustrates the point that some women are more aware than others of the social forces that shape their oral narratives.
- (E) It identifies the historical conditions that led to the social acceptance of women's paid work outside the home.

Evaluation

This question requires recognizing how a particular part of the passage is related to the overall reasoning in the passage. The first paragraph introduces a methodology and describes the methodology's appeal. The second paragraph then raises concerns about the use of the methodology, drawing attention to the cultural and historical bias that may be present in oral narratives. In line 21, the passage refers specifically to the influence *political rhetoric* may have on a woman's understanding of her experience. In the final sentence, the passage provides a specific hypothetical example of a woman at the time of the Second World War to illustrate this concern.

- A The last sentence employs a hypothetical example and does not describe a particular event as being important to historians.
- B **Correct.** After contending that political rhetoric may influence oral narratives, the passage uses the example of the Second World War in the final sentence to support this claim.
- C The last sentence does not provide a particular example of an oral narrative.
- D The passage does not claim that some women are more aware than others of the social forces that may bear on them.
- E The passage does not claim that social conditions during the Second World War led to acceptance of women in the workplace.

The correct answer is B.

35. According to the passage, scholars of women's history should refrain from doing which of the following?
- (A) Relying on traditional historical sources when women's oral narratives are unavailable
 - (B) Focusing on the influence of political rhetoric on women's perceptions to the exclusion of other equally important factors
 - (C) Attempting to discover the cultural and historical factors that influence the stories women tell
 - (D) Assuming that the conventions of women's written autobiographies are similar to the conventions of women's oral narratives
 - (E) Accepting women's oral narratives less critically than they accept women's written histories

Inference

Answering this question requires recognizing which option is directly inferable from information in the passage. After describing in the first paragraph why oral narratives are appealing to historians, the passage begins the second paragraph by imploring scholars of women's history to *be as cautious about accepting oral narratives ... as ... written memories* (lines 12–14). The passage then goes on to describe potential bias in oral narratives, suggesting that scholars should be as critical of them as they are of written sources.

- A The passage does not claim that traditional historical sources should be avoided by scholars.
- B The passage mentions the influence of political rhetoric merely as one example of potential bias.
- C The passage suggests that scholars *should* attempt to be aware of cultural and historical factors.
- D The passage does not discuss the conventions of women's written autobiographies.
- E **Correct.** The passage implies that written histories and oral narratives should receive the same level of critical scrutiny by scholars.

The correct answer is E.

36. According to the passage, each of the following is a difference between women's oral narratives and most standard histories EXCEPT:

- (A) Women's oral histories validate the significance of women's achievements.
- (B) Women's oral histories depict experience from the point of view of women.
- (C) Women's oral histories acknowledge the influence of well-known women.
- (D) Women's oral histories present today's women with a sense of their historical relationship to women of the past.
- (E) Women's oral histories are crucial to the collective identity of today's women.

Supporting ideas

This question asks for information that is stated in the passage, and it requires a process of elimination. In line 7, oral narratives are presented as being *unlike most standard histories*, and the passage then goes on in lines 7–11 to list characteristics of oral histories that most standard histories do not have. The answer to this question will therefore contain a characteristic of women's oral histories that is not described in lines 7–11.

- A The passage states that, unlike most standard histories, women's oral histories *affirm the importance of women's contributions* (lines 8–9).
- B The passage states that, unlike most standard histories, women's oral histories *represent experience from the perspective of women* (lines 7–8).
- C **Correct.** The passage does not mention the influence of well-known women on women's oral histories.
- D The passage states that, unlike most standard histories, women's oral histories *furnish present-day women with historical continuity* (lines 9–10).
- E The passage states that, unlike most standard histories, women's oral histories furnish a historical sense that is *essential to their identity, individually and collectively* (line 11).

The correct answer is C.

Questions 37–41 refer to the passage on page 382.

37. The passage suggests that in order for a manufacturer in a capital-intensive industry to have a decisive advantage over competitors making similar products, the manufacturer must
- (A) be the first in the industry to build production facilities of theoretically optimal size
 - (B) make every effort to keep fixed and sunk costs as low as possible
 - (C) be one of the first to operate its manufacturing plants at minimum efficient scale
 - (D) produce goods of higher quality than those produced by direct competitors
 - (E) stockpile raw materials at production sites in order to ensure a steady flow of such materials

Inference

This question asks for an inference about what a manufacturer in a capital-intensive industry must do to have an advantage over competitors making similar products. The passage addresses this question by stating that advantage accrues to those firms that are the first to exploit the full potential of optimally sized, technologically sophisticated plants. In this context, exploiting the full potential of such plants means operating them at *minimum efficient scale*. Based on the definition in the first paragraph, this means that the plant must have an output of such a size that the cost per unit of output is at a minimum.

- A The passage says that for new capital-intensive firms to dominate the market, it is not enough for them to have optimally sized plants; the plants must also be operated in a way that fully exploits their potential.
- B While keeping fixed and sunk costs low would obviously help keep overall costs low, the passage does not suggest that this is decisive in enabling a firm to have an advantage over competitors.

- C **Correct.** Being among the first manufacturers to operate plants at minimum efficient scale means that those plants are being exploited to their full potential. This strategy would most likely give such manufacturers a decisive advantage over new firms hoping to compete effectively.
- D The passage does not discuss the quality of goods made by manufacturers.
- E The passage does not suggest that stockpiling raw materials is the most efficient way to ensure a steady flow of raw materials into the manufacturing process, though the passage states that such a steady flow is a factor in achieving minimum efficient scale.

The correct answer is C.

38. The passage suggests that which of the following is true of a manufacturer's fixed and sunk costs?
- (A) The extent to which they are determined by market conditions for the goods being manufactured is frequently underestimated.
 - (B) If they are kept as low as possible, the manufacturer is very likely to realize significant profits.
 - (C) They are the primary factor that determines whether a manufacturer will realize economies of scale.
 - (D) They should be on a par with the fixed and sunk costs of the manufacturer's competitors.
 - (E) They are not affected by fluctuations in a manufacturing plant's throughput.

Inference

This question asks about what the passage implies about fixed and sunk costs. The passage states that when production declines due to certain factors, such costs remain at the same level (which may be high), and the cost per unit produced (*unit costs*) rises sharply.

- A The passage discusses the impact of market conditions on determining what the optimal size of a manufacturing plant is (which affects fixed and sunk costs). But it makes no claim about the frequency with which such an impact is “underestimated.”
- B The passage emphasizes that failing to keep throughput at an efficiently high level reduces profitability because that failure results in increased cost per unit (to which, of course, the plant’s fixed and sunk costs contribute). But the passage does not claim that keeping aggregate fixed and sunk costs very low is necessary in order to have the most competitive production operation.
- C The passage emphasizes that the crucial factor in achieving economies of scale is efficient operation of the production facilities, not the size of the firm’s fixed and sunk costs (even though such costs are clearly in part determined by the size and design of the production facilities).
- D While a manufacturer’s fixed and sunk costs may be on a par with those of the manufacturer’s competitors, the passage provides no grounds for inferring that there is any need for them to be (for example, physical plants that employ different technologies may have different price tags).
- E **Correct.** According to the passage, “throughput” refers to the flow of materials through a plant. This flow can vary as a result of various factors, but fixed and sunk costs—financial resources already committed—remain the same regardless of such variation.

The correct answer is E.

39. In the context of the passage as a whole, the second paragraph serves primarily to
- (A) provide an example to support the argument presented in the first paragraph
 - (B) evaluate various strategies discussed in the first paragraph

- (C) introduce evidence that undermines the argument presented in the first paragraph
- (D) anticipate possible objections to the argument presented in the first paragraph
- (E) demonstrate the potential dangers of a commonly used strategy

Evaluation

This question asks about the rhetorical function of the second paragraph. While the first paragraph argues that a crucial factor in achieving economies of scale is intangible capital, or organized human capabilities, the second paragraph uses the example of new capital-intensive manufacturing industries to help show that this is indeed the case.

- A **Correct.** The second paragraph provides an example that illustrates the claims made in the first paragraph. It discusses the way in which intangible capital—e.g., distribution networks, marketing systems, smooth production processes, and qualified management teams—enables manufacturers in new capital-intensive manufacturing industries to realize economies of scale and achieve market dominance.
- B The second paragraph does, in a sense, “evaluate” investment in intangible capital: it suggests that such investment is necessary. However, investment in intangible capital is the only strategy it discusses.
- C The second paragraph supports rather than undermines the first paragraph’s argument.
- D Nothing in the second paragraph suggests that there are, or could be, any objections to the first paragraph’s argument.
- E The second paragraph discusses the potential positive outcomes of investing in intangible capital. It suggests that there might be negative consequences to not making such investments, but it does not indicate that avoiding such investments is a commonly used strategy.

The correct answer is A.

40. The passage LEAST supports the inference that a manufacturer's throughput could be adversely affected by
- (A) a mistake in judgment regarding the selection of a wholesaler
 - (B) a breakdown in the factory's machinery
 - (C) a labor dispute on the factory floor
 - (D) an increase in the cost per unit of output
 - (E) a drop in the efficiency of the sales network

Application

This question may be best approached by using an elimination strategy—first finding the four choices that can reasonably be inferred from the passage, and then checking to make sure that the remaining choice cannot reasonably be inferred. This requires understanding the information the passage gives about throughput, then making inferences about what can cause throughput to drop. The passage defines throughput generally as *the flow of materials through a plant* and goes on to explain that it involves coordination of the production process itself, as well as obtaining materials from suppliers and marketing and distributing the manufactured products. Anything that damages this flow of materials and products would be said to have an adverse effect on throughput.

- A Making a poor judgment about a wholesaler would most likely have an adverse effect on throughput, in that it could affect *the flow of output to wholesalers and final consumers*.
- B A breakdown in machinery would likely fall into the category of *problems on the factory floor* mentioned in the passage and would likely prove damaging to throughput because of its effect on the production process itself.

- C A labor dispute would also likely fall into the category of *problems on the factory floor* mentioned in the passage and would probably cause a decline in production and thus adversely affect throughput.
- D **Correct.** The passage emphasizes that changes in throughput can cause increases or decreases in costs per unit. But the passage is not committed to any claims about how changes in costs per unit might affect throughput.
- E The passage suggests that inefficient sales networks could cause a decline in production. Thus a decrease in sales efficiency would most likely adversely affect a manufacturer's ability to provide goods to consumers, and thus would create problems with throughput.

The correct answer is D.

41. The primary purpose of the passage is to
- (A) point out the importance of intangible capital for realizing economies of scale in manufacturing
 - (B) show that manufacturers frequently gain a competitive advantage from investment in large manufacturing facilities
 - (C) argue that large manufacturing facilities often fail because of inadequate investment in both tangible and intangible capital
 - (D) suggest that most new industries are likely to be dominated by firms that build large manufacturing plants early
 - (E) explain why large manufacturing plants usually do not help manufacturers achieve economies of scale

Main idea

This question depends on understanding the passage as a whole. In general, it makes an argument for investing in intangible capital as a way for manufacturers to realize economies of scale, and it supports its argument with an example.

- A **Correct.** The passage focuses on intangible capital as a crucial factor in realizing economies of scale.
- B According to the passage, manufacturers gain competitive advantage by building plants of optimal size that they then fully exploit; nothing in the passage suggests that large plants are frequently optimal.
- C The passage assumes that manufacturers invest appropriately in tangible capital and argues that it is important for them to invest in intangible capital as well.
- D The passage states that new capital-intensive manufacturing industries are dominated not by firms that are the first to build large plants, but by firms that exploit the full potential of their plants.
- E The passage indicates that economies of scale can be achieved in plants of optimal size. The passage does not suggest that large plants cannot be optimal.

The correct answer is A.

Questions 42–44 refer to the passage on page 384.

42. The passage suggests that combing and carding differ from weaving in that combing and carding were
- (A) low-skill jobs performed primarily by women employees
 - (B) low-skill jobs that were not performed in the home
 - (C) low-skill jobs performed by both male and female employees
 - (D) high-skill jobs performed outside the home
 - (E) high-skill jobs performed by both male and female employees

Inference

Since the question uses the word *suggests*, the answer is probably not directly stated in the passage and therefore has to be inferred. How was weaving different from carding and combing? Lines 16–17 discuss weaving, combing, and carding; all three activities are characterized as low-skill jobs. As the human capital theory notes, there was a concentration of women in certain low-skill occupations because they *could be carried out in the home* (lines 19–20); weaving was one such occupation. Since the passage implies that relatively few women worked in carding and combing, these jobs presumably could *not* be carried out in the home. Thus the passage suggests that carding and combing were low-skill jobs, mostly done by men working outside the home.

- A Lines 15–17 imply that women predominated in weaving but that carding and combing were done mainly by men.
- B **Correct.** Carding and combing, unlike weaving, could not be done at home.
- C The passage suggests that weaving, carding, and combing were all low-skill jobs done by both men and women, although the concentrations of the genders in these jobs were different; this statement does not explain how the passage suggests that *combing and carding differ from weaving*.
- D Lines 16–17 characterize all three jobs as low-skill.
- E Lines 16–17 characterize all three jobs as low-skill.

The correct answer is B.

43. Which of the following, if true, would most weaken the explanation provided by the human capital theory for women's concentration in certain occupations in seventeenth-century Florence?
- (A) Women were unlikely to work outside the home even in occupations whose hours were flexible enough to allow women to accommodate domestic tasks as well as paid labor.
 - (B) Parents were less likely to teach occupational skills to their daughters than they were to their sons.
 - (C) Women's participation in the Florentine paid labor force grew steadily throughout the sixteenth and seventeenth centuries.
 - (D) The vast majority of female weavers in the Florentine wool industry had children.
 - (E) Few women worked as weavers in the Florentine silk industry, which was devoted to making cloths that required a high degree of skill to produce.

Logical structure

To answer this question, examine the logic of the explanation. How does the human capital theory explain women's concentration in certain occupations? The theory says that women's roles in childbearing made it difficult for them to acquire the skills needed in high-skill jobs. Moreover, their role in child rearing made them choose occupations that could be carried out at home. Evidence against either of these points will weaken the explanation.

- A Correct.** If women of that time were generally unlikely to take any jobs outside the home, even those that allowed them to handle their domestic tasks, then these tasks are not the reason women predominated in jobs that they could do within the home, as the human capital theory posits.
- B** Different levels of teaching by parents may help perpetuate job segregation, but this is quite consistent with the socially defined role that women then had as childbearers and child rearers and the explanation provided by the human capital theory.

- C** The growth of women's participation in the paid labor force does not affect the explanation of occupational concentrations provided by the human capital theory.
- D** The explanation suggests the women chose weaving because they had children to raise at home. The fact that the majority of weavers had children actually supports, rather than weakens, the explanation.
- E** Silk weaving was a high-skill job, exactly the kind of job that women would not have in the human capital explanation. This point supports, rather than weakens, the explanation.

The correct answer is A.

44. The author of the passage would be most likely to describe the explanation provided by the human capital theory for the high concentration of women in certain occupations in the seventeenth-century Florentine textile industry as
- (A) well founded though incomplete
 - (B) difficult to articulate
 - (C) plausible but poorly substantiated
 - (D) seriously flawed
 - (E) contrary to recent research

Logical structure

This question requires an evaluation of the author's point of view. What does the author think of the human capital explanation of women's occupational concentration in the Florentine textile industry? In line 5, the author characterizes the theory as *useful*, a positive word reflecting a positive evaluation. However, the entire second paragraph is devoted to examining *differences in pay scales that cannot be explained by the human capital theory*. The author's positive view of the theory is qualified by the theory's inability to explain an important point.

- A **Correct.** This statement reflects the author's generally positive evaluation, as well as concerns about insufficiencies.
- B The author articulates the theory without difficulty and does not criticize it as difficult to articulate.
- C To substantiate the theory means to provide evidence that verifies the theory. The author regards the theory's explanations of high concentration of women in certain occupations as sound, and so is unlikely to regard the theory as *poorly substantiated*.
- D If the author regarded the theory as *seriously flawed*, the passage would not describe it as *useful* (see line 5).
- E The author does not mention recent research.

The correct answer is A.

Questions 45–51 refer to the passage on page 386.

45. The primary purpose of the passage is to
- (A) present the results of statistical analyses and propose further studies
 - (B) explain a recent development and predict its eventual consequences
 - (C) identify the reasons for a trend and recommend measures to address it
 - (D) outline several theories about a phenomenon and advocate one of them
 - (E) describe the potential consequences of implementing a new policy and argue in favor of that policy

Main idea

Understanding the author's purpose comes from a careful consideration of the whole passage. The author begins by noting one explanation for the rise in temporary employment, but dismisses it, finding another explanation more likely. The author closes the passage by making specific recommendations to counter the problems caused by temporary employment.

- A The author uses statistical analyses as the basis of an explanation, but the analyses act only as support for the larger purpose of explaining a trend; no further studies are proposed.
- B The author explores possible reasons for a recent development but recommends ways to curb or change that development; the author does not predict the consequences if the situation is left unchanged or the recommendations unmet.
- C **Correct.** The author examines possible reasons for the rise in temporary employment and makes specific recommendations to change the current situation.
- D The use of the phrase *several theories* is enough to make this inaccurate. Two types of explanation are suggested: employee preference or employer self-interest.
- E The author makes recommendations but provides no arguments in support of those recommendations—merely suggesting that they are aimed at discouraging employers from creating too many temporary positions.

The correct answer is C.

46. According to the passage, which of the following is true of the “factors affecting employers” that are mentioned in lines 10–19?
- (A) Most experts cite them as having initiated the growth in temporary employment that occurred during the 1980s.
 - (B) They may account for the increase in the total number of temporary workers during the 1980s.
 - (C) They were less important than demographic change in accounting for the increase of temporary employment during the 1980s.
 - (D) They included a sharp increase in the cost of labor during the 1980s.
 - (E) They are more difficult to account for than are other factors involved in the growth of temporary employment during the 1980s.

Supporting idea

This question is based on information explicitly stated in lines 10–12. The statistical analyses *suggest that factors affecting employers account for the rise in temporary employment.*

- A *Some observers* attribute the rise to the composition of the workforce; the passage does not identify what most experts believe.
- B Correct.** The factors affecting employers may explain the rise in temporary employment.
- C The passage suggests that these factors were more important than demographic changes in explaining the rise.
- D Although there is some suggestion in lines 15–16 that employers at some point experienced difficulty from the cost of labor, the passage does not suggest that a sharp increase in that cost occurred in the 1980s—and even suggests that labor costs may have decreased because of labor’s reduced bargaining strength.
- E The issue of how to *account for* those factors (i.e., explain why they occurred) is not raised in the passage—so the issue of whether those factors are more difficult to account for than other factors is not raised.

The correct answer is B.

47. The passage suggests which of the following about the use of temporary employment by firms during the 1980s?
- (A) It enabled firms to deal with fluctuating product demand far more efficiently than they did before the 1980s.
 - (B) It increased as a result of increased participation in the workforce by certain demographic groups.
 - (C) It was discouraged by government-mandated policies.
 - (D) It was a response to preferences indicated by certain employees for more flexible working arrangements.
 - (E) It increased partly as a result of workers’ reduced ability to control the terms of their employment.

Inference

Since the word *suggests* is used in the question, the answer is probably not directly stated in the passage and therefore has to be inferred. The author believes that the rise in temporary employment during the 1980s can be explained by two factors affecting employers: *product demand* and *labor’s reduced bargaining strength*. Temporary employment allows employers to adapt their workforce to the fluctuating demand for their product. At this time, *labor’s reduced bargaining strength* left employers, not workers, in greater control of the terms of employment.

- A This goes too far beyond the information provided in the passage. The passage neither says nor implies anything about efficiency levels before the 1980s.
- B The author says that *demographic changes in the workforce did not correlate with variations in the total number of temporary workers*, ruling out this explanation.
- C In 1992, the author recommended government-mandated policies because they did not exist.
- D The author says that *growth in temporary employment now far exceeds the level explainable by ... groups said to prefer temporary jobs*.
- E Correct.** *Labor’s reduced bargaining power* resulted in employers’ increased control over the terms of employment.

The correct answer is E.

48. The passage suggests which of the following about the workers who took temporary jobs during the 1980s?
- (A) Their jobs frequently led to permanent positions within firms.
 - (B) They constituted a less demographically diverse group than has been suggested.
 - (C) They were occasionally involved in actions organized by labor unions.
 - (D) Their pay declined during the decade in comparison with the pay of permanent employees.
 - (E) They did not necessarily prefer temporary employment to permanent employment.

Inference

The question's use of the word *suggests* indicates that the answer is probably not directly stated in the passage. The author says that the rise in temporary employment *now far exceeds the level explainable by recent workforce entry rates of groups said to prefer temporary jobs*. Thus, the number of workers employed on a temporary basis is far greater than the number of workers who actually do prefer temporary employment.

- A No evidence is presented that temporary jobs led to permanent positions.
- B The passage grants that there was *increased participation in the workforce by certain groups, such as first-time or reentering workers*. This suggests more rather than less demographic diversity.
- C The role of temporary workers in labor unions is not discussed.
- D The passage does suggest that the pay of temporary workers is less than that of permanent workers, but not that the pay of temporary workers *declined*.
- E **Correct.** The passage indicates that the number of workers in temporary jobs was higher than the number of workers who stated a preference for temporary work.

The correct answer is E.

49. The first sentence in the passage suggests that the "observers" mentioned in line 1 would be most likely to predict which of the following?
- (A) That the number of new temporary positions would decline as fewer workers who preferred temporary employment entered the workforce
 - (B) That the total number of temporary positions would increase as fewer workers were able to find permanent positions
 - (C) That employers would have less control over the terms of workers' employment as workers increased their bargaining strength
 - (D) That more workers would be hired for temporary positions as product demand increased
 - (E) That the number of workers taking temporary positions would increase as more workers in any given demographic group entered the workforce

Application

These observers specifically attribute the growth of temporary employment to *increased participation in the workforce by certain groups ... who supposedly prefer such arrangements*. On the basis of the passage's first sentence, any prediction these observers might make must be about the relation between the number of workers in temporary employment and the preference of these workers for temporary employment. No other issue is discussed. A rise in temporary employment could be explained only by a rise in the number of new workers who prefer temporary jobs, and a decline in temporary employment only by a decline in the number of new workers who prefer temporary work.

- A **Correct.** By this rationale, the only reason for a decline in temporary employment would be a corresponding decline in the number of new workers who preferred temporary jobs.
- B According to the observers, temporary employment would increase only if a greater number of employers who preferred temporary jobs entered the workforce.
- C These observers are not said to consider control over the terms of employment.
- D These observers are not said to consider the relationship between product demand and temporary employment.
- E The number of workers taking temporary positions would rise only if they were composed of *certain groups, such as first-time or reentering workers*, who, the observers believe, prefer temporary work.

The correct answer is A.

50. In the context of the passage, the word “excessive” (line 23) most closely corresponds to which of the following phrases?

- (A) Far more than can be justified by worker preferences
- (B) Far more than can be explained by fluctuations in product demand
- (C) Far more than can be beneficial to the success of the firms themselves
- (D) Far more than can be accounted for by an expanding national economy
- (E) Far more than can be attributed to increases in the total number of people in the workforce

Logical structure

In its context in this passage, the word *excessive* indicates a value-judgment by the author. The author recommends that firms be *discouraged from creating excessive numbers of temporary positions* on the basis of the statistical analyses, which show that the rise in temporary employment *now far exceeds the level explainable by recent workforce entry rates of groups said to prefer temporary jobs*. In the context of lines 24–31, it is clear that the author believes that the large expansion in temporary employment exclusively serves employer interests at the expense of employee interests (including their preferences), and is, for that reason, excessive.

- A Correct.** An expansion of temporary employment that serves employer interests more than it serves employee interests (such as preferences) is considered by the author to be *excessive*.
- B** It is not because the expansion in temporary employment allows employers to respond to fluctuations in product demand that the author regards the expansion as *excessive*.
- C** The relation of temporary employment to the success of firms is not discussed.
- D** The relation of temporary employment to an expanding economy is not discussed.
- E** The author does not consider the issue of overall increases in the workforce as a whole, only the issue of increases in temporary employment.

The correct answer is A.

51. The passage mentions each of the following as an appropriate kind of governmental action EXCEPT

- (A) getting firms to offer temporary employment primarily to a certain group of people
- (B) encouraging equitable pay for temporary and permanent employees
- (C) facilitating the organization of temporary workers by labor unions
- (D) establishing guidelines on the proportion of temporary workers that firms should employ
- (E) ensuring that temporary workers obtain benefits from their employers

Supporting ideas

The author closes the passage with a list of specific recommendations. Check that list against the possible answers. By the process of elimination, choose the one recommendation the author does not make. The author recommends that government policymakers consider: 1) *mandating benefit coverage for temporary employees*, 2) *promoting pay equity between temporary and permanent workers*, 3) *assisting labor unions in organizing temporary workers*, and 4) *encouraging firms to assign temporary jobs primarily to employees who explicitly indicate that preference*.

- A** The author does recommend that firms assign temporary jobs to workers who prefer temporary work.
- B** The author does recommend that pay equity between temporary and permanent workers be encouraged.
- C** The author does recommend that labor unions be assisted in organizing temporary workers.
- D Correct.** The author does not recommend that such guidelines be established.
- E** The author does recommend that benefit coverage for temporary workers be mandated.

The correct answer is D.

Questions 52–55 refer to the passage on page 388.

52. It can be inferred from the passage that a large plant might have to spend more than a similar but smaller plant on environmental compliance because the larger plant is
- (A) more likely to attract attention from local regulators
 - (B) less likely to be exempt from permit and reporting requirements
 - (C) less likely to have regulatory costs passed on to it by companies that supply its raw materials
 - (D) more likely to employ older production technologies
 - (E) more likely to generate wastes that are more environmentally damaging than those generated by smaller plants

Inference

This item depends on understanding the implications of the passage's discussion of differences between large and small plants. It asks what might be true of a larger plant that would compel it to spend more than a smaller plant on environmental compliance. The passage addresses this issue by stating that smaller plants are often not subject to the same permit or reporting requirements that larger plants are.

- A The likelihood of attracting regulatory attention is discussed only in the context of comparing plants that are *isolated* with small plants that are near large noncompliant ones. The passage does not suggest that size is generally the crucial determining factor in attracting regulatory attention.
- B **Correct.** According to the passage, certain permit or reporting requirements may not apply to smaller plants; this suggests that larger plants are less likely than smaller plants to be exempt from these requirements, and thus that the larger plants would have to spend more to comply.
- C The passage does not discuss the passing on of regulatory costs from suppliers to plants.

- D The passage does not suggest that larger plants are any more likely than smaller plants to employ older production technologies.
- E The passage does not distinguish between the types of wastes emitted by larger plants and those emitted by smaller plants.

The correct answer is B.

53. According to the passage, which of the following statements about sulfur dioxide and nitrogen oxide outputs is true?
- (A) Older production technologies cannot be adapted so as to reduce production of these outputs as waste products.
 - (B) Under the most recent environmental regulations, industrial plants are no longer permitted to produce these outputs.
 - (C) Although these outputs are environmentally hazardous, some plants still generate them as waste products despite the high compliance costs they impose.
 - (D) Many older plants have developed innovative technological processes that reduce the amounts of these outputs generated as waste products.
 - (E) Since the production processes that generate these outputs are less costly than alternative processes, these less expensive processes are sometimes adopted despite their acknowledged environmental hazards.

Supporting idea

This item depends on identifying what the passage states explicitly about outputs of sulfur dioxide and nitrogen oxide. The passage says that plants that produce these outputs are those that use older industrial coal-fired burners, and that such plants are subject to extensive compliance costs imposed by new regulations.

- A The passage does not address the question of whether older production technologies might be adapted to reduce outputs of sulfur dioxide and nitrogen oxide.
- B The passage states that new regulations have imposed high compliance costs on companies that produce sulfur dioxide and nitrogen oxide outputs, not that these outputs are prohibited.
- C **Correct.** The passage states that some companies are still using the older kinds of burners that generate sulfur dioxide and nitrogen oxide outputs, and that new regulations have imposed high compliance costs on these companies.
- D The passage does not address the question of whether older plants have developed new processes to reduce the amounts of sulfur dioxide and nitrogen oxide they produce.
- E Sulfur dioxide and nitrogen oxide outputs, the passage suggests, are produced only by older industrial coal-fired burners; newer facilities (using alternative processes) do not employ this technology, the expense of which is not mentioned in the passage.

The correct answer is C.

54. Which of the following best describes the relationship of the statement about large plants (lines 12–17) to the passage as a whole?
- (A) It presents a hypothesis that is disproved later in the passage.
 - (B) It highlights an opposition between two ideas mentioned in the passage.
 - (C) It provides examples to support a claim made earlier in the passage.
 - (D) It exemplifies a misconception mentioned earlier in the passage.
 - (E) It draws an analogy between two situations described in the passage.

Evaluation

This question asks about the role played in the passage by the following statement: *Additionally, large plants can spread compliance costs such as waste treatment across a larger revenue base; on the other hand, some smaller plants may not even be subject to certain provisions such as permit or reporting requirements by virtue of their size.* This statement describes situations in which compliance costs for plants of different sizes may differ, which serve as evidence in support of the passage's main claim: that environmental regulations do *not* affect all competitors in a given industry uniformly.

- A The statement in question is not a hypothesis; rather, it reports factors that are known to affect the varying impact of environmental regulations.
- B This is too vague to be a good description of the kind of relationship the question asks about. The highlighted statement does present a contrast—it suggests that larger plants' compliance costs are lower under some circumstances, while smaller plants' compliance costs are lower under other circumstances. But this purports to state two facts rather than mere *ideas*; they are contrasting facts but not in any meaningful sense *opposed*, since they can easily coexist.
- C **Correct.** The statement provides examples to support the initial claim made in the passage that regulatory costs fall unevenly on competitors in an industry: large plants can spread compliance costs around, and smaller plants may not even have to pay certain costs.
- D This statement helps to dispel, not exemplify, a misconception mentioned earlier in the passage—i.e., the myth that environmental regulations affect all companies in an industry the same way.
- E The statement does not suggest that the situation of larger and smaller plants is similar (or analogous) to any other situation mentioned in the passage.

The correct answer is C.

55. The primary purpose of the passage is to
- (A) address a widespread environmental management problem and suggest possible solutions
 - (B) illustrate varying levels of compliance with environmental regulation among different corporations
 - (C) describe the various alternatives to traditional methods of environmental management
 - (D) advocate increased corporate compliance with environmental regulation
 - (E) correct a common misconception about the impact of environmental regulations

Main idea

This question depends on understanding the passage as a whole. Its first sentence indicates its main purpose: to dispel a myth about environmental regulations that is often taken as fact.

- A The passage is not about the management of any environmental problem, which would be a problem about how to prevent or undo damage to the environment. The passage primarily aims to dispel a belief that the passage says is widely held by environmental managers.
- B The passage refers to variations in firms' levels of compliance with environmental regulations, but its primary purpose is not to illustrate those varying levels, nor does it do so.
- C The passage suggests that most environmental managers are mistaken about a key concept; its primary purpose is not to describe traditional methods of environmental management or alternatives to those traditional methods, nor does it do so.
- D The passage takes no position on whether companies should increase their compliance with environmental regulation.
- E **Correct.** The passage primarily aims to dispel the belief that environmental regulations affect all companies in an industry uniformly.

The correct answer is E.

Questions 56–62 refer to the passage on page 390.

56. According to the passage, which of the following was true of the treaty establishing the Fort Belknap Indian Reservation?
- (A) It was challenged in the Supreme Court a number of times.
 - (B) It was rescinded by the federal government, an action that gave rise to the *Winters* case.
 - (C) It cited American Indians' traditional use of the land's resources.
 - (D) It failed to mention water rights to be enjoyed by the reservation's inhabitants.
 - (E) It was modified by the Supreme Court in *Arizona v. California*.

Supporting ideas

This question requires recognizing information that is explicitly stated in the passage. In the first sentence, the passage states that the Fort Belknap Indian Reservation was established by treaty. The following sentence begins by stating that this treaty *did not mention water rights* (lines 5–6); in other words, the right to use the water flowing through the reservation was not established by treaty.

- A Although the Supreme Court ruled on water rights for the reservation established by the treaty, there is no evidence in the passage that the treaty itself was ever challenged in the Supreme Court.
- B Although the *Winters* case resulted in water rights for the reservation established by the treaty, there is no evidence in the passage that the treaty was ever rescinded.
- C The passage does not mention American Indians' traditional resource use as being tied to the treaty establishing the Fort Belknap Indian Reservation.
- D **Correct.** The passage states explicitly that the treaty establishing the Fort Belknap Indian Reservation did not mention the right to use water flowing through the reservation.
- E The passage does not mention the Fort Belknap Indian Reservation or the treaty that established it in relation to *Arizona v. California*.

The correct answer is D.

57. The passage suggests that, if the criteria discussed in lines 10–20 were the only criteria for establishing a reservation's water rights, which of the following would be true?

- (A) The water rights of the inhabitants of the Fort Belknap Indian Reservation would not take precedence over those of other citizens.
- (B) Reservations established before 1848 would be judged to have no water rights.
- (C) There would be no legal basis for the water rights of the Rio Grande pueblos.
- (D) Reservations other than American Indian reservations could not be created with reserved water rights.
- (E) Treaties establishing reservations would have to mention water rights explicitly in order to reserve water for a particular purpose.

Inference

Answering this question requires making an inference based on information given in the passage. The question focuses on lines 10–20, where the passage provides a summary of the criteria used by the U.S. courts to establish water rights. The passage then explains that the Rio Grande pueblos used other means to establish water rights, noting that what *constitutes an American Indian reservation is a question of practice, not of legal definition* (lines 34–36). This strongly implies that establishing water rights for the Rio Grande pueblos required reference to legal language not contained in the criteria described in lines 10–20.

- A Since the passage says that decisions setting the criteria in lines 10–20 cited the *Winters* case—which gave water rights to the Fort Belknap Indian Reservation—one can infer that the Fort Belknap reservation met all of those criteria.
- B The criteria in lines 10–20 do not touch on specific dates of the transfer of sovereignty over particular lands.
- C **Correct.** The passage demonstrates that for the Rio Grande pueblos, it was necessary to establish water rights based on criteria not contained in lines 10–20.

- D The criteria described in lines 10–20 are not specific only to lands reserved for American Indians.
- E The passage illustrates that *Winters* established water rights in the absence of any explicit mention of water rights in the treaty.

The correct answer is C.

58. Which of the following most accurately summarizes the relationship between *Arizona v. California* in lines 38–42, and the criteria citing the *Winters* doctrine in lines 10–20?

- (A) *Arizona v. California* abolishes these criteria and establishes a competing set of criteria for applying the *Winters* doctrine.
- (B) *Arizona v. California* establishes that the *Winters* doctrine applies to a broader range of situations than those defined by these criteria.
- (C) *Arizona v. California* represents the sole example of an exception to the criteria as they were set forth in the *Winters* doctrine.
- (D) *Arizona v. California* does not refer to the *Winters* doctrine to justify water rights, whereas these criteria do rely on the *Winters* doctrine.
- (E) *Arizona v. California* applies the criteria derived from the *Winters* doctrine only to federal lands other than American Indian reservations.

Inference

This question requires inferring how one part of the passage bears on another part of the passage. The two parts referred to are the criteria described in lines 10–20 and *Arizona v. California*, which is referred to in lines 38–45. *Arizona v. California* shows that the establishment of water rights need not be tied to any previous legal definition of reservation lands but may be tied to the U.S. government's practice merely of treating the land as reserved for American Indians. The criteria described in lines 10–20 apply to situations in which the land in question has been legally identified as reservation land. So *Arizona v. California* broadened the scope of *Winters* in establishing water rights.

- A The passage illustrates that *Arizona v. California* does not supersede or deny any of the criteria in lines 10–20.
- B **Correct.** The passage suggests that *practice* and not *legal definition* (lines 34–36) allows *Winters* to be applied to situations not covered by the criteria in lines 10–20.
- C In stating that *some American Indian tribes have also established water rights* by means other than the criteria in lines 10–20, the first sentence of the second paragraph makes clear that *Arizona v. California* is not the sole exception to the criteria.
- D The passage states that *Arizona v. California* does refer to *Winters*.
- E The passage illustrates that *Arizona v. California* was directly relevant to the Pueblo Indians' water rights.

The correct answer is B.

59. The “pragmatic approach” mentioned in lines 37–38 of the passage is best defined as one that
- (A) grants recognition to reservations that were never formally established but that have traditionally been treated as such
 - (B) determines the water rights of all citizens in a particular region by examining the actual history of water usage in that region
 - (C) gives federal courts the right to reserve water along with land even when it is clear that the government originally intended to reserve only the land
 - (D) bases the decision to recognize the legal rights of a group on the practical effect such a recognition is likely to have on other citizens
 - (E) dictates that courts ignore precedents set by such cases as *Winters v. United States* in deciding what water rights belong to reserved land

Supporting ideas

This question requires recognizing what a particular phrase in the passage is referring to. The pragmatic approach the question refers to is introduced by the passage as *this* pragmatic approach. It is therefore necessary to identify which approach the passage has already referred to in this context, which in this case is contained in the sentence just prior to the reference. This sentence states that establishing what is an American Indian reservation is a matter of the U.S. government's practice and not of any formal, legal definition.

- A **Correct.** The approach referred to as *pragmatic* involves establishing American Indian reservations based not on formal law but on the government's established practice of treating the lands as such.
- B The approach referred to as *pragmatic* is not specific to establishing water rights.
- C The approach referred to as *pragmatic* is not specific to establishing water rights.
- D The approach referred to as *pragmatic* does not refer to balancing the rights of some people with rights of others.
- E The approach referred to as *pragmatic* is shown to be consistent with and supportive of the rights established by *Winters*.

The correct answer is A.

60. The author cites the fact that the Rio Grande pueblos were never formally withdrawn from public lands primarily in order to do which of the following?
- (A) Suggest why it might have been argued that the *Winters* doctrine ought not to apply to pueblo lands
 - (B) Imply that the United States never really acquired sovereignty over pueblo lands
 - (C) Argue that the pueblo lands ought still to be considered part of federal public lands
 - (D) Support the argument that the water rights of citizens other than American Indians are limited by the *Winters* doctrine
 - (E) Suggest that federal courts cannot claim jurisdiction over cases disputing the traditional diversion and use of water by Pueblo Indians

Evaluation

Answering this question involves recognizing how a particular part of the passage functions within the passage as a whole. The passage illustrates in the first paragraph that *Winters* was cited in the establishment of water rights based on a set of criteria that included the formal withdrawal of lands by the government. In the second paragraph, the case of the Rio Grande pueblos is introduced as an example of lands that had never been formally withdrawn by the government, raising the question of whether *Winters* would still be applicable in such situations. The passage then asserts that the situation of the pueblos *has not barred* (line 33) the application of *Winters*.

- A **Correct.** While the passage affirms the application of *Winters* to the situation with the pueblos, it recognizes that it may initially appear that *Winters* does not apply.
- B The passage states explicitly that the United States did gain official sovereignty over pueblo lands in 1848, when they *became part of the United States* (lines 27–28).
- C The passage states explicitly that *the pueblo lands never formally constituted a part of federal public lands* (lines 28–29) and takes no stand on the issue of whether particular lands ought to be considered public lands.
- D While one can infer that the rights of other citizens to use water could be limited by reserving water rights for residents of American Indian lands according to the *Winters* doctrine, the passage takes no stand on this issue.
- E The passage does not mention the rights of federal courts to claim jurisdiction over particular water rights cases.

The correct answer is A.

61. The primary purpose of the passage is to
- (A) trace the development of laws establishing American Indian reservations
 - (B) explain the legal basis for the water rights of American Indian tribes
 - (C) question the legal criteria often used to determine the water rights of American Indian tribes
 - (D) discuss evidence establishing the earliest date at which the federal government recognized the water rights of American Indians
 - (E) point out a legal distinction between different types of American Indian reservations

Main idea

This question requires recognizing the main topic of the passage, which is about the establishment of water rights on American Indian lands. Its intent is to explain or describe, and it does not take sides on any issue.

- A The passage is primarily about establishing water rights, not establishing reservations.
- B **Correct.** The passage is an explanation of water rights on American Indian lands.
- C The passage describes legal criteria used to establish water rights on American Indian lands but does not take issue with them.
- D The passage does not discuss the earliest date for water rights on American Indian lands.
- E The passage is primarily about establishing water rights, not about types of reservations.

The correct answer is B.

62. The passage suggests that the legal rights of citizens other than American Indians to the use of water flowing into the Rio Grande pueblos are
- (A) guaranteed by the precedent set in *Arizona v. California*
 - (B) abolished by the *Winters* doctrine
 - (C) deferred to the Pueblo Indians whenever treaties explicitly require this
 - (D) guaranteed by federal land-use laws
 - (E) limited by the prior claims of the Pueblo Indians

Inference

Answering this question requires recognizing what the passage implies. The passage illustrates at the beginning of the second paragraph that water rights were granted to Pueblo Indians based on their use of the water in the Rio Grande pueblos prior to U.S. sovereignty. The passage also later states that since the *Winters* doctrine applies, the water rights of Pueblo Indians *have priority over other citizens' water rights as of 1848* (lines 42–44), which implies that the water rights of citizens other than Pueblo Indians are limited.

- A The passage illustrates that *Arizona v. California* reinforced the water rights of citizens residing on American Indian reservations; it does not imply a precedent ensuring water rights for other citizens.
- B The passage states that the water rights of citizens other than Pueblo Indians are lower in priority, not abolished altogether.
- C The passage does not mention that different water rights have been defined by different treaties.
- D The passage does not mention that the water rights of citizens other than Pueblo Indians are guaranteed on pueblo lands.
- E **Correct.** The passage states that the water rights of Pueblo Indians have priority over other citizens' water rights, which thereby limits the rights of those citizens.

The correct answer is E.

Questions 63–68 refer to the passage on page 392.

63. In the passage, the author is primarily interested in
- (A) suggesting an alternative to an outdated research method
 - (B) introducing a new research method that calls an accepted theory into question
 - (C) emphasizing the instability of data gathered from the application of a new scientific method
 - (D) presenting a theory and describing a new method to test that theory
 - (E) initiating a debate about a widely accepted theory

Main idea

This question concerns the main point of the passage. A careful examination of the overall structure of the passage will reveal the main point. In the first paragraph, the author briefly presents Milankovitch's theory and explains why it could not be tested early on. In the second and third paragraphs, the author describes how a new method allows testing of the theory and shows how evidence from the testing supports the theory. While the final paragraph acknowledges that other factors should be considered, the author's primary interest in this passage is in presenting Milankovitch's theory and the recently discovered method for testing it.

- A A new research method is described, but no previous method is discussed.
- B As described in the passage, the new method tests and confirms the theory; there is no mention that the theory is accepted or that the method casts doubt on it.
- C Nothing in the passage suggests that "instability of data" is an issue.
- D **Correct.** The author presents Milankovitch's theory and describes the oxygen isotope method of testing it.
- E The theory is nowhere said to be "widely accepted" and the author does not debate the theory.

The correct answer is D.

64. The author of the passage would be most likely to agree with which of the following statements about the Milankovitch theory?
- (A) It is the only possible explanation for the ice ages.
 - (B) It is too limited to provide a plausible explanation for the ice ages, despite recent research findings.
 - (C) It cannot be tested and confirmed until further research on volcanic activity is done.
 - (D) It is one plausible explanation, though not the only one, for the ice ages.
 - (E) It is not a plausible explanation for the ice ages, although it has opened up promising possibilities for future research.

Application

The author's reaction to the statements about the Milankovitch theory must be based on how the author treats the theory in the passage. The first, second, and third paragraphs describe the theory and the use of a new research method to test the theory. The passage states that data from these tests *have established a strong connection between variations in the Earth's orbit and the periodicity of the ice ages*, suggesting that the author of the passage believes the theory is plausible. In the final paragraph, the author points to other factors that might be involved, suggesting that the theory might not provide a complete explanation.

- A In the last paragraph, the author suggests that because there are still other untested factors that may have effects on climate, other explanations are possible.
- B Though in the last paragraph the author points to other factors that may be involved, these are not presented by the author as indicating limitations that diminish the plausibility of the theory—they are acknowledged merely as possibilities that are not now understood—and nothing else in the passage suggests that the theory is “too limited.”
- C The author shows how the theory has been tested; volcanic activity is not part of this theory.
- D **Correct.** The author's presentation of the theory and the tests of the theory show that the author finds the theory plausible; the mention of other factors shows the author does not think that all other explanations have been ruled out, even if they are as yet untested.
- E The theory was a plausible explanation from its beginning, but it was not testable until recently; scientists would be unlikely to try to devise means to test a theory that did not strike them as antecedently plausible.

The correct answer is D.

65. It can be inferred from the passage that the isotope record taken from ocean sediments would be less useful to researchers if which of the following were true?
- (A) It indicated that lighter isotopes of oxygen predominated at certain times.
 - (B) It had far more gaps in its sequence than the record taken from rocks on land.
 - (C) It indicated that climate shifts did not occur every 100,000 years.
 - (D) It indicated that the ratios of oxygen 16 and oxygen 18 in ocean water were not consistent with those found in fresh water.
 - (E) It stretched back for only a million years.

Inference

To make an inference about the isotope record from ocean sediments, examine what the passage says about that record. The third paragraph discusses that record and lists its two advantages. First, it is a global record with *remarkably little variation* in samples from varied locations. Second, it is *more continuous* than the record from rocks. If either of these advantages were not true, then it is logical to infer that the record would be less useful.

- A According to lines 14–16, the lighter isotope does predominate; this is part of the record and does not affect its usefulness.
- B **Correct.** In lines 37–42, the author states that an advantage of the ocean record is that it is *a more continuous record than that taken from rocks on land*. If this were not true, the ocean record would be less useful.
- C If the record were to show that the shifts did not occur every 100,000 years, Milankovitch's theory would be weakened. This impact on the theory does not make the isotope record less useful to researchers. The record is useful precisely because it can offer evidence to confirm or refute such theories.
- D This inconsistency would not affect the usefulness of the ocean-water record. Researchers would simply need to accommodate the fresh-water inconsistency.
- E The record would still be useful. Lines 42–46 attest to the establishment of a pattern based on data from *the past several hundred thousand years*.

The correct answer is B.

66. According to the passage, which of the following is true of the ratios of oxygen isotopes in ocean sediments?
- (A) They indicate that sediments found during an ice age contain more calcium carbonate than sediments formed at other times.
 - (B) They are less reliable than the evidence from rocks on land in determining the volume of land ice.
 - (C) They can be used to deduce the relative volume of land ice that was present when the sediment was laid down.
 - (D) They are more unpredictable during an ice age than in other climatic conditions.
 - (E) They can be used to determine atmospheric conditions at various times in the past.

Supporting ideas

The phrase *according to the passage* suggests that the answer to the question is most likely stated in the passage. Lines 12–14 state that the relative volume of land ice can be deduced from the ratio of oxygen 18 to oxygen 16 in ocean sediments.

- A There is no evidence in the passage about this point.
- B The ocean record is described in lines 38–39 as *more continuous*, so it is unlikely to be less reliable. In any case, reliability is not discussed.
- C **Correct.** Lines 12–14 explain that *the land-ice volume for a given period can be deduced from the ratio of two oxygen isotopes*.
- D There is no evidence in the passage to support this statement.
- E The passage does not discuss the use of this record in determining past atmospheric conditions.

The correct answer is C.

67. It can be inferred from the passage that precipitation formed from evaporated ocean water has
- (A) the same isotopic ratio as ocean water
 - (B) less oxygen 18 than does ocean water
 - (C) less oxygen 18 than has the ice contained in continental ice sheets
 - (D) a different isotopic composition than has precipitation formed from water on land
 - (E) more oxygen 16 than has precipitation formed from fresh water

Inference

Any inference about precipitation from evaporated ocean water needs to be based on what the passage says. Lines 20–22 show that *heavier isotopes tend to be left behind when water evaporates from the ocean surfaces*. Therefore, the evaporated water would contain less oxygen 18 and the remaining ocean water would contain more. It is logical to infer that precipitation formed from this evaporated water would also contain less oxygen 18.

- A Lines 20–24 explain that the water remaining in the ocean after evaporation has more oxygen 18.
- B **Correct.** Since *the heavier isotopes tend to be left behind*, there will be less oxygen 18 in the evaporated water and in the precipitation that forms from it.
- C The passage suggests that the ocean water evaporates and through subsequent precipitation helps form the ice sheets, so the amount of oxygen 18 in the ice sheets should be similar to the amount in the precipitation formed from the evaporated water.
- D The passage does not discuss precipitation formed from water on land.
- E The passage does not discuss precipitation formed from fresh water.

The correct answer is B.

68. It can be inferred from the passage that calcium carbonate shells
- (A) are not as susceptible to deterioration as rocks
 - (B) are less common in sediments formed during an ice age
 - (C) are found only in areas that were once covered by land ice
 - (D) contain radioactive material that can be used to determine a sediment's isotopic composition
 - (E) reflect the isotopic composition of the water at the time the shells were formed

Inference

Any inference about calcium carbonate shells needs to be based on what the passage says about these shells. Lines 24–32 explain the role of these shells in forming sediments and establishing a chronology for ice ages. The shells *were constructed with oxygen atoms drawn from the surrounding ocean*. Lines 29–32 make it clear that if the sediments reveal a higher ratio of oxygen 18, it is because more oxygen 18 had been left behind when the ocean water evaporated and contributed to the growth of continental ice sheets. It can thus be inferred that the shells that make up those sediments must reflect the proportion of oxygen 18 found in the ocean water at the time they were formed.

- A The only mention of rocks in the passage is a comparison of “gappiness” of the rock and sedimentary specimen records in lines 38–39; this information does not allow any firm inference to be made with respect to relative susceptibility to deterioration, though a more continuous record might be the result of less susceptibility to deterioration.
- B The passage does not make any reference to the relative abundance of these shells during ice ages; no such inference can be drawn.

- C The only information in the passage that might support this statement is found in lines 29–32, but that information, about the correlation between oxygen ratios in sediment specimens and land ice, describes a relation that implies nothing about distributions of such specimens.
- D Though the passage does indirectly indicate that the shells contained radioactive material, nothing in the passage suggests that radioactive material is used to determine isotopic composition.
- E **Correct.** The passage explains that oxygen atoms in the surrounding water are one of the building blocks of calcium carbonate shells. The isotopic composition of the surrounding water changes during the ice age cycles, so it is logical that the isotopic composition of the shells will change depending on when they were formed.

The correct answer is E.

Questions 69–74 refer to the passage on page 394.

69. The primary purpose of the passage is to
- (A) examine two sides of a historiographical debate
 - (B) call into question an author's approach to a historiographical debate
 - (C) examine one author's approach to a historiographical debate
 - (D) discuss two authors' works in relationship to a historiographical debate
 - (E) explain the prevalent perspective on a historiographical debate

Main idea

This question requires understanding what the passage as a whole is attempting to do. The passage opens by introducing two books published in 1984 that both concern the history of women in the United States. The passage then makes it clear that one book deals *directly* (line 14) with the issue of women's status, while the other does not. The passage then goes on to discuss the perspective that each book takes and what each book has to offer for an assessment of women's status in the eighteenth and nineteenth centuries.

- A The two books discussed in the passage do not take different sides on a particular debate but rather are described as being more or less useful to the debate itself.
- B The passage focuses on how two different books contain information useful to a particular historiographical debate but does not call into question the approach of either book.
- C The passage focuses on two authors' works, not one.
- D **Correct.** The passage discusses what two different books have to offer in relation to a particular historiographical debate.
- E The passage does not describe any perspective on a particular historiographical debate as being more prevalent than any other.

The correct answer is D.

70. The author of the passage mentions the supervision of schools primarily in order to
- (A) remind readers of the role education played in the cultural changes of the nineteenth century in the United States
 - (B) suggest an area in which nineteenth-century American women were relatively free to exercise power
 - (C) provide an example of an occupation for which accurate data about women's participation are difficult to obtain

- (D) speculate about which occupations were considered suitable for United States women of the nineteenth century
- (E) illustrate how the answers to questions about women's status depend on particular contexts

Evaluation

Answering this question depends on understanding what role a particular piece of information plays in the passage as a whole. The author implicitly supports Lebsock's contention (beginning at line 19) that different frames of reference can produce different perspectives on the debate about women's status in the eighteenth and nineteenth centuries. The author then summarizes different contexts cited by Lebsock to support the contention about frames of reference. As part of this summary, the author refers to *supervising schools* (line 23) as an example of a job that apparently showed women losing power.

- A The passage does not discuss the role of education in the nineteenth century.
- B The passage does mention some ways in which, according to Lebsock, *women ... gained power* (line 24) in the nineteenth century, but *supervising schools* is not among them.
- C The passage does not discuss the difficulty of obtaining data about particular occupations.
- D The passage makes no judgments about the suitability for women of any jobs in the nineteenth century.
- E **Correct.** The passage mentions supervising schools as part of an illustration of Lebsock's claim that the debate about women's status depends on the context being examined.

The correct answer is E.

71. With which of the following characterizations of Lebsock's contribution to the controversy concerning women's status in the nineteenth-century United States would the author of the passage be most likely to agree?

- (A) Lebsock has studied women from a formerly neglected region and time period.
- (B) Lebsock has demonstrated the importance of frame of reference in answering questions about women's status.
- (C) Lebsock has addressed the controversy by using women's current status as a frame of reference.
- (D) Lebsock has analyzed statistics about occupations and property that were previously ignored.
- (E) Lebsock has applied recent historiographical methods to the biography of a nineteenth-century woman.

Supporting ideas

Answering this question requires recognizing information explicitly given in the passage. The passage introduces the work of Lebsock in line 6 and then goes on to describe several characteristics of Lebsock's book. In lines 19–21, the author introduces Lebsock's claim that the historiographical debate about women's status is dependent on frame of reference and calls that claim important; the passage then gives an example showing how frame of reference affects views of women's status. In so doing, the author displays an implicit agreement with Lebsock's discussion on this point.

- A The author of the passage portrays neither the place nor time period that Lebsock focuses on as having been neglected by historians.
- B Correct.** The author describes as important Lebsock's idea that frame of reference informs the debate about women's status.
- C According to the passage, Lebsock's book deals with women's status in the eighteenth and nineteenth centuries, not the present status of women.
- D The passage does not mention or imply that Lebsock analyzed statistics in writing her book.

- E Although the passage does describe Lebsock's book as pertaining to an ongoing historiographical debate, it identifies the book's topic as *women in one southern community* (lines 7–8), not the life of a single woman.

The correct answer is B.

72. According to the passage, Lebsock's work differs from Buel and Buel's work in that Lebsock's work

- (A) uses a large number of primary sources
- (B) ignores issues of women's legal status
- (C) refuses to take a position on women's status in the eighteenth century
- (D) addresses larger historiographical issues
- (E) fails to provide sufficient material to support its claims

Supporting ideas

This question asks for recognition of information contained in the passage. In the first sentence, the passage states that Buel and Buel's work and Lebsock's work have *contrasting approaches*. The passage then proceeds, using descriptions of each work's approach, to illustrate how the works differ. The passage notes that Buel and Buel's work *makes little effort* to place its biographical subject *in the context of recent historiography on women* (lines 4–6), whereas Lebsock's work *attempts to redirect two decades of historiographical debate* about women's status.

- A Primary sources are not mentioned in the passage in relation to either work discussed.
- B The legal status of women is not mentioned in the passage.
- C Lebsock's work is described in the passage as attempting to redirect the debate about women's status in the eighteenth and nineteenth centuries.
- D Correct.** The passage suggests that by not placing its subject's story in the context of historiography, Buel and Buel's work does not therefore address larger historiographical issues, as Lebsock's does.
- E The passage tends to support Lebsock's views and does not refer to any lack of support for the claims made in Lebsock's work.

The correct answer is D.

73. The passage suggests that Lebsock believes that compared to nineteenth-century American women, eighteenth-century American women were
- (A) in many respects less powerful in relation to men
 - (B) more likely to own real estate
 - (C) generally more economically independent
 - (D) more independent in conducting their private lives
 - (E) less likely to work as school superintendents

Inference

This question requires making an inference based on information given in the passage. As part of the passage's description of Lebsock's contribution to the historiographical debate about women's status in the eighteenth and nineteenth centuries, Lebsock's conclusions about women's autonomy are described. As part of this description, the passage cites Lebsock's conclusion that nineteenth-century women lost economic autonomy when compared to eighteenth-century women (lines 16–19).

- A The passage states that in many ways women in the nineteenth century *lost power in relation to men* (lines 21–22), which would imply that in those respects eighteenth-century women had more power in relation to men, not less. The only increase mentioned in nineteenth-century women's power is associated with owning more real estate.
- B The passage states that more nineteenth-century women owned real estate.
- C **Correct.** As the passage states, Lebsock concluded that nineteenth-century women lost economic autonomy compared to eighteenth-century women.
- D The passage states that nineteenth-century women gained more independence in their private lives.
- E The passage cites school superintendents as an example of an occupation more likely to be held by eighteenth-century women.

The correct answer is C.

74. The passage suggests that Buel and Buel's biography of Mary Fish provides evidence for which of the following views of women's history?

- (A) Women have lost power in relation to men since the colonial era.
- (B) Women of the colonial era were not as likely to be concerned with their status as were women in the nineteenth century.
- (C) The colonial era was not as favorable for women as some historians have believed.
- (D) Women had more economic autonomy in the colonial era than in the nineteenth century.
- (E) Women's occupations were generally more respected in the colonial era than in the nineteenth century.

Inference

This question requires understanding what the passage implies. The approach that Buel and Buel's work takes is specifically described in lines 3–6 and again in lines 27–32. In lines 27–30, the passage states that Buel and Buel's work *provides ample raw material for questioning the myth ... of a colonial golden age in the eighteenth century*, referring to a myth about women's status. In describing this golden age as a myth fostered by some historians, the passage suggests that this era was not as favorable to women as these historians suggest.

- A The passage describes Lebsock's work as providing such evidence, not Buel and Buel's work.
- B The passage does not pertain to the level of concern women had for their status.
- C **Correct.** The final paragraph of the passage describes Buel and Buel's work as providing material that calls into question claims that the eighteenth century was especially favorable to women.
- D The passage refers to the economic autonomy of women in relation to Lebsock's work, not Buel and Buel's work.
- E The passage does not refer to whether any particular occupations held by women were more respected at one time or another.

The correct answer is C.

Questions 75–83 refer to the passage on page 396.

75. Which of the following titles best summarizes the contents of the passage?
- (A) Neurotransmitters: Their Crucial Function in Cellular Communication
 - (B) Diet and Survival: An Old Relationship Reexamined
 - (C) The Blood Supply and the Brain: A Reciprocal Dependence
 - (D) Amino Acids and Neurotransmitters: The Connection between Serotonin Levels and Tyrosine
 - (E) The Effects of Food Intake on the Production and Release of Serotonin: Some Recent Findings

Main idea

Finding a title that best summarizes a passage requires examining the passage as a whole. This task is made easier by the fact that the second sentence of the first paragraph provides a topic sentence stating the main idea: *In recent studies, however, we have discovered that the production and release in brain neurons of the neurotransmitter serotonin ... depend directly on the food that the body processes.* In the second paragraph, the authors cite the results of several studies relating neurotransmitter levels to eating meals and to injections of insulin. In the final paragraph, the authors discuss a study of the effect of a protein-rich meal on serotonin level. Thus, the correct title must show the relationship between food eaten and serotonin produced.

- A The function of neurotransmitters is only briefly mentioned.
- B The passage does not discuss the relation between diet and survival.
- C There is no discussion of blood supply and the brain.
- D While tyrosine is briefly mentioned, this was not a main focus of the studies.
- E **Correct.** This title offers a summary of the article's contents.

The correct answer is E.

76. According to the passage, the speed with which tryptophan is provided to the brain cells of a rat varies with the
- (A) amount of protein present in a meal
 - (B) concentration of serotonin in the brain before a meal
 - (C) concentration of leucine in the blood rather than with the concentration of tyrosine in the blood after a meal
 - (D) concentration of tryptophan in the brain before a meal
 - (E) number of serotonin-containing neurons

Supporting ideas

The phrase *according to the passage* suggests that the answer is likely stated in the passage. Look at the third paragraph, which discusses variations in the speed with which tryptophan is provided to the brain. Lines 41–44 state *the more protein is in a meal ... the more slowly is tryptophan provided to the brain.*

- A **Correct.** The greater the amount of protein, the more slowly tryptophan is provided.
- B The relationship is not discussed in the passage, although the concentration of serotonin *after* a meal is measured.
- C While leucine and tyrosine are mentioned, their concentrations in the blood are not compared.
- D This relationship is not discussed in the passage, although the concentration of tryptophan *after* a meal is measured.
- E The researchers do not consider the number of neurons.

The correct answer is A.

77. According to the passage, when the authors began their first studies, they were aware that
- (A) they would eventually need to design experiments that involved feeding rats high concentrations of protein
 - (B) tryptophan levels in the blood were difficult to monitor with accuracy
 - (C) serotonin levels increased after rats were fed meals rich in tryptophan
 - (D) there were many neurotransmitters whose production was dependent on metabolic processes elsewhere in the body
 - (E) serotonin levels increased after rats were injected with a large amount of tryptophan

Supporting ideas

The phrase *according to the passage* suggests that the answer is likely stated in the passage. Look at the first sentence of the second paragraph where the focus of the authors' *first studies* is explained. The investigators wanted to see if an increase in serotonin levels would be observed after rats ate meals that changed tryptophan levels in the blood. Earlier research had already established that injecting tryptophan increased serotonin levels.

- A The authors' decision to add protein came later in their studies, after they had seen the effects of eating in general.
- B The passage does not identify any problems with monitoring tryptophan levels in the blood.
- C This was the hypothesis of the first experiment, so the authors could not have known it beforehand.
- D This point is irrelevant to the authors' work; only one neurotransmitter, serotonin, is discussed.
- E **Correct.** Lines 9–12 show that this increase had already been observed.

The correct answer is E.

78. According to the passage, one reason that the authors gave rats carbohydrates was to
- (A) depress the rats' tryptophan levels
 - (B) prevent the rats from contracting diseases
 - (C) cause the rats to produce insulin
 - (D) demonstrate that insulin is the most important substance secreted by the body
 - (E) compare the effect of carbohydrates with the effect of proteins

Supporting ideas

The phrase *according to the passage* suggests that the answer is likely stated in the passage. Look at lines 22–26, which say *We then decided to see whether the secretion of the animal's own insulin similarly affected serotonin production. We gave the rats a carbohydrate-containing meal that we knew would elicit insulin secretion.* These sentences together show that the authors gave carbohydrates to the rats to cause the rats to secrete insulin.

- A Lines 26–29 show that the carbohydrate increased the blood tryptophan level.
- B Preventing disease was not part of the study.
- C **Correct.** The authors had already tried injecting insulin; they then gave the rats carbohydrates to stimulate insulin production.
- D The authors make no such claim about insulin.
- E The study involving protein came later, so this could not have been the reason for giving the rats carbohydrates.

The correct answer is C.

79. According to the passage, the more protein a rat consumes, the lower will be the
- (A) ratio of the rat's blood-tryptophan concentration to the amount of serotonin produced and released in the rat's brain
 - (B) ratio of the rat's blood-tryptophan concentration to the concentration in its blood of the other amino acids contained in the protein
 - (C) ratio of the rat's blood-tyrosine concentration to its blood-leucine concentration
 - (D) number of neurotransmitters of any kind that the rat will produce and release
 - (E) number of amino acids the rat's blood will contain

Supporting ideas

The phrase *according to the passage* suggests that the answer is likely stated in the passage. In lines 41–43, the authors state: *The more protein is in a meal, the lower is the ratio of the resulting blood-tryptophan concentration to the concentration of competing amino acids*

- A While lower levels of blood-tryptophan lead to lower serotonin levels, the relationship is not discussed in terms of a ratio.
- B Correct.** Lines 41–43 show this to be the correct answer choice.
- C This relationship is not demonstrated in the passage.
- D This point is not made in the passage.
- E Lines 38–40 explain that *consumption of protein increases blood concentration of the other amino acids much more* Since proteins are made up of amino acids, eating protein would logically increase the number of amino acids.

The correct answer is B.

80. The authors' discussion of the "mechanism that provides blood tryptophan to the brain cells" (lines 34–35) is meant to
- (A) stimulate further research studies
 - (B) summarize an area of scientific investigation
 - (C) help explain why a particular research finding was obtained
 - (D) provide supporting evidence for a controversial scientific theory
 - (E) refute the conclusions of a previously mentioned research study

Logical structure

To find the purpose of this discussion, look at the context in which this reference occurs. At the beginning of the third paragraph, the authors note that, *surprisingly*, adding protein led to lower brain tryptophan and serotonin levels. The question is why were the levels lowered? *The answer lies* in the mechanism cited in lines 34–35. Therefore, the discussion of the mechanism is meant to explain a surprising research finding.

- A No further studies are mentioned.
- B There are summaries of several studies, but there is no summary of an entire area of scientific investigation.
- C Correct.** The mechanism helps explain the surprising finding about lower brain tryptophan and serotonin levels.
- D No theory is advanced, nor is any evidence about it provided.
- E There is no attempt to refute any other study.

The correct answer is C.

81. According to the passage, an injection of insulin was most similar in its effect on rats to an injection of

(A) tyrosine
(B) leucine
(C) blood
(D) tryptophan
(E) protein

Supporting ideas

Since the question refers to information given in the passage, the answer can be found by careful reading. In order to find an injection with a similar effect, look first at the effect of injecting insulin. In lines 20–22, the authors state that *injecting insulin ... caused parallel elevations in blood and brain tryptophan levels and in serotonin levels*. The only other reference to injection occurs earlier in lines 10–13 where rats injected with tryptophan had increased serotonin levels; injecting tryptophan would obviously cause tryptophan levels to increase. Thus, the effects of injecting insulin were similar to the effects of injecting tryptophan.

- A No evidence suggests that tyrosine injection would have similar effects.
B The studies did not involve injecting leucine.
C The studies did not involve injecting blood.
D **Correct.** According to the passage, injecting tryptophan raises serotonin and tryptophan levels just as injecting insulin does.
E The studies involved eating protein, not injecting it; eating protein did not raise serotonin levels.

The correct answer is D.

82. It can be inferred from the passage that which of the following would be LEAST likely to be a potential source of aid to a patient who was not adequately producing and releasing serotonin?

(A) Meals consisting almost exclusively of protein
(B) Meals consisting almost exclusively of carbohydrates
(C) Meals that would elicit insulin secretion
(D) Meals that had very low concentrations of tyrosine
(E) Meals that had very low concentrations of leucine

Inference

Since this question asks for an inference, the answer is not directly stated in the passage; it must instead be derived from the information given. What kind of meals would NOT help a patient with low serotonin levels? Meals that increased serotonin would help the patient; meals that lowered serotonin would not. According to the last sentence in the passage, *the more protein in a meal, the less serotonin subsequently produced and released*. Therefore, high-protein meals would be LEAST likely to help the patient.

- A **Correct.** Meals with very high levels of protein would tend to lower serotonin and thus to be less beneficial for the patient with inadequate serotonin levels.
B When rats ate a carbohydrate-containing meal, serotonin increased (lines 25–29). Therefore, these meals would tend to raise serotonin levels and so help the patient.
C In the study, meals that elicited insulin secretion raised serotonin levels.
D Since tyrosine is an amino acid found in protein, meals low in tyrosine would be low in protein and so would tend to raise serotonin levels and help the patient.
E Since leucine is an amino acid found in protein, meals low in leucine would be low in protein and so would tend to raise serotonin levels and help the patient.

The correct answer is A.

83. It can be inferred from the passage that the authors initially held which of the following hypotheses about what would happen when they fed large amounts of protein to rats?
- (A) The rats' brain serotonin levels would not decrease.
 - (B) The rats' brain tryptophan levels would decrease.
 - (C) The rats' tyrosine levels would increase less quickly than would their leucine levels.
 - (D) The rats would produce more insulin.
 - (E) The rats would produce neurotransmitters other than serotonin.

Inference

When the authors discuss the results of adding protein to meals, they begin with the word *surprisingly* (line 30). The use of this word indicates that the results differed from the authors' initial hypotheses. The results showed lowered serotonin. It is reasonable to conclude that the researchers initially hypothesized that serotonin levels would not decrease.

- A **Correct.** The use of the word *surprisingly* in line 30 suggests that researchers thought serotonin levels would not decrease.
- B The researchers had expected that tryptophan levels would not decrease, *since protein contains tryptophan* (lines 32–34).
- C Since there is no discussion of the comparative levels of tyrosine and leucine, there was probably no hypothesis about these levels.
- D In the passage insulin is explicitly discussed in relation to carbohydrates, and plays no role at all in the discussion of protein; this very strongly suggests that insulin production played no role in the authors' decision to feed the rats large amounts of protein.
- E Serotonin is the only neurotransmitter discussed in the research, so it is unlikely that the researchers had an initial hypothesis involving other neurotransmitters.

The correct answer is A.

Questions 84–86 refer to the passage on page 398.

84. The passage suggests that WIDC differed from WTUL in which of the following ways?
- (A) WIDC believed that the existing safety regulations were adequate to protect women's health, whereas WTUL believed that such regulations needed to be strengthened.
 - (B) WIDC believed that unions could not succeed in pressuring employers to comply with such regulations, whereas WTUL believed that unions could succeed in doing so.
 - (C) WIDC believed that lead poisoning in white lead factories could be avoided by controlling conditions there, whereas WTUL believed that lead poisoning in such factories could not be avoided no matter how stringently safety regulations were enforced.
 - (D) At the time that the legislation concerning white lead factories was proposed, WIDC was primarily concerned with addressing health conditions in white lead factories, whereas WTUL was concerned with improving working conditions in all types of factories.
 - (E) At the time that WIDC was opposing legislative attempts to restrict women's labor, WTUL had already ceased to do so.

Inference

To answer this question you need to understand the differences between WIDC and WTUL as they are described in the passage. The only information about WTUL in the passage is that it had stopped opposing restrictions on women's labor in the late 1880s, and that, because existing safety regulations were not being enforced, it supported the proposal to prohibit women from working in white lead factories. WIDC, on the other hand, was formed in 1892 specifically to oppose restrictions on women's labor, and it opposed the proposal.

- A According to the passage, WIDC did believe that existing safety regulations, if enforced, could prevent lead poisoning. WTUL may or may not have believed that the safety regulations needed to be strengthened; all the passage states is that WTUL did not believe that the safety regulations were likely to be enforced.
- B The passage states that WTUL believed that because there were no unions to pressure employers, the employers would not comply with safety regulations. The passage does not present any information on which to base a conclusion about WIDC's beliefs regarding union pressure on employers.
- C Based on information in the passage, both WIDC and SPEW believed that enforcing safety regulations could protect women against lead poisoning. WIDC supported SPEW's position on the matter. WTUL believed that safety regulations were unlikely to be enforced because of the lack of unions.
- D The passage states that WIDC viewed the proposal to restrict women's employment in white lead factories as an instance of legislation designed to limit women's work opportunities—precisely the legislation that WIDC was formed to oppose. Thus, WIDC was not primarily concerned with the factories' health conditions.
- E **Correct.** WIDC began opposing legislative attempts to restrict women's labor in 1892 and continued to do so through at least 1895, when the Home Secretary proposed prohibiting women from working in white lead factories. WTUL stopped opposing restrictions on women's labor in the late 1880s, before WIDC was even founded. Thus, the passage suggests that WTUL had stopped opposing restrictions on women's labor well before WIDC worked to oppose such legislation.

The correct answer is E.

85. Which of the following, if true, would most clearly support the contention attributed to SPEW in lines 17–20?
- (A) Those white lead factories that most strongly enforced regulations concerning worker safety and hygiene had the lowest incidences of lead poisoning among employees.
 - (B) The incidence of lead poisoning was much higher among women who worked in white lead factories than among women who worked in other types of factories.
 - (C) There were many household sources of lead that could have contributed to the incidence of lead poisoning among women who also worked outside the home in the late nineteenth century.
 - (D) White lead factories were more stringent than were certain other types of factories in their enforcement of workplace safety regulations.
 - (E) Even brief exposure to the conditions typically found in white lead factories could cause lead poisoning among factory workers.

Evaluation

This question requires the reader to find a statement that would provide additional support for the contention made in the following statement: *SPEW contended, and WIDC concurred, that controllable conditions in such factories were responsible for the development of lead poisoning.* Information suggesting that when conditions were controlled, lead poisoning was less likely to develop would provide support for SPEW's contention.

- A **Correct.** If incidences of lead poisoning were low in those factories that enforced hygiene and safety regulations, that would suggest that lead poisoning was not an inevitable result of working in a white lead factory—but rather that lead poisoning was the result of poor hygiene and safety practices.

- B It would not be particularly surprising for the incidence of lead poisoning to be higher among women working in white lead factories than among women working in other kinds of factories—but such a finding would say nothing about whether controllable conditions had any effect on the development of lead poisoning.
- C The existence of household sources of lead that might contribute to lead poisoning would weaken, not support, SPEW's contention that controllable factory conditions were responsible for the development of lead poisoning.
- D If white lead factories enforced workplace safety regulations more stringently than did some other types of factories, it might be the case that SPEW's contention was incorrect: that even controlled conditions could not prevent a high incidence of lead poisoning.
- E If the conditions typically found in white lead factories were particularly bad with regard to safety and hygiene, it could conceivably be the case that SPEW's contention was true—that is, that the conditions that caused lead poisoning were controllable. But it might also be the case that an uncontrollable aspect of those conditions caused lead poisoning. Thus, this neither supports nor undermines SPEW's contention clearly.

The correct answer is A.

86. The passage is primarily concerned with
- (A) presenting various groups' views of the motives of those proposing certain legislation
- (B) contrasting the reasoning of various groups concerning their positions on certain proposed legislation
- (C) tracing the process whereby certain proposed legislation was eventually enacted
- (D) assessing the success of tactics adopted by various groups with respect to certain proposed legislation
- (E) evaluating the arguments of various groups concerning certain proposed legislation

Main idea

Answering this question depends on identifying the overall point of the passage. The passage is mainly concerned with explaining the reasons behind the positions taken by WIDC and SPEW, which opposed the proposal to enact legislation prohibiting women from holding most white lead factory jobs, and the reasoning of WTUL, which supported the proposal.

- A The passage explains how WIDC viewed the proposal, but it does not indicate what any of the groups believed about the motivations of the Home Secretary, who made the proposal.
- B **Correct.** The passage contrasts the reasoning of the WIDC and SPEW, both of which believed that enforcing safety regulations would make the proposed legislation unnecessary, with the reasoning of WTUL, which thought that safety regulations were unlikely to be enforced and thus supported the proposal.
- C The passage simply states that the proposal was eventually enacted; it does not trace the process by which this occurred.
- D The passage implies that WIDC and SPEW were unsuccessful in their opposition to the proposed legislation, but it identifies only one tactic used in opposition to it: SPEW's attempt to challenge it by investigating the causes of lead poisoning.
- E The passage does not evaluate the groups' arguments concerning the proposed legislation; rather, it presents those arguments without comment on their quality or value.

The correct answer is B.

Questions 87–92 refer to the passage on page 400.

87. The primary purpose of the passage is to
- (A) evaluate a research study
- (B) summarize the history of a research area
- (C) report new research findings
- (D) reinterpret old research findings
- (E) reconcile conflicting research findings

Main idea

Determining the primary purpose comes from examining what the author does in the entire passage. In the first paragraph, the author explains Duverger's work on women's electoral participation. In the second paragraph the author points out both the successes and failures of that work. The purpose of this passage, then, is to evaluate Duverger's study.

- A **Correct.** The author evaluates Duverger's study of women's electoral activities.
- B This passage examines only one research study, not an entire research area.
- C Duverger's work was published in 1955; its findings are not new.
- D The author explains and evaluates Duverger's findings but does not reinterpret them.
- E The author's discussion of Duverger's work does not reveal or attempt to reconcile conflicting findings.

The correct answer is A.

88. According to the passage, Duverger's study was unique in 1955 in that it
- (A) included both election data and survey data
 - (B) gathered data from sources never before used in political studies
 - (C) included an analysis of historical processes
 - (D) examined the influence on voting behavior of the relationships between women and men
 - (E) analyzed not only voting and political candidacy but also other political activities

Supporting ideas

This question is based on information specifically stated in the first sentence of the passage. The author introduces Duverger's work by calling it the first study of *women's electoral participation ever to use election data and survey data together* (lines 3–5).

- A **Correct.** Duverger's work was unique because it used election data and survey data together.
- B The two data types had never before been used together in such a study; they may well have been used separately in many earlier political studies.
- C The second paragraph states that Duverger placed his findings in the context of historical processes, but not that he was unique in doing so (lines 15–17).
- D Duverger compared the frequency and direction of voting between men and women, not the effect that their relationships had on voting (line 27).
- E Duverger's work analyzed political activism, but the author does not claim that it was unique in doing so (lines 5–6).

The correct answer is A.

89. Which of the following characteristics of a country is most clearly an example of a factor that Duverger, as described in the passage, failed to consider in his study?
- (A) A large population
 - (B) A predominantly Protestant population
 - (C) A predominantly urban population
 - (D) A one-party government
 - (E) Location in the heart of Europe

Inference

In the second paragraph, the author notes Duverger's *failure to consider ... the influence of political regimes, the effects of economic factors, and the ramifications of political and social relations between women and men* (lines 22–27). This question requires checking this list from the passage against the possible answers; the only point of convergence is the system of government. A system of government in which there is only one political party is a type of political regime.

- A The author does not say that Duverger failed to consider the size of the population.
- B No evidence shows that Duverger failed to consider the predominance of a religion.
- C The author does not say that Duverger failed to consider the location of the population.
- D Correct.** According to the author of the passage, Duverger failed to consider *the influence of political regimes*.
- E Duverger is not faulted for failing to consider the location of the countries that he studied.

The correct answer is D.

90. The author implies that Duverger's actual findings are

- (A) limited because they focus on only four countries
- (B) inaccurate in their description of the four countries in the early 1950s
- (C) out-of-date in that they are inapplicable in the four countries today
- (D) flawed because they are based on unsound data
- (E) biased by Duverger's political beliefs

Inference

Since the question uses the word *implies*, the answer involves making an inference based on the information in the text. The second paragraph evaluates Duverger's work. The author notes that Duverger *placed his findings in the context of many of the historical processes*. Because these contexts have changed since 1955, the author holds that *Duverger's approach has proved more durable than his actual findings*. The actual findings, then, are out-of-date and irrelevant to the countries today.

- A The limitations the author brings up in the second paragraph have no connection to the number of countries studied.
- B The limitations the author brings up in the second paragraph do not suggest that the findings were inaccurate; rather, they were, in the author's view, significantly incomplete.

- C Correct.** The actual findings, unlike the research method, are out-of-date and inapplicable today.
- D The limitations the author brings up in the second paragraph do not suggest that Duverger's data were unsound; rather, in the author's view, they were incomplete and have become dated.
- E The limitations the author brings up in the second paragraph do not suggest that Duverger's findings were politically biased; rather, in the author's view, they did not take full enough account of politics.

The correct answer is C.

91. The passage implies that, in comparing four European countries, Duverger found that the voting rates of women and men were most different in the country in which women

- (A) were most politically active
- (B) ran for office most often
- (C) held the most conservative political views
- (D) had the most egalitarian relations with men
- (E) had possessed the right to vote for the shortest time

Inference

The comparison of voting rates is discussed at the end of the first paragraph and forms the basis for the required inference. Duverger found that *women voted somewhat less frequently than men* but that this difference narrowed *the longer the women had the vote* (lines 9–11). That is, there was an ongoing process of convergence in voting rates for women and men, as the time period for which women had the vote lengthened. This suggests that at one end, when women had been voting for the shortest time, voting rates were most dissimilar, and at the other end, when women had been voting for the longest time, the rates were most similar.

- A Women's political activism is not suggested as a reason for the difference.
- B Women's political candidacy is not suggested as a reason for the difference.
- C Women's political views are not suggested as a reason for the difference.
- D Women's egalitarian relations with men are not suggested as a reason for the difference.
- E **Correct.** Duverger's finding is of (apparently steady, ongoing) convergence in voting-frequency rates between women and men over time. This supports the inference that the shorter the time period, the less convergence—i.e., the more divergence—there is in voting-frequency rates.

The correct answer is E.

92. The author implies that some behavioralist research involving the multinational study of women's political participation that followed Duverger's study did which of the following?
- (A) Ignored Duverger's approach
 - (B) Suffered from faults similar to those in Duverger's study
 - (C) Focused on political activism
 - (D) Focused on the influences of political regimes
 - (E) Focused on the political and social relations between women and men

Inference

The final sentence of the passage links Duverger's study to behavioralist work in general. After noting Duverger's failure to consider several important elements, the author observes, *Duverger's study foreshadowed the enduring limitations of the behavioralist approach to the multinational study of women's political participation* (lines 28–31). Thus, it is reasonable to infer that the author is of the opinion that the behavioralist research that followed Duverger's study suffered from the same limitations.

- A The author does not imply that other behavioralists ignored Duverger's approach.
- B **Correct.** The author says that Duverger's work revealed the *enduring limitations* also found in later behavioralist research.

- C This is not obviously a limitation at all, let alone one that Duverger's study suffered from.
- D This is not obviously a limitation at all, let alone one that Duverger's study suffered from.
- E This is not obviously a limitation at all, let alone one that Duverger's study suffered from.

The correct answer is B.

Questions 93–98 refer to the passage on page 402.

93. According to the passage, senior managers use intuition in all of the following ways EXCEPT to
- (A) speed up the creation of a solution to a problem
 - (B) identify a problem
 - (C) bring together disparate facts
 - (D) stipulate clear goals
 - (E) evaluate possible solutions to a problem

Supporting ideas

To answer this question, look for information explicitly stated in the passage. The third paragraph of the passage describes the five ways that senior managers use intuition. To find the one way that is NOT described, go back to the paragraph and check the possible answers against the list of the ways provided in the paragraph. The list includes all the answer choices except stipulating clear goals.

- A Lines 39–40 state that intuition allows managers to *move rapidly to engender a plausible solution*.
- B Lines 22–23 explain that managers use intuition to *sense when a problem exists*.
- C Lines 28–29 say the third function of intuition is *to synthesize isolated bits of data and practice into an integrated picture*.
- D **Correct.** Stipulating clear goals is not linked with managers' use of intuition.
- E Lines 30–38 show that managers use intuition *as a check on the results of more rational analysis*, when they are *leery of solutions suggested by these methods*.

The correct answer is D.

94. The passage suggests which of the following about the “writers on management” mentioned in line 12?
- (A) They have criticized managers for not following the classical rational model of decision analysis.
 - (B) They have not based their analyses on a sufficiently large sample of actual managers.
 - (C) They have relied in drawing their conclusions on what managers say rather than on what managers do.
 - (D) They have misunderstood how managers use intuition in making business decisions.
 - (E) They have not acknowledged the role of intuition in managerial practice.

Inference

Answering this question depends on making an inference from the passage. The second paragraph dismisses most *writers on management* for displaying a *poor grasp of what intuition is* (line 15). The third paragraph, in contrast, describes Isenberg’s research, which shows that *senior managers use intuition in at least five distinct ways* (lines 21–22), and those ways are then discussed in more detail. It can be inferred that Isenberg understands what most *writers on management* do not: how managers use intuition in making business decisions.

- A The passage does not link these writers with such a critique of managers.
- B No mention is made in the passage of the writers’ methods.
- C The passage does not indicate that the writers have examined words at the expense of actions.
- D **Correct.** According to the passage, the writers do not understand what intuition is or how managers apply it.
- E According to lines 12–15, the writers have acknowledged that *some practicing managers rely heavily on intuition*, but the writers fail to understand how or why.

The correct answer is D.

95. Which of the following best exemplifies “an ‘Aha!’ experience” (line 30) as it is presented in the passage?
- (A) A manager risks taking an action whose outcome is unpredictable to discover whether the action changes the problem at hand.
 - (B) A manager performs well-learned and familiar behavior patterns in creative and uncharacteristic ways to solve a problem.
 - (C) A manager suddenly connects seemingly unrelated facts and experiences to create a pattern relevant to the problem at hand.
 - (D) A manager rapidly identifies the methodology used to compile data yielded by systematic analysis.
 - (E) A manager swiftly decides which of several sets of tactics to implement in order to deal with the contingencies suggested by a problem.

Application

Finding an example involves applying the information in the passage to new situations. How do managers reach an “Aha!” experience? Lines 28–29 clearly explain that this experience is the result of the managers’ ability *to synthesize isolated bits of data and practice into an integrated picture*. Managers connect apparently unrelated pieces of information and elements of their previous experience, and, through these unexpected connections, produce a unified picture or pattern.

- A This managerial style is mentioned in the last paragraph, but not as defining the “Aha!” experience.
- B Lines 23–27 indicate that managers use intuition *to perform well-learned behavior patterns rapidly*, but the result is not an “Aha!” experience.
- C **Correct.** Through an intuitive appreciation of the subtle interrelationships of disparate facts and experiences, the manager all at once perceives the coherent overarching pattern or picture formed by the interconnections, which lines 28–29 define as an “Aha!” experience.
- D Lines 34–38 show that managers do possess this ability, but it does not culminate in an “Aha!” experience.
- E This managerial style is also related to the second function of intuition, *to perform well-learned behavior patterns rapidly* (lines 23–27), but does not define an “Aha!” experience.

The correct answer is C.

96. According to the passage, the classical model of decision analysis includes all of the following EXCEPT
- (A) evaluation of a problem
 - (B) creation of possible solutions to a problem
 - (C) establishment of clear goals to be reached by the decision
 - (D) action undertaken in order to discover more information about a problem
 - (E) comparison of the probable effects of different solutions to a problem

Supporting ideas

What does the passage say about the classical model of decision analysis? The first sentence defines the classical model as *clarifying goals, assessing the problem, formulating options, estimating likelihoods of success, making a decision, and only then taking action to implement the decision*. To solve this process-of-elimination question, check the given list against the possible answers in order to find the one that does not match. Note that the exact wording in the answers may differ from that in the passage; the match is based on underlying meaning.

- A Evaluating a problem is identified as *assessing the problem*.
- B Creating solutions is identified as *formulating options*.
- C Establishing goals is identified as *clarifying goals*.
- D **Correct.** Acting in order to learn more about the problem is not identified in the passage as part of the rational classical model. It does appear as part of the acting/thinking cycle in the last paragraph.
- E Comparing probable effects is identified as *estimating likelihoods of success*.

The correct answer is D.

97. It can be inferred from the passage that which of the following would most probably be one major difference in behavior between Manager X, who uses intuition to reach decisions, and Manager Y, who uses only formal decision analysis?
- (A) Manager X analyzes first and then acts; Manager Y does not.
 - (B) Manager X checks possible solutions to a problem by systematic analysis; Manager Y does not.
 - (C) Manager X takes action in order to arrive at the solution to a problem; Manager Y does not.
 - (D) Manager Y draws on years of hands-on experience in creating a solution to a problem; Manager X does not.
 - (E) Manager Y depends on day-to-day tactical maneuvering; Manager X does not.

Application

To answer this question, apply the information in the passage to the specific examples of Manager X, an intuitive decision maker, and Manager Y, who relies exclusively on formal decision analysis. The first paragraph distinguishes between the process of formal decision analysis, in which a decision is made and then action is taken (lines 4–5), and the process of intuition, in which action is integrated into the process of thinking (lines 10–11). The last paragraph reinforces the definition of the intuitive manager as one for whom “*thinking*” is *inseparable from acting* and *action is often part of defining the problem*. Manager X is likely to act as part of the process of solving a problem, but Manager Y is not.

- A Acting only after analysis characterizes the rational model, not intuition.
- B Systematic analysis is typical of the rational model, not intuition.
- C **Correct.** An intuitive manager acts as a step within the problem-solving process, but a manager who depends on formal decision analysis acts only after making a decision.
- D Drawing on experience is linked in the passage with intuition rather than with rational analysis; the passage does not suggest that managers who use formal decision analysis would ignore their experience in so doing.

- E Day-to-day tactical maneuvers are required of all managers.

The correct answer is C.

98. The passage provides support for which of the following statements?
- (A) Managers who rely on intuition are more successful than those who rely on formal decision analysis.
 - (B) Managers cannot justify their intuitive decisions.
 - (C) Managers' intuition works contrary to their rational and analytical skills.
 - (D) Logical analysis of a problem increases the number of possible solutions.
 - (E) Intuition enables managers to employ their practical experience more efficiently.

Logical structure

This question asks the reader to select the statement for which there is the most justification in the passage. The entire passage places value on the use of intuition, so the answer to this question is bound to show a benefit of intuition. Lines 25–27 reveal that intuition is based on *years of painstaking practice and hands-on experience* and lines 38–40 explain that, in contrast to formal decision analysis, intuition allows managers to *move rapidly to engender a plausible solution*. Thus, intuition enables managers to apply their experience quickly and productively, that is, efficiently.

- A The first paragraph acknowledges that most successful managers are intuitive, but it does not go so far as to make this comparison.
- B There is no support for or against this statement in the passage; Isenberg's research shows why intuition is beneficial, but does not address how managers justify their decisions.
- C Intuition does not compete with rational analysis, but complements it; line 25 provides an assurance that intuition is *not arbitrary or irrational*.
- D The passage does not support this claim for logical analysis.

- E **Correct.** Managers can reach decisions more efficiently through an intuitive approach based on experience than through time-consuming formal analyses.

The correct answer is E.

Questions 99–103 refer to the passage on page 404.

99. The passage is primarily concerned with
- (A) identifying two practices in medical research that may affect the accuracy of clinical trials
 - (B) describing aspects of medical research that tend to drive up costs
 - (C) evaluating an analysis of certain shortcomings of current medical research practices
 - (D) describing proposed changes to the ways in which clinical trials are conducted
 - (E) explaining how medical researchers have traditionally conducted clinical trials and how such trials are likely to change

Main idea

This question requires an understanding of what the passage as a whole is doing. The passage introduces Frazier and Mosteller as proposing changes to the ways clinical trials in medical research are currently conducted. The rest of the passage then describes these proposed changes together with the support Frazier and Mosteller provide for adopting these changes.

- A The passage identifies practices in medical research to help illustrate the basis for Frazier and Mosteller's proposed changes.
- B The passage mentions medical research costs as one example within the larger description of Frazier and Mosteller's proposed changes.
- C The passage is not concerned with evaluating Frazier and Mosteller's proposed changes.
- D **Correct.** The passage describes the changes proposed by Frazier and Mosteller to the way clinical trials are conducted.
- E The passage is not concerned with establishing the likelihood of any changes to the way medical research is conducted.

The correct answer is D.

100. Which of the following can be inferred from the passage about a study of the category of patients referred to in lines 21–23?
- (A) Its findings might have limited applicability.
 - (B) It would be prohibitively expensive in its attempt to create ideal conditions.
 - (C) It would be the best way to sample the total population of potential patients.
 - (D) It would allow researchers to limit information collection without increasing the risk that important variables could be overlooked.
 - (E) Its findings would be more accurate if it concerned treatments for a progressive disease than if it concerned treatments for a nonprogressive disease.

Inference

This question requires drawing an inference from information given in the passage. In describing the proposals put forth by Frazier and Mosteller, the passage states in lines 16–21 that they propose using more patients in clinical trials than are currently being used, and that the trials would thereby obtain *a more representative sample of the total population with the disease under study*. The passage then states that researchers often *restrict* (lines 21–23) their trials to certain types of patients, therefore limiting the applicability of their findings.

- A Correct.** The passage states that the researchers preferred to restrict the types of patients used in their studies, thereby using a less representative sample than if they used a more inclusive group of patients.
- B** The passage mentions the added expense of clinical trials only in relation to data storage, collection, and analysis.
- C** The passage describes the category of patients referred to as restricted and therefore unrepresentative of the total population.
- D** While the passage does mention the amount of data collected about an individual patient, that topic is not connected to the category of patients referred to in lines 21–23.

- E** The passage does not suggest that a study using the category of patients referred to would be more effective in investigating progressive diseases.

The correct answer is A.

101. It can be inferred from the passage that a study limited to patients like those mentioned in lines 21–23 would have which of the following advantages over the kind of study proposed by Frazier and Mosteller?
- (A) It would yield more data and its findings would be more accurate.
 - (B) It would cost less in the long term, though it would be more expensive in its initial stages.
 - (C) It would limit the number of variables researchers would need to consider when evaluating the treatment under study.
 - (D) It would help researchers to identify subgroups of patients with secondary conditions that might also be treatable.
 - (E) It would enable researchers to assess the value of an experimental treatment for the average patient.

Inference

This question requires understanding what the information in the passage implies. The passage explains that Frazier and Mosteller's proposal involves enrolling more patients in clinical trials (lines 18–19) than is the case with the category of patients referred to. The passage then explains that broadening the range of trial participants would allow an evaluation of particular treatments *under various conditions* and *for different patient subgroups* (lines 29–30). This strongly suggests that limiting the patients used to those described in the referred text would limit the number of variables researchers would need to consider.

- A** The passage suggests that not limiting the patients used in clinical trials will yield more data than restricting them will.
- B** The passage refers to the costs of clinical trials only as it concerns the collection, storage, and analysis of data collected from participants.

- C Correct.** By limiting the patients used to those having the ailment under study, the passage suggests that researchers need to consider fewer variables in their assessment of a treatment.
- D** The passage suggests that *not* limiting the types of patients used in clinical trials will better allow researchers to evaluate subgroups.
- E** The passage suggests that limiting the types of patients available for clinical trials results in data for specific, rather than average, populations.

The correct answer is C.

102. The author mentions patients' ages (line 33) primarily in order to

- (A) identify the most critical variable differentiating subgroups of patients
- (B) cast doubt on the advisability of implementing Frazier and Mosteller's proposals about medical research
- (C) indicate why progressive diseases may require different treatments at different stages
- (D) illustrate a point about the value of enrolling a wide range of patients in clinical trials
- (E) substantiate an argument about the problems inherent in enrolling large numbers of patients in clinical trials

Evaluation

Answering this question requires understanding how a particular piece of information functions in the passage as a whole. The passage is concerned with describing the proposals of Frazier and Mosteller. One of these proposals, described in the second paragraph, involves broadening the range of participants used in clinical trials. The passage states that in following this proposal, Frazier and Mosteller suggest that the effectiveness of treatments can be assessed for different patient subgroups. To affirm the value of broadening the range of participants, the passage then cites two examples of criteria by which relevant subgroups might be identified: disease stages and patients' ages.

- A** The passage makes no judgment as to the value of the subgroups it refers to in relation to broadened participation in clinical trials.
- B** The passage does not call into question the potential effectiveness of Frazier and Mosteller's proposals.
- C** The passage's example of patients' ages is not intended to be causally connected to its previous example regarding progressive diseases.
- D Correct.** Patients' ages are referred to in the passage to identify subgroups that could be evaluated if the range of participants in clinical trials were broadened.
- E** The passage refers to patients' ages in support of Frazier and Mosteller's proposal that more patients be used in clinical trials.

The correct answer is D.

103. According to the passage, which of the following describes a result of the way in which researchers generally conduct clinical trials?

- (A) They expend resources on the storage of information likely to be irrelevant to the study they are conducting.
- (B) They sometimes compromise the accuracy of their findings by collecting and analyzing more information than is strictly required for their trials.
- (C) They avoid the risk of overlooking variables that might affect their findings, even though doing so raises their research costs.
- (D) Because they attempt to analyze too much information, they overlook facts that could emerge as relevant to their studies.
- (E) In order to approximate the conditions typical of medical treatment, they base their methods of information collection on those used by hospitals.

Supporting ideas

This question asks for an identification of specific information given in the passage. The passage describes the proposals of Frazier and Mosteller as attempting to improve the way clinical trials have generally been conducted. In describing how current trials are generally conducted, the passage states that researchers collect *far more background information on patients than is strictly required for their trials* (lines 4–6) and that they therefore escalate the costs of the trials.

- A **Correct.** The passage states that researchers generally collect more information than they need to perform their clinical trials, which drives up the costs of the trials.
- B The passage makes no judgment about the accuracy of the information collected by researchers who currently hold clinical trials.
- C The passage states that the risk of overlooking relevant information in clinical trials is *never entirely eliminable* (lines 11–12).
- D The passage states that researchers generally collect more information than is relevant, not that they overlook relevant information.
- E The passage states that, in general, researchers currently collect more information than hospitals do (line 6).

The correct answer is A.

Questions 104–110 refer to the passage on page 406.

104. The author is primarily concerned with
- (A) advocating a return to an older methodology
 - (B) explaining the importance of a recent theory
 - (C) enumerating differences between two widely used methods
 - (D) describing events leading to a discovery
 - (E) challenging the assumptions on which a theory is based

Main idea

Examine the entire passage to find the author's primary concern. An analysis of this passage shows that the author introduces a recent theory in the first paragraph, explains the practical importance of the theory in the second, and discusses the methods of exploration the theory makes possible in the third and fourth paragraphs. The author is primarily concerned with presenting a new theory and showing why it is important.

- A The only older methodology cited in the passage, *simple prospecting methods*, leads to only an *occasional discovery* (lines 15–17); there is no indication that the author favors this.
- B **Correct.** The author describes a recent theory of ore formation and discusses its importance.
- C Three methods of exploration are described in the third paragraph, but differences among them are not discussed.
- D The passage describes a theory and the practice derived from it; it does not describe a series of events leading to a discovery.
- E The author describes two theories of ore formation in the first paragraph but does not challenge the assumptions on which either one is based.

The correct answer is B.

105. According to the passage, the widely held view of Archean-age gold-quartz vein systems is that such systems
- (A) were formed from metamorphic fluids
 - (B) originated in molten granite-like bodies
 - (C) were formed from alluvial deposits
 - (D) generally have surface expression
 - (E) are not discoverable through chemical tests

Supporting ideas

This question asks for information explicitly stated in the first paragraph where Archean-age gold-quartz vein systems are discussed. The recent theory is *contrary* to the *widely held* theory that Archean-age gold-quartz vein systems *were deposited from metamorphic fluids* (lines 6–7).

- A **Correct.** The widely held theory explains that the systems were *deposited from metamorphic fluids* (line 7).
- B It is the recent theory that holds that the systems were formed *from magmatic fluids that originated from molten granite-like bodies* (lines 3–4); the recent theory is not *the widely held view*.
- C Alluvial deposits are mentioned only in the context of *simple prospecting methods* (lines 14–16); there is nothing in the passage explicitly linking alluvial deposits to metamorphic fluids.
- D Lines 17–19 explain that most deposits *not yet discovered ... have no surface expression*, but there is no mention in the passage of widely held beliefs concerning surface expressions of the metamorphic fluids.
- E *Sensitive chemical tests* are able to detect deposits where mineralization has occurred (lines 27–29).

The correct answer is A.

106. The passage implies that which of the following steps would be the first performed by explorers who wish to maximize their chances of discovering gold?
- (A) Surveying several sites known to have been formed more than two billion years ago
 - (B) Limiting exploration to sites known to have been formed from metamorphic fluid
 - (C) Using an appropriate conceptual model to select a site for further exploration
 - (D) Using geophysical methods to analyze rocks over a broad area
 - (E) Limiting exploration to sites where alluvial gold has previously been found

Inference

Since the question uses the word *implies*, the answer will be an inference based on what the passage says about exploration. The third and fourth paragraphs describe the process of exploration. The high-technology methods are of no use to the explorer if the sites have not mineralized, *and to maximize the chances of discovery the explorer must therefore pay particular attention to selecting the ground formations most likely to be mineralized* (lines 30–35). Conceptual models based on observation and ore-formation theories allow the explorer to identify the areas most likely to be mineralized (lines 39–46).

- A Nothing in the passage indicates that a large portion of two-billion-year-old sites will have gold in them; it only indicates that if they are gold-quartz vein systems, they will be over two billion years old.
- B The widely held view, rather than the recent theory that is the focus of the passage, argued that gold-quartz vein systems were formed from metamorphic fluids. The passage says the recent theory has *considerable practical importance*, suggesting the benefits of applying the recent theory rather than this widely held view.
- C **Correct.** Conceptual models lead the explorer to the sites most likely to have mineralized.
- D Geophysical techniques are of no use unless ground formations in an area have been mineralized (lines 24–32).
- E The *simple prospecting methods* that find alluvial gold lead to only an *occasional discovery*; *most deposits not yet discovered ... are buried* (lines 15–19).

The correct answer is C.

107. Which of the following statements about discoveries of gold deposits is supported by information in the passage?
- (A) The number of gold discoveries made annually has increased between the time of the original gold rushes and the present.
 - (B) New discoveries of gold deposits are likely to be the result of exploration techniques designed to locate buried mineralization.
 - (C) It is unlikely that newly discovered gold deposits will ever yield as much as did those deposits discovered during the original gold rushes.
 - (D) Modern explorers are divided on the question of the utility of simple prospecting methods as a source of new discoveries of gold deposits.
 - (E) Models based on the theory that gold originated from magmatic fluids have already led to new discoveries of gold deposits.

Supporting ideas

This question requires consideration of explicit information throughout the passage. The second paragraph explains that *most deposits not yet discovered ... are buried* (lines 17–19), so the explorer’s best means of discovering them is the use of *conceptual models* to identify the sites most likely to have buried minerals (lines 35–38). At that point, the explorer may use the high-technology methods possible when buried mineralization is present (lines 22–29).

- A The passage does not discuss the number of gold discoveries.
- B Correct.** Since most gold deposits are buried, explorers must find the sites most likely to contain buried minerals.
- C The passage does not discuss the yield of gold discoveries.
- D While *simple prospecting methods* lead only to an *occasional discovery*, modern explorers are not said to dispute their utility (lines 15–17).
- E The passage does not say that gold deposits have already been found by using the models based on this recent theory.

The correct answer is B.

108. It can be inferred from the passage that which of the following is easiest to detect?
- (A) A gold-quartz vein system originating in magmatic fluids
 - (B) A gold-quartz vein system originating in metamorphic fluids
 - (C) A gold deposit that is mixed with granite
 - (D) A gold deposit that has shed alluvial gold
 - (E) A gold deposit that exhibits chemical halos

Application

To answer this question, apply what the passage says about gold deposits to the examples in the answer choices. The second paragraph states that the gold deposits discovered during the gold rushes were *exposed at the Earth’s surface*; they were found because *they had shed trails of alluvial gold that were easily traced by simple prospecting methods* (lines 11–16). Most deposits have not been detected because they are buried and have *no surface expression*. Thus the simplest gold to find would be that in a deposit that had shed alluvial gold.

- A The recent theory holds that gold-quartz vein systems are formed from magmatic fluids, but does not say that these systems have easily detectable surface expressions; the passage states that they form deep beneath the surface of Earth, which makes it unlikely that they will be easy to find.
- B The widely held view contends that gold-quartz vein systems are formed from metamorphic fluids, but does not say if these have easily detectable surface expressions.
- C The passage does not comment on gold deposits mixed with granite, although the recent theory does mention *molten granite-like bodies deep beneath the surface of the Earth* (lines 4–5).
- D Correct.** Finding gold deposits that have shed alluvial gold at the Earth’s surface is far easier than finding buried gold deposits.
- E One complex, difficult subsurface exploration method involves chemical tests detecting the subtle chemical halos that surround mineralized areas; clearly this is not the *easiest* means of detecting gold deposits.

The correct answer is D.

109. The theory mentioned in lines 1–5 relates to the conceptual models discussed in the passage in which of the following ways?

- (A) It may furnish a valid account of ore-forming processes, and, hence, can support conceptual models that have great practical significance.
- (B) It suggests that certain geological formations, long believed to be mineralized, are in fact mineralized, thus confirming current conceptual models.
- (C) It suggests that there may not be enough similarity across Archean-age gold-quartz vein systems to warrant the formulation of conceptual models.
- (D) It corrects existing theories about the chemical halos of gold deposits, and thus provides a basis for correcting current conceptual models.
- (E) It suggests that simple prospecting methods still have a higher success rate in the discovery of gold deposits than do more modern methods.

Logical structure

This question requires considering the conceptual models described in lines 35–41 in light of the recent theory (lines 1–5), which the author assures the reader has *considerable practical importance* (lines 10–11). The conceptual models are derived from observation and from *theories of ore-forming processes*. Therefore, the recent theory may explain ore formation in a way that leads to the development of an updated model, and that model may then aid in the discovery of gold deposits.

- A **Correct.** The theory provides an explanation of ore formation, which aids in creating a conceptual model that may help explorers find gold deposits.
- B The theory does not confirm models, but contributes to forming them.
- C The practical value of the theory is that it can help to formulate models.
- D The theory does not challenge theories about chemical halos but rather contributes to the development of conceptual models that might allow for the broader application of chemical halos.
- E The theory does not compare methods of discovering gold deposits.

The correct answer is A.

110. According to the passage, methods of exploring for gold that are widely used today are based on which of the following facts?

- (A) Most of the Earth's remaining gold deposits are still molten.
- (B) Most of the Earth's remaining gold deposits are exposed at the surface.
- (C) Most of the Earth's remaining gold deposits are buried and have no surface expression.
- (D) Only one type of gold deposit warrants exploration, since the other types of gold deposits are found in regions difficult to reach.
- (E) Only one type of gold deposit warrants exploration, since the other types of gold deposits are unlikely to yield concentrated quantities of gold.

Supporting ideas

This question concerns factual information stated in the passage. In contrast to the gold deposits discovered at the Earth's surface, *most deposits not yet discovered have gone undetected because they are buried and have no surface expression* (lines 17–19). The *methods widely used today* must search for buried minerals rather than minerals on the surface (lines 22–29).

- A The passage mentions neither molten gold nor the method to detect it.
- B The passage explicitly says that most deposits are buried.
- C **Correct.** The passage explicitly states that most gold deposits are buried, leaving no traces at the Earth's surface.
- D The passage neither distinguishes between types of gold nor describes inaccessible regions.
- E The passage does not relate types of gold to yields of gold deposits.

The correct answer is C.

Questions 111–114 refer to the passage on page 408.

111. The passage mentions which of the following as a factor that affects the role of *P. ochraceus* as a keystone species within different habitats?
- (A) The degree to which the habitat is sheltered from waves
 - (B) The degree to which other animals within a habitat prey on mussels
 - (C) The fact that mussel populations are often not dominant within some habitats occupied by *P. ochraceus*
 - (D) The size of the *P. ochraceus* population within the habitat
 - (E) The fact that there is great species diversity within some habitats occupied by *P. ochraceus*

Supporting idea

This question depends on recognizing what the passage states about the factors affecting *P. ochraceus*'s role as a keystone species, which is different in different habitats. According to the passage, *P. ochraceus* consumes and suppresses mussel populations in some habitats—specifically, those that are wave-exposed—making it a keystone predator in those habitats. But in wave-sheltered habitats, *P. ochraceus* does not play the same role in suppressing mussel populations.

- A Correct.** The passage clearly states that *P. ochraceus*'s role in wave-exposed habitats differs from its role in wave-sheltered habitats.
- B** The passage says that the impact of *P. ochraceus* predation on mussels is not strong in wave-sheltered habitats, but this is not—at least not at all sites—because other animals are preying on the mussels; rather, at least at some sites, it is because mussels are controlled by sand burial.
- C** The passage does not suggest that mussel populations are dominant in any habitats occupied by *P. ochraceus*.

- D** The size of the *P. ochraceus* population affects the size of the mussel population within wave-exposed habitats, but the passage does not suggest that *P. ochraceus*'s role as a keystone species depends on the size of its population within those habitats.
- E** The only other species the passage mentions in conjunction with *P. ochraceus* habitats is the mussel; the passage does not address species diversity in these habitats.

The correct answer is A.

112. Which of the following hypothetical experiments most clearly exemplifies the method of identifying species' roles that the author considers problematic?
- (A) A population of seals in an Arctic habitat is counted in order to determine whether it is the dominant species in that ecosystem.
 - (B) A species of fish that is a keystone species in one marine ecosystem is introduced into another marine ecosystem to see whether the species will come to occupy a keystone role.
 - (C) In order to determine whether a species of monkey is a keystone species within a particular ecosystem, the monkeys are removed from that ecosystem and the ecosystem is then studied.
 - (D) Different mountain ecosystems are compared to determine how geography affects a particular species' ability to dominate its ecosystem.
 - (E) In a grassland experiencing a changing climate, patterns of species extinction are traced in order to evaluate the effect of climate changes on keystone species in that grassland.

Application

Answering this question depends on recognizing what the author says about identifying species' roles in habitats and then extending that to another situation. The author considers a particular method of studying keystone species problematic: removing a suspected keystone species from its habitat and observing what happens to the ecosystem. The author finds this problematic because interactions among species are complex.

- A The author does not discuss counting the members of a population as a problematic way of determining whether that population is a dominant species.
- B The method that the author finds problematic has to do with observing what happens to an ecosystem when a keystone species is removed from it, not with observing what happens to a different ecosystem when the species is introduced into it.
- C **Correct.** The author states explicitly that removing a species from a habitat in order to determine its keystone status is problematic. Removing the monkeys from their habitat is a clear example of this problematic practice.
- D Comparison of habitats in order to determine geography's effect on a particular species' dominance would most likely find favor with the author, for this is the approach the author seems to advocate in investigating *P. ochraceus*'s keystone status.
- E The author does not discuss tracing patterns of extinction or changing climates in the passage.

The correct answer is C.

113. Which of the following, if true, would most clearly support the argument about keystone status advanced in the last sentence of the passage (lines 24–31)?
- (A) A species of bat is primarily responsible for keeping insect populations within an ecosystem low, and the size of the insect population in turn affects bird species within that ecosystem.
 - (B) A species of iguana occupies a keystone role on certain tropical islands, but does not play that role on adjacent tropical islands that are inhabited by a greater number of animal species.
 - (C) Close observation of a savannah ecosystem reveals that more species occupy keystone roles within that ecosystem than biologists had previously believed.
 - (D) As a keystone species of bee becomes more abundant, it has a larger effect on the ecosystem it inhabits.
 - (E) A species of moth that occupies a keystone role in a prairie habitat develops coloration patterns that camouflage it from potential predators.

Evaluation

To answer this question, focus on the argument advanced in the last sentence of the passage and identify what information would support that argument. In the last sentence of the passage, the author claims that keystone status depends on context. The author then offers three contextual factors that may affect a species' keystone status: geography, community diversity (i.e., the number of species in a given habitat), and length of species interaction. Evidence supporting this argument would show that context is important to a species' keystone status.

- A This scenario does not indicate anything about keystone status; this is simply a description of how species populations in a single ecosystem affect one another.
- B **Correct.** That the iguana is a keystone species in a location that has limited species diversity but not a keystone species in a location that has greater species diversity suggests that keystone status does indeed depend on context. Thus, this example supports the author's argument in the last sentence of the passage.
- C That biologists were mistaken about keystone species in a particular ecosystem does not have a bearing on whether keystone status is context dependent.
- D It is not surprising that an increase in a species' population would lead to that species having a larger effect on its ecosystem—but this does not speak directly to the question of whether keystone status itself depends on context.
- E A keystone species enhancing its ability to survive in a single ecosystem does not lend any support to the idea that keystone status depends on context. The moth's keystone status would have to undergo some change for this to have a bearing on the question of context.

The correct answer is B.

114. The passage suggests which of the following about the identification of a species as a keystone species?

- (A) Such an identification depends primarily on the species' relationship to the dominant species.
- (B) Such an identification can best be made by removing the species from a particular ecosystem and observing changes that occur in the ecosystem.
- (C) Such an identification is likely to be less reliable as an ecosystem becomes less diverse.
- (D) Such an identification seems to depend on various factors within the ecosystem.
- (E) Such an identification can best be made by observing predation behavior.

Inference

Answering this question requires identifying how the passage suggests that keystone species should be identified. The passage identifies a particular way in which keystone status should *not* be determined: removing a species and observing what happens to the ecosystem. The passage also argues that keystone status depends strongly on context: that is, an ecosystem's characteristics, including its geography and inhabitants, determine its keystone species.

- A While the passage uses an example of a keystone species, *P. ochraceus*, which preys on a species that would, in the keystone species' absence, be dominant, there is nothing to suggest that a keystone species *must* have a particular relationship with the dominant, or potentially dominant, species in an ecosystem.
- B The passage explicitly states that this method of identification would be problematic.
- C A reduction in an ecosystem's diversity might alter which species occupy keystone roles in that ecosystem, the passage suggests, but there is no indication that identifying such species would become more difficult.

- D **Correct.** If, as the passage suggests, keystone status for any given species depends on the context of the ecosystem in which it lives, then it is likely that identifying keystone species depends strongly on understanding what factors of the ecosystem contribute to creating keystone status. The passage lists such factors as geography, community diversity, and species interaction.
- E While the passage uses a predator, *P. ochraceus*, as its example of a keystone species, there is no indication that predation is an essential component of the actual definition of keystone species (*one whose effects are much larger than would be predicted from its abundance*).

The correct answer is D.

Questions 115–119 refer to the passage on page 410.

115. The passage is primarily concerned with

- (A) defending a controversial approach
- (B) criticizing an accepted view
- (C) summarizing research findings
- (D) contrasting competing theories
- (E) describing an innovative technique

Main idea

Figuring out the authors' primary concern depends on a careful review of the passage as a whole. The first paragraph identifies the larger question that is the context for the authors' investigation. The second paragraph presents the part of the question the authors researched, concluding with their unexpected results. The third paragraph explains the importance of these findings in relation to the larger question of the universe's possible "*close*." The authors' primary purpose in this passage is to summarize the findings of their research.

- A The authors do not discuss approaches to the question they research.
- B The authors mention that their findings do not conform to Kepler's law, but the passage's primary focus is on summarizing research findings and not on criticizing any particular view.
- C **Correct.** This passage presents a summation of the findings of the authors' research.
- D The authors do not contrast different theories in this passage.
- E The authors do not discuss new techniques in this passage.

The correct answer is C.

116. The authors' study indicates that, in comparison with the outermost regions of a typical spiral galaxy, the region just outside the nucleus can be characterized as having

- (A) higher rotational velocity and higher luminosity
- (B) lower rotational velocity and higher luminosity
- (C) lower rotational velocity and lower luminosity
- (D) similar rotational velocity and higher luminosity
- (E) similar rotational velocity and similar luminosity

Inference

In the second paragraph, the authors observe that *outside the bright nucleus of a typical spiral galaxy luminosity falls off rapidly* (lines 20–21); the region just outside the nucleus may thus be characterized as having higher luminosity than the outermost regions of a spiral galaxy. Their research finds that *the rotational velocity in spiral galaxies either remains constant with increasing distance from the center or increases slightly* (lines 27–30). The region just outside the nucleus may thus be characterized as sharing with the outermost regions of a spiral galaxy a similar rotational velocity.

- A This region was expected to have higher rotational velocity, but the research findings did not corroborate this hypothesis; it is correct that the region has higher luminosity.
- B The region does have higher luminosity, but not lower rotational velocity.
- C The region has neither lower luminosity nor lower rotational velocity.
- D **Correct.** The region has similar rotational velocity and higher luminosity.
- E The region has similar rotational velocity but higher luminosity.

The correct answer is D.

117. The authors' suggestion that "as much as 90 percent of the mass of the universe is not radiating at any wavelength with enough intensity to be detected on the Earth" (lines 34–37) would be most weakened if which of the following were discovered to be true?

- (A) Spiral galaxies are less common than types of galaxies that contain little nonluminous matter.
- (B) Luminous and nonluminous matter are composed of the same basic elements.
- (C) The bright nucleus of a typical spiral galaxy also contains some nonluminous matter.
- (D) The density of the observable universe is greater than most previous estimates have suggested.
- (E) Some galaxies do not rotate or rotate too slowly for their rotational velocity to be measured.

Application

The authors' conclusion about nonluminous matter is based on their study of the rotational velocity of spiral galaxies. If spiral galaxies were found to be atypical of galaxies, then it would be possible that, in those other galaxies, nonluminous matter does not increase as luminous matter decreases. If this were the case, the authors' conclusion would be based on a sample of galaxies not representative of the whole, and their argument would be seriously weakened.

- A **Correct.** The authors' conclusion assumes that spiral galaxies are typical of all galaxies; information calling that assumption into question weakens the argument.
- B The relation rather than the composition of luminous and nonluminous mass is relevant to the conclusion.
- C Nonluminous mass increases as luminous mass decreases: This finding does not rule out that the nucleus contains some nonluminous mass; the argument is not affected.
- D The density of the observable universe is only *a fraction* of the density needed to "*close*" the universe, so even if this density were greater, it is not likely to exceed the density of nonluminous matter.
- E The authors are concerned only with measurable rotational velocity.

The correct answer is A.

118. It can be inferred from information presented in the passage that if the density of the universe were equivalent to significantly less than three hydrogen atoms per cubic meter, which of the following would be true as a consequence?
- (A) Luminosity would be a true indicator of mass.
 - (B) Different regions in spiral galaxies would rotate at the same velocity.
 - (C) The universe would continue to expand indefinitely.
 - (D) The density of the invisible matter in the universe would have to be more than 70 times the density of the luminous matter.
 - (E) More of the invisible matter in spiral galaxies would have to be located in their nuclei than in their outer regions.

Inference

An inference is drawn from stated information. This question refers to the first paragraph, where the authors explain that *the critical density of matter needed to brake the expansion and "close" the universe is equivalent to three hydrogen atoms per cubic meter* (lines 7–9). If the density is significantly less, then the universe will not "*close*" but continue to expand indefinitely.

- A The authors' finding that luminosity is not a true indicator of mass is not derived from the conclusion that the density is less than three hydrogen atoms per cubic meter.
- B The authors' finding that different regions rotate at similar velocities does not come from the hypothesis about the density of the universe.
- C **Correct.** If the critical density needed to "*close*" the universe is equivalent to three hydrogen atoms per cubic meter, then a density of significantly less than this amount means that the universe will continue its expansion.
- D This statement would be true of the hypothetical "*close*" of the universe, but if the density is less than three hydrogen atoms per cubic meter, the universe will continue its expansion.
- E This statement cannot be inferred from the hypothesis about the density of the universe.

The correct answer is C.

119. The authors propose all of the following as possibly contributing to the "missing matter" in spiral galaxies EXCEPT
- (A) massive black holes
 - (B) small black holes
 - (C) small, dim stars
 - (D) massive stars
 - (E) large planets

Supporting ideas

This question asks the reader to find the list of possible explanations for the “missing” or *dark matter* that the authors give in the passage and to check that list against the possible answers. Using the process of elimination will show which answer is not included on the authors’ list. In the final paragraph, the authors write, *Such dark matter could be in the form of extremely dim stars of low mass, of large planets like Jupiter, or of black holes, either small or massive* (lines 37–40).

- A The authors include massive black holes.
- B The authors include small black holes.
- C The authors include small, dim stars.
- D Correct.** The authors do not include massive stars in their list of possible explanations for “missing matter.”
- E The authors include large planets.

The correct answer is D.

Questions 120–127 refer to the passage on page 412.

120. The primary purpose of the passage is to

- (A) advocate a more positive attitude toward technological change
- (B) discuss the implications for employees of the modernization of a telephone exchange
- (C) consider a successful challenge to the constructivist view of technological change
- (D) challenge the position of advocates of technological determinism
- (E) suggest that the social causes of technological change should be studied in real situations

Main idea

This question asks for an assessment of what the passage as a whole is doing. The passage introduces Clark’s study as a *solid contribution* (lines 3–4) to the debate between technological determinists and social constructivists. In the second paragraph, Braverman is introduced as holding a position of social constructivism, a position that Clark takes issue with. In the final paragraph, the passage holds that Clark *refutes the extremes of the constructivists* (line 33), and Clark’s arguments challenging social constructivism are then described.

- A The passage takes no position on the merits of technological change but is concerned only with the role of such change in society.
- B The passage mentions telephone exchange workers as an example that helps illustrate the more central debate between determinists and constructivists.
- C Correct.** The passage is mainly concerned with portraying Clark’s view as a successful challenge to constructivism.
- D The passage describes Clark’s view as a successful challenge to social constructivism, not technological determinism.
- E The passage is concerned with describing a challenge to social constructivism and not with suggesting the context in which technological change ought to be studied.

The correct answer is C.

121. Which of the following statements about the modernization of the telephone exchange is supported by information in the passage?

- (A) The new technology reduced the role of managers in labor negotiations.
- (B) The modernization was implemented without the consent of the employees directly affected by it.
- (C) The modernization had an impact that went significantly beyond maintenance routines.
- (D) Some of the maintenance workers felt victimized by the new technology.
- (E) The modernization gave credence to the view of advocates of social constructivism.

Supporting ideas

This question requires recognizing information contained in the passage. The passage states in the first paragraph that Clark's study focused on the modernization of a telephone exchange and the effect this had on maintenance work and workers. After describing Braverman's analysis in the second paragraph as being at odds with Clark's views, the passage discusses Clark's views in more detail in the final paragraph. As part of this discussion, the passage notes that Clark shows how a change from *maintenance-intensive electromechanical switches to semielectronic switching systems* at the telephone exchange *altered work tasks, skills, training opportunities, administration, and organization of workers* (lines 41–46). Thus, the passage shows that the modernization of the telephone exchange affected much more than maintenance routines.

- A The passage does not discuss whether new technology reduces the role of managers in labor negotiations.
- B The passage does not discuss the role of employee consent in the modernization of the telephone exchange.
- C **Correct.** The passage states that the modernization of the telephone exchange affected tasks, skills, training, administration, and the organization of workers.
- D The passage does not suggest that maintenance workers felt victimized by the modernization of the telephone exchange.
- E The passage describes modernization as a fact viewable from a perspective of social constructivism or technological determinism, but that does not in itself support either view.

The correct answer is C.

122. Which of the following most accurately describes Clark's opinion of Braverman's position?

- (A) He respects its wide-ranging popularity.
- (B) He disapproves of its misplaced emphasis on the influence of managers.
- (C) He admires the consideration it gives to the attitudes of the workers affected.

- (D) He is concerned about its potential to impede the implementation of new technologies.
- (E) He is sympathetic to its concern about the impact of modern technology on workers.

Inference

Answering this question requires inferring what the passage's author likely believes. The passage describes Braverman's position as one of mainstream social constructivism (lines 23–24), a position that Clark takes issue with. Although it describes Braverman's position, the rest of the passage is devoted to showing how Clark's position takes issue with Braverman's. In the second paragraph, the passage describes Clark as holding that *technology can be a primary determinant of social and managerial organization* (lines 11–12), which suggests that managers are sometimes subordinate to technological change. In lines 16–19, however, Braverman is described as holding that *the shape of a technological system is subordinate to the manager's desire to wrest control of the labor process from the workers*, which shows that Clark and Braverman are at odds on this point.

- A Since the passage says that Clark believes an important insight *has been obscured by the recent sociological fashion* that Braverman's views exemplify (lines 12–15), one cannot infer that Clark respects the popularity of Braverman's views.
- B **Correct.** The passage shows that Clark believes managers to have less influence over how technology affects an organization than Braverman claims that they have.
- C The passage does not indicate that Clark admires any aspect of Braverman's position.
- D The passage does not indicate that Clark considers impediments to modernization.
- E The passage does not indicate that Clark is sympathetic to any concerns attributed to Braverman.

The correct answer is B.

123. The information in the passage suggests that which of the following statements from hypothetical sociological studies of change in industry most clearly exemplifies the social constructivists' version of technological determinism?

- (A) It is the available technology that determines workers' skills, rather than workers' skills influencing the application of technology.
- (B) All progress in industrial technology grows out of a continuing negotiation between technological possibility and human need.
- (C) Some organizational change is caused by people; some is caused by computer chips.
- (D) Most major technological advances in industry have been generated through research and development.
- (E) Some industrial technology eliminates jobs, but educated workers can create whole new skills areas by the adaptation of the technology.

Application

This question requires understanding different points of view discussed in the passage. In the first paragraph, the passage mentions the debate involving technological determinism and social constructivism. In the second and third paragraphs, the passage uses Braverman's analysis to illustrate the social constructivists' position and in the third paragraph suggests that the constructivists are *misrepresenting technological determinism* (lines 25–26). In lines 31–32, the constructivists are reported to hold that technological determinism views technology as *existing outside society, capable of directly influencing skills and work organization*.

- A **Correct.** This statement is consistent with the constructivists' view that technological determinism sees technology as outside of society, influencing workers' skills.
- B The passage states that the constructivists hold that *technological determinists are supposed to believe ... that machinery imposes appropriate forms of order on society* (lines 27–29), suggesting that no negotiation is present.

- C According to the description of them in the passage, constructivists portray technological determinists as believing that technology, not people, drives organizational change.
- D The passage does not portray either constructivists or determinists as being concerned with technological research and development.
- E The passage does not portray either constructivists or determinists as being concerned with technology-driven job elimination or creation.

The correct answer is A.

124. The information in the passage suggests that Clark believes that which of the following would be true if social constructivism had not gained widespread acceptance?

- (A) Businesses would be more likely to modernize without considering the social consequences of their actions.
- (B) There would be greater understanding of the role played by technology in producing social change.
- (C) Businesses would be less likely to understand the attitudes of employees affected by modernization.
- (D) Modernization would have occurred at a slower rate.
- (E) Technology would have played a greater part in determining the role of business in society.

Inference

Answering this question involves understanding a point of view as it is described in the passage. The passage aligns Clark's study closely with the technological determinists, summarizing his view in lines 11–12: *technology can be a primary determinant of social and managerial organization*. In the following sentence, the passage states that Clark believes that *this possibility is obscured by the recent sociological fashion, exemplified by Braverman's analysis* (lines 12–15). After illustrating Braverman's analysis, the passage then states that it represents *social constructivism*.

- A According to the passage, Clark holds that constructivists obscure how modernization might have social consequences.
- B Correct.** According to the passage, Clark sees constructivism as obscuring the possibility that technology plays a primary role in social change.
- C The passage does not discuss how the attitudes of employees are perceived by their employers.
- D The passage describes a debate about the history and sociology of technology; it does not suggest that sociological analyses affect the pace of modernization.
- E The passage describes a debate about the history and sociology of technology; it does not suggest that sociological analyses affect the role that technology plays in business.

The correct answer is B.

125. According to the passage, constructivists employed which of the following to promote their argument?
- (A) Empirical studies of business situations involving technological change
 - (B) Citation of managers supportive of their position
 - (C) Construction of hypothetical situations that support their view
 - (D) Contrasts of their view with a misstatement of an opposing view
 - (E) Descriptions of the breadth of impact of technological change

Supporting ideas

Answering this question involves recognizing information given in the passage. The passage indicates that a debate exists between technological determinists and social constructivists, suggesting that these views are in opposition. The passage goes on to state that *constructivists gain acceptance by misrepresenting technological determinism* (lines 25–26). This misrepresentation is presented as the *alternative to constructivism* (lines 29–30), suggesting that constructivists promoted their own view by contrasting it with a misrepresentation of determinists' views.

- A The passage mentions empirical studies in relation to Clark's study but not Braverman's analysis.
- B The passage does not mention that managers were supportive of any particular point of view within the sociology of technology.
- C The passage does not mention any hypothetical situations as being used by the constructivists in support of their view.
- D Correct.** The passage indicates that the constructivists have come into fashion by contrasting their own views with a misrepresentation of the views of technological determinists.
- E The passage does not describe the constructivists as making determinations regarding the degree of impact that technological change has on social or managerial organization.

The correct answer is D.

126. The author of the passage uses the expression "are supposed to" in line 27 primarily in order to
- (A) suggest that a contention made by constructivists regarding determinists is inaccurate
 - (B) define the generally accepted position of determinists regarding the implementation of technology
 - (C) engage in speculation about the motivation of determinists
 - (D) lend support to a comment critical of the position of determinists
 - (E) contrast the historical position of determinists with their position regarding the exchange modernization

Evaluation

This question requires understanding how a particular phrase functions in the passage as a whole. In the third paragraph the passage states that *constructivists gain acceptance by misrepresenting technological determinism* (lines 25–26) and follows this claim with an example of this misrepresentation, stating that *technological determinists are supposed to believe, for example* (lines 27–28). This line implies that the constructivist view of the determinists is inaccurate.

- A **Correct.** The passage uses the expression in part to provide an example of the constructivists' misrepresentation of the determinists.
- B The passage indicates that the view attributed to the determinists is a misrepresentation, not one that is generally accepted by determinists.
- C The expression in the passage is part of a discussion about the motivation of constructivists, not determinists.
- D The expression in the passage is part of a discussion that is critical of the constructivists, not the determinists.
- E The passage does not describe either the historical position of determinists or their position on the exchange modernization.

The correct answer is A.

127. Which of the following statements about Clark's study of the telephone exchange can be inferred from information in the passage?

- (A) Clark's reason for undertaking the study was to undermine Braverman's analysis of the function of technology.
- (B) Clark's study suggests that the implementation of technology should be discussed in the context of conflict between labor and management.
- (C) Clark examined the impact of changes in the technology of switching at the exchange in terms of overall operations and organization.

- (D) Clark concluded that the implementation of new switching technology was equally beneficial to management and labor.
- (E) Clark's analysis of the change in switching systems applies only narrowly to the situation at the particular exchange that he studied.

Inference

This question requires understanding what the passage implies in its discussion of a point of view. The details of Clark's views are discussed primarily in the final paragraph. The passage states that on an empirical level, Clark demonstrates that technological change regarding switches at the telephone exchange *altered work tasks, skills, training opportunities, administration, and organization of workers* (lines 44–46). The passage goes on to state Clark's contention that these changes even influenced negotiations between management and labor unions.

- A The passage indicates that Clark's study addressed the extremes of both technological determinism and social constructivism. It cites Braverman as a proponent of social constructivism but provides no evidence that Clark's motivation in beginning his study was specifically to target an analysis offered by Braverman.
- B The passage indicates that Clark attributed some organizational change to the way labor and management negotiated the introduction of technology but does not mention conflict between them.
- C **Correct.** According to the passage, Clark concludes that changes to the technology of switches had an influence on several aspects of the overall operations and organization of the telephone exchange.
- D The passage does not indicate that Clark assesses the benefits of technological change to either labor or management.
- E The passage indicates that Clark believes the change in switching technology influenced many aspects of the overall operations of the telephone exchange.

The correct answer is C.

Questions 128–133 refer to the passage on page 414.

128. According to the passage, the five well-known plant hormones are not useful in controlling the growth of crops because
- (A) it is not known exactly what functions the hormones perform
 - (B) each hormone has various effects on plants
 - (C) none of the hormones can function without the others
 - (D) each hormone has different effects on different kinds of plants
 - (E) each hormone works on only a small subset of a cell's genes at any particular time

Supporting ideas

To answer this question, look for information that is provided in the passage. Lines 16–20 explain that each of the five plant hormones *has more than one effect on the growth and development of plants*; for this reason, they *are not very useful in artificially controlling the growth of crops*.

- A Lines 20–25 describe in detail the multiple functions of the hormone auxin.
- B Correct.** The hormones *have so many simultaneous effects* on plants that they are not useful in controlling the growth of crops.
- C The passage provides no evidence to support this reason.
- D No information is given in the passage to support this reason.
- E The hormones' multiple effects on plant growth, not their specific effect at the cellular level, make them ineffective at artificially controlling crop growth.

The correct answer is B.

129. The passage suggests that the place of hypothalamic hormones in the hormonal hierarchies of animals is similar to the place of which of the following in plants?
- (A) Plant cell walls
 - (B) The complement of genes in each plant cell
 - (C) A subset of a plant cell's gene complement
 - (D) The five major hormones
 - (E) The oligosaccharins

Inference

This question asks for information that is not directly stated in the passage. It requires examining the analogy between the action of hormones in animals and in plants, which is the subject of the third and fourth paragraphs. In animals, hypothalamic hormones stimulate the pituitary gland to synthesize and release many different hormones; this process causes hormones from the adrenal cortex to be released. A similar *hierarchy of hormones* may exist in plants. The pleiotropic plant hormones may activate the enzymes that, in turn, release oligosaccharins from the cell wall. It is reasonable to infer that, in triggering the action, the plant hormones may act in a way similar to the hypothalamic hormones in animals.

- A Plant cell walls do not activate enzymes as the hypothalamic hormones activate the pituitary gland.
- B The passage states that all cells of a plant start out with the same complement of genes (lines 1–2), but this statement is not part of the analogy.
- C Line 5 refers to the subset of genes, but it is not a part of the analogy.
- D Correct.** Like hypothalamic hormones in animals, the five major plant hormones may be responsible for releasing the catalysts for growth.
- E The oligosaccharins are part of the hierarchy, but they are not equivalent to the hypothalamic hormones in releasing other hormones.

The correct answer is D.

130. The passage suggests that which of the following is a function likely to be performed by an oligosaccharin?
- (A) To stimulate a particular plant cell to become part of a plant's root system
 - (B) To stimulate the walls of a particular cell to produce other oligosaccharins
 - (C) To activate enzymes that release specific chemical messengers from plant cell walls
 - (D) To duplicate the gene complement in a particular plant cell
 - (E) To produce multiple effects on a particular subsystem of plant cells

Inference

Answering this question requires making an inference based on the information in the passage. The analogy between animal and plant hormones describes a process that ends, in animals, with *specific effects on target organs all over the body* (lines 33–34). While the pleiotropic plant hormones have multiple effects, the oligosaccharins are described as *more specific chemical messengers* (lines 43–44). It is reasonable to infer that oligosaccharins affect a specific part of a plant's growth.

- A **Correct.** This is the only response that gives an example of an effect on a specific aspect of plant growth and development.
- B The last paragraph explains that enzymes release oligosaccharins. The passage provides no evidence that oligosaccharins stimulate the release of other oligosaccharins.
- C The pleiotropic plant hormones, not the oligosaccharins, may activate the enzymes (lines 41–43).
- D The passage does not discuss such duplication.
- E The oligosaccharins, as *more specific chemical messengers*, have a specific effect, not multiple effects, on plant growth.

The correct answer is A.

131. The author mentions specific effects that auxin has on plant development in order to illustrate the
- (A) point that some of the effects of plant hormones can be harmful
 - (B) way in which hormones are produced by plants
 - (C) hierarchical nature of the functioning of plant hormones
 - (D) differences among the best-known plant hormones
 - (E) concept of pleiotropy as it is exhibited by plant hormones

Logical structure

To answer this question, reread the section where auxin is discussed. The second paragraph explains that each of the five major pleiotropic hormones, including auxin, *has more than one effect on the growth and development of plants*. The author then lists auxin's multiple effects as an example of the principle of pleiotropy in plants.

- A The passage does not discuss harmful effects.
- B The passage discusses the effects of hormones, not their production.
- C Auxin is used to exemplify the many different effects of a pleiotropic hormone, not its role in a hierarchy of hormones.
- D The differences among the five major hormones are not discussed.
- E **Correct.** The author lists auxin's multiple effects to illustrate how pleiotropic hormones affect plant growth.

The correct answer is E.

132. According to the passage, which of the following best describes a function performed by oligosaccharins?
- (A) Regulating the daily functioning of a plant's cells
 - (B) Interacting with one another to produce different chemicals
 - (C) Releasing specific chemical messengers from a plant's cell walls
 - (D) Producing the hormones that cause plant cells to differentiate to perform different functions
 - (E) Influencing the development of a plant's cells by controlling the expression of the cells' genes

Supporting ideas

To answer this question, look for information that is provided in the passage. Oligosaccharins are *regulatory molecules* (line 13). They form part of the complex system that turns on, or expresses, a small subset of genes in a particular kind of cell. As explained in the first paragraph, this process allows plant cells to differentiate and form different plant structures. Unlike the five major plant hormones, the oligosaccharins affect a specific aspect of the plant's growth (lines 14–17).

- A The passage does not discuss the daily functioning of a plant's cells.
- B The passage provides no evidence of this interaction.
- C The oligosaccharins *are fragments of the cell wall* (line 39) and the *specific chemical messengers from the cell wall* (lines 43–44).
- D The oligosaccharins are not said to produce hormones.
- E **Correct.** Oligosaccharins are part of the system that turns on, or expresses, the subset of a cell's genes that allows cells to grow into different plant structures.

The correct answer is E.

133. The passage suggests that, unlike the pleiotropic hormones, oligosaccharins could be used effectively to
- (A) trace the passage of chemicals through the walls of cells
 - (B) pinpoint functions of other plant hormones
 - (C) artificially control specific aspects of the development of crops
 - (D) alter the complement of genes in the cells of plants
 - (E) alter the effects of the five major hormones on plant development

Inference

The passage does not explicitly state how oligosaccharins could be used, but a use can be inferred. The second paragraph establishes that the pleiotropic hormones are not useful in artificially controlling crop growth because of their multiple, diverse effects. Oligosaccharins are contrasted with the hormones because they have specific effects. Thus it is reasonable to infer that oligosaccharins might be used to control specific aspects of crop growth.

- A Passage of chemicals through cell walls is not discussed.
- B The passage does not indicate that oligosaccharins act in this way.
- C **Correct.** Because the oligosaccharins have specific rather than multiple effects, they might have the potential to be used to control specific aspects of a crop's growth.

- D The oligosaccharins are not said to alter the cells' complement of genes.
- E The passage does not show that oligosaccharins alter the hormones' effects.

The correct answer is C.

Questions 134–139 refer to the passage on page 416.

134. The author indicates explicitly that which of the following records has been a source of information in her investigation?
- (A) United States Immigration Service reports from 1914 to 1930
 - (B) Payrolls of southern manufacturing firms between 1910 and 1930
 - (C) The volume of cotton exports between 1898 and 1910
 - (D) The federal census of 1910
 - (E) Advertisements of labor recruiters appearing in southern newspapers after 1910

Supporting ideas

Since the question uses the word *explicitly*, it is clear that the answer can be found in the passage. In lines 27–30, the author refers to the number of African American workers in *manufacturing and mechanical pursuits*, a phrase cited as coming from the federal census and indicating that she was using census data. While she probably used other sources as well, no other source is explicitly mentioned.

- A Immigration Service reports are not mentioned in the passage.
- B Payroll records are not mentioned in the passage.
- C While the decline of the cotton industry is mentioned, records of exports are not.
- D **Correct.** The federal census is indicated as a source of information on the employment of African American workers.
- E Labor recruiters and the African American press are mentioned, but there is no mention of data being collected from labor recruiting ads.

The correct answer is D.

135. In the passage, the author anticipates which of the following as a possible objection to her argument?
- (A) It is uncertain how many people actually migrated during the Great Migration.
 - (B) The eventual economic status of the Great Migration migrants has not been adequately traced.
 - (C) It is not likely that people with steady jobs would have reason to move to another area of the country.
 - (D) It is not true that the term “manufacturing and mechanical pursuits” actually encompasses the entire industrial sector.
 - (E) Of the African American workers living in southern cities, only those in a small number of trades were threatened by obsolescence.

Logical structure

Answering questions about the author’s line of argument requires following the steps in the logical structure of that argument. The author argues that many of the African American migrants to the North may have lived and worked in southern urban areas, not rural areas. In lines 33–36, she recognizes that some people may find it *surprising to argue* that African Americans with steady jobs would leave and proceeds to offer *an explanation* based on southern labor conditions. She thus anticipates the objection that workers would not leave steady jobs.

- A The actual number of people migrating is not part of the author’s argument, which concerns whether the migrants came from urban or rural backgrounds.
- B The eventual economic status is outside the scope of the argument.
- C **Correct.** The author anticipates this objection and answers it by citing southern labor conditions.

- D The author claims that “*manufacturing and mechanical pursuits*” encompassed roughly *the entire industrial sector* (lines 29–31) but does not address—either explicitly or implicitly—any possible objections relating to this claim.
- E The number of industrial workers leaving southern cities specifically because of job obsolescence is not at issue and is thus not the basis for a potential objection. In the final paragraph, the author is simply presenting her case that wage pressures affected southern African American urban workers in general, in both artisan trades and newly developed industries.

The correct answer is C.

136. According to the passage, which of the following is true of wages in southern cities in 1910?
- (A) They were being pushed lower as a result of increased competition.
 - (B) They had begun to rise so that southern industry could attract rural workers.
 - (C) They had increased for skilled workers but decreased for unskilled workers.
 - (D) They had increased in large southern cities but decreased in small southern cities.
 - (E) They had increased in newly developed industries but decreased in the older trades.

Supporting ideas

The information that this question asks for is stated in the passage and can be found by careful rereading. The last paragraph is about working conditions in the South. Lines 52–55 show that an influx of rural workers had increased competition for the available industrial jobs and driven wages lower.

- A **Correct.** Lines 52–55 indicate that wages were going down as more workers arrived from rural areas and competed for jobs.
- B Rural workers arrived in the city because of the boll weevil infestation, not because of the promise of higher wages, and their arrival depressed wages.
- C The passage refers to wages for industrial jobs but does not distinguish between the wages of skilled workers and unskilled workers in this respect.
- D The passage does not discuss wage differences between large and small southern cities.
- E The passage provides no information on differences in wages between older trades and new industries.

The correct answer is A.

137. The author cites each of the following as possible influences in an African American worker's decision to migrate north in the Great Migration EXCEPT
- (A) wage levels in northern cities
 - (B) labor recruiters
 - (C) competition from rural workers
 - (D) voting rights in northern states
 - (E) the African American press

Supporting ideas

Use the process of elimination to answer this question regarding what specifically does NOT appear in the passage. Four of the five answers are mentioned as influences on migration, and one is not. Match each answer with its mention in the passage; the choice that does not have a match is the correct answer. In this case, the only answer not mentioned is *voting rights*.

- A Northern wage levels are mentioned in lines 49–51.
- B Labor recruiters are mentioned in line 48.
- C Competition from rural workers is mentioned in lines 52–54.
- D **Correct.** Voting rights in northern states are not mentioned in the passage; the author has not cited them as a possible influence on a migrant's decision.
- E The African American press is mentioned in lines 48–49.

The correct answer is D.

138. It can be inferred from the passage that the “easy conclusion” mentioned in line 58 is based on which of the following assumptions?
- (A) People who migrate from rural areas to large cities usually do so for economic reasons.
 - (B) Most people who leave rural areas to take jobs in cities return to rural areas as soon as it is financially possible for them to do so.
 - (C) People with rural backgrounds are less likely to succeed economically in cities than are those with urban backgrounds.
 - (D) Most people who were once skilled workers are not willing to work as unskilled workers.
 - (E) People who migrate from their birthplaces to other regions of a country seldom undertake a second migration.

Inference

The question directs one's attention to line 58 and the phrase *easy conclusion*. In this context, *easy* has the negative connotation of “facile” or “simplistic” and suggests the author's disagreement with the conclusion that the economic problems of the migrants to northern urban areas were linked to their rural backgrounds. The *conclusion* derived from this link is first discussed in lines 17–19, where lack of economic success in the North is tied to a rural background.

- A The author does assume economic motives for migration, but this assumption is not linked to the conclusion about difficulties arising from a rural background.
- B This point is not discussed in the passage and is not related to the conclusion that a rural background is linked to economic problems.
- C **Correct.** The conclusion referred to in line 58 is based on the assumption that rural background will hinder economic success in urban settings.
- D The conclusion refers to all people from rural backgrounds and does not distinguish between skilled and unskilled workers.
- E The conclusion about the economic difficulties of migrants from rural backgrounds makes no assumptions about whether people migrate more than once.

The correct answer is C.

139. The primary purpose of the passage is to

- (A) support an alternative to an accepted methodology
- (B) present evidence that resolves a contradiction
- (C) introduce a recently discovered source of information
- (D) challenge a widely accepted explanation
- (E) argue that a discarded theory deserves new attention

Main idea

Answering questions about primary purpose requires thinking about the underlying structure of the passage. In the first paragraph, the author describes the Great Migration and mentions the assumption that most migrants came from rural areas. Some people then concluded that the migrants' economic difficulties were due to their rural background. In the second paragraph, the author speculates that many migrants could have come from urban areas, and in the third paragraph, she offers information that supports her position. Essentially, if the migrants came from urban areas, their subsequent economic difficulties cannot be attributed to their nonexistent rural background. An analysis of the structure of the passage thus reveals that the author is presenting a generally accepted view and then challenging it.

- A The author is showing the weakness in an explanation; there is no discussion of a methodology or of an alternative methodology.
- B The reasoning presented in the passage contradicts what the author describes as prevailing ideas but does not resolve any previous contradiction.
- C The author does not mention any source of information that was previously unavailable. While census records are briefly mentioned, they are hardly a recently discovered source of information.
- D **Correct.** The author first discusses a widely accepted explanation of the economic difficulties of African American migrants and then challenges that explanation.
- E The author argues against an explanation she thinks should be discarded. She does not discuss any previously discarded theory.

The correct answer is D.

7.4 Practice Questions

Each of the reading comprehension questions is based on the content of a passage. After reading the passage answer all questions pertaining to it on the basis of what is stated or implied in the passage. For each question, select the best answer of the choices given.

Line	Biologists have advanced two theories to explain why schooling of fish occurs in so many fish species. Because schooling is particularly widespread among
(5)	species of small fish, both theories assume that schooling offers the advantage of some protection from predators.
(10)	Proponents of theory A dispute the assumption that a school of thousands of fish is highly visible. Experiments have shown that any fish can be seen, even
(15)	in very clear water, only within a sphere of 200 meters in diameter. When fish are in a compact group, the spheres of visibility overlap. Thus the chance of a predator finding the school is only slightly greater than the chance of the
(20)	predator finding a single fish swimming alone. Schooling is advantageous to the individual fish because a predator's chance of finding any particular fish
(25)	swimming in the school is much smaller than its chance of finding at least one of the same group of fish if the fish were dispersed throughout an area.
(30)	However, critics of theory A point out that some fish form schools even in areas where predators are abundant and thus little possibility of escaping
(35)	detection exists. They argue that the school continues to be of value to its members even after detection. They advocate theory B, the "confusion effect," which can be explained in two different ways.
(40)	Sometimes, proponents argue, predators simply cannot decide which fish to attack. This indecision supposedly results from a predator's preference for striking prey that is distinct from the rest of the school in appearance. In many schools the fish are almost identical in appearance, making it difficult for a predator to select one. The second explanation for the "confusion effect" has to do with the sensory confusion caused by a large number of prey moving around the predator. Even if the predator makes the decision to attack a particular fish, the movement of other prey in the school can be distracting. The predator's difficulty can be compared to that of a tennis player trying to hit a tennis ball when two are approaching simultaneously.

Questions 1–4 refer to the passage.

1. According to the passage, theory B states that which of the following is a factor that enables a schooling fish to escape predators?
 - (A) The tendency of fish to form compact groups
 - (B) The movement of other fish within the school
 - (C) The inability of predators to detect schools

(D) The ability of fish to hide behind one another in a school

(E) The great speed with which a school can disperse

2. According to the passage, both theory A and theory B have been developed to explain how

(A) fish hide from predators by forming schools

(B) forming schools functions to protect fish from predators

(C) schooling among fish differs from other protective behaviors

(D) small fish are able to make rapid decisions

(E) small fish are able to survive in an environment densely populated by large predators

3. According to one explanation of the “confusion effect,” a fish that swims in a school will have greater advantages for survival if it

(A) tends to be visible for no more than 200 meters

(B) stays near either the front or the rear of a school

(C) is part of a small school rather than a large school

(D) is very similar in appearance to the other fish in the school

(E) is medium-sized

4. The author is primarily concerned with

(A) discussing different theories

(B) analyzing different techniques

(C) defending two hypotheses

(D) refuting established beliefs

(E) revealing new evidence

Line	Ecoefficiency (measures to minimize environmental impact through the reduction or elimination of waste from production processes) has become a
(5)	goal for companies worldwide, with many realizing significant cost savings from such innovations. Peter Senge and Goran Carstedt see this development
(10)	as laudable but suggest that simply adopting ecoefficiency innovations could actually worsen environmental stresses in the future. Such innovations
(15)	reduce production waste but do not alter the number of products manufactured nor the waste generated from their use and discard; indeed,
(20)	most companies invest in ecoefficiency improvements in order to increase profits and growth. Moreover, there is no guarantee that increased economic
(25)	growth from ecoefficiency will come in similarly ecoefficient ways, since in today’s global markets, greater profits may be turned into investment capital

(30)	that could easily be reinvested in old-style eco-inefficient industries. Even a vastly more ecoefficient industrial system could, were it to grow much larger, generate more total waste and destroy more habitat and species than would a smaller, less ecoefficient economy. Senge and Carstedt argue that to preserve the global environment and sustain economic growth, businesses must develop a new systemic approach that reduces total material use and total accumulated waste. Focusing exclusively on ecoefficiency, which offers a compelling business case according to established thinking, may distract companies from pursuing radically different products and business models.

Questions 5–7 refer to the passage.

5. The primary purpose of the passage is to
 - (A) explain why a particular business strategy has been less successful than was once anticipated
 - (B) propose an alternative to a particular business strategy that has inadvertently caused ecological damage
 - (C) present a concern about the possible consequences of pursuing a particular business strategy
 - (D) make a case for applying a particular business strategy on a larger scale than is currently practiced
 - (E) suggest several possible outcomes of companies' failure to understand the economic impact of a particular business strategy
6. The passage mentions which of the following as a possible consequence of companies' realization of greater profits through ecoefficiency?
 - (A) The companies may be able to sell a greater number of products by lowering prices.
 - (B) The companies may be better able to attract investment capital in the global market.
 - (C) The profits may be reinvested to increase economic growth through ecoefficiency.
 - (D) The profits may be used as investment capital for industries that are not ecoefficient.
 - (E) The profits may encourage companies to make further innovations in reducing production waste.
7. The passage implies that which of the following is a possible consequence of a company's adoption of innovations that increase its ecoefficiency?
 - (A) Company profits resulting from such innovations may be reinvested in that company with no guarantee that the company will continue to make

further improvements in ecoefficiency.

(B) Company growth fostered by cost savings from such innovations may allow that company to manufacture a greater number of products that will be used and discarded, thus worsening environmental stress.

(C) A company that fails to realize significant cost savings from such innovations may have little incentive to continue to minimize the environmental impact of its production processes.

(D) A company that comes to depend on such innovations to increase its profits and growth may be vulnerable in the global market to competition from old-style eco-inefficient industries.

(E) A company that meets its ecoefficiency goals is unlikely to invest its increased profits in the development of new and innovative ecoefficiency measures.

Line	Scientists long believed that two nerve clusters in the human hypothalamus, called suprachiasmatic nuclei (SCNs), were what controlled our circadian rhythms. Those rhythms are the biological cycles that recur approximately every 24 hours in synchronization with the cycle of sunlight and darkness caused by Earth's rotation. Studies have demonstrated that in some animals, the SCNs control daily fluctuations in blood pressure, body temperature, activity level, and alertness, as well as the nighttime release of the sleep-promoting agent melatonin. Furthermore, cells in the human retina dedicated to transmitting information about light levels to the SCNs have recently been discovered.
(5)	
(10)	
(15)	
(20)	Four critical genes governing circadian cycles have been found to be active in every tissue, however, not just the SCNs, of flies, mice, and humans. In addition, when laboratory rats that usually ate at will were fed only once a day, peak activity of a clock gene in their livers shifted by 12 hours, whereas the same clock gene in the SCNs remained synchronized with light cycles. While scientists do not dispute the role of the SCNs in controlling core functions such as the regulation of body temperature and blood pressure, scientists now believe that circadian clocks in other organs and tissues may respond to external cues other than light—including temperature changes—that recur regularly every 24 hours.
(25)	

Questions 8–10 refer to the passage.

8. The primary purpose of the passage is to

- (A) challenge recent findings that appear to contradict earlier findings
- (B) present two sides of an ongoing scientific debate
- (C) report answers to several questions that have long puzzled researchers
- (D) discuss evidence that has caused a long-standing belief to be revised

(E) attempt to explain a commonly misunderstood biological phenomenon

9. The passage mentions each of the following as a function regulated by the SCNs in some animals EXCEPT

(A) activity level

(B) blood pressure

(C) alertness

(D) vision

(E) temperature

10. The author of the passage would probably agree with which of the following statements about the SCNs?

(A) The SCNs are found in other organs and tissues of the body besides the hypothalamus.

(B) The SCNs play a critical but not exclusive role in regulating circadian rhythms.

(C) The SCNs control clock genes in a number of tissues and organs throughout the body.

(D) The SCNs are a less significant factor in regulating blood pressure than scientists once believed.

(E) The SCNs are less strongly affected by changes in light levels than they are by other external cues.

Line	Io and Europa, the inner two of Jupiter's four largest moons, are about the size of Earth's moon and are composed mostly or entirely of rock and metal.
(5)	Ganymede and Callisto are larger and roughly half ice. Thus, these four moons are somewhat analogous to the planets of the solar system, in which the rock- and metal-rich inner planets are distinct from the much larger gas-
(10)	and ice-rich outer planets. Jupiter's moons are, however, more "systematic": many of their properties vary continuously with distance from Jupiter. For
(15)	example, Io is ice-free, Europa has a surface shell of ice, and while Ganymede and Callisto are both ice-rich, outermost Callisto has more.
(20)	This compositional gradient has geological parallels. Io is extremely geologically active, Europa seems to be active on a more modest scale, and
(25)	Ganymede has undergone bouts of activity in its geological past. Only Callisto reveals no geological activity. In similar fashion, Callisto's surface is very
(30)	heavily cratered from the impact of comets and asteroids; Ganymede, like Earth's moon, is heavily cratered in parts; Europa is very lightly cratered; and
	no craters have been detected on Io, even though Jupiter's gravity attracts comets and asteroids passing near it, substantially increasing the bombardment rate of the inner moons compared to that of the outer ones. But

because of Io's high degree of geological activity, its surface undergoes more-or-less continuous volcanic resurfacing.

Questions 11–13 refer to the passage.

11. According to the passage, the difference in the amount of cratering on Callisto's and Io's respective surfaces can probably be explained by the difference between these two moons with respect to which of the following factors?
- (A) Size
 - (B) Ice content
 - (C) The rate of bombardment by comets and asteroids
 - (D) The influence of Jupiter's other moons
 - (E) The level of geological activity
12. Which of the following best describes the purpose of the second paragraph of the passage?
- (A) To provide further evidence of the systematic variation in the characteristics of Jupiter's four largest moons
 - (B) To present a comprehensive theory to explain the systematic variation in the characteristics of Jupiter's four largest moons
 - (C) To explain the significance of the systematic variation in the characteristics of Jupiter's four largest moons
 - (D) To introduce facts that contradict conventional assumptions about Jupiter's four largest moons
 - (E) To contrast the characteristics of Jupiter's four largest moons with the characteristics of the planets of the solar system
13. The author's reference to Jupiter's gravity in line 25 serves primarily to
- (A) indicate why the absence of craters on Io's surface is surprising
 - (B) explain the presence of craters on the surface of Jupiter's four largest moons
 - (C) provide an explanation for the lack of geological activity on Callisto
 - (D) contrast Jupiter's characteristics with the characteristics of its four largest moons
 - (E) illustrate the similarity between Jupiter's four largest moons and the planets of the solar system

Line (5)	When Jamaican-born social activist Marcus Garvey came to the United States in 1916, he arrived at precisely the right historical moment. What made the moment right was the return of African American soldiers from the First

World War in 1918, which created an ideal constituency for someone with Garvey's message of unity, pride, and improved conditions for African American communities.

Hoping to participate in the traditional American ethos of individual success, many African American people entered the armed forces with enthusiasm, only to find themselves segregated from white troops and subjected to numerous indignities. They returned to a United States that was as segregated as it had been before the war. Considering similar experiences, anthropologist Anthony F. C. Wallace has argued that when a perceptible gap arises between a culture's expectations and the reality of that culture, the resulting tension can inspire a revitalization movement: an organized, conscious effort to construct a culture that fulfills long-standing expectations.

Some scholars have argued that Garvey created the consciousness from which he built, in the 1920s, the largest revitalization movement in African American history. But such an argument only tends to obscure the consciousness of identity, strength, and sense of history that already existed in the African American community. Garvey did not create this consciousness; rather, he gave this consciousness its political expression.

Questions 14–17 refer to the passage.

14. According to the passage, which of the following contributed to Marcus Garvey's success?
 - (A) He introduced cultural and historical consciousness to the African American community.
 - (B) He believed enthusiastically in the traditional American success ethos.
 - (C) His audience had already formed a consciousness that made it receptive to his message.
 - (D) His message appealed to critics of African American support for United States military involvement in the First World War.
 - (E) He supported the movement to protest segregation that had emerged prior to his arrival in the United States.
15. The passage suggests that many African American people responded to their experiences in the armed forces in which of the following ways?
 - (A) They maintained as civilians their enthusiastic allegiance to the armed forces.
 - (B) They questioned United States involvement in the First World War.
 - (C) They joined political organizations to protest the segregation of African American troops and the indignities they suffered in the military.
 - (D) They became aware of the gap between their expectations and the

realities of American culture.

(E) They repudiated Garvey's message of pride and unity.

16. It can be inferred from the passage that the "scholars" mentioned in line 24 believe which of the following to be true?

(A) Revitalization resulted from the political activism of returning African American soldiers following the First World War.

(B) Marcus Garvey had to change a number of prevailing attitudes in order for his mass movement to find a foothold in the United States.

(C) The prevailing sensibility of the African American community provided the foundation of Marcus Garvey's political appeal.

(D) Marcus Garvey hoped to revitalize consciousness of cultural and historical identity in the African American community.

(E) The goal of the mass movement that Marcus Garvey helped bring into being was to build on the pride and unity among African Americans.

17. According to the passage, many African American people joined the armed forces during the First World War for which of the following reasons?

(A) They wished to escape worsening economic conditions in African American communities.

(B) They expected to fulfill ideals of personal attainment.

(C) They sought to express their loyalty to the United States.

(D) They hoped that joining the military would help advance the cause of desegregation.

(E) They saw military service as an opportunity to fulfill Marcus Garvey's political vision.

Line	In terrestrial environments, gravity places special demands on the cardiovascular systems of animals. Gravitational pressure can cause blood to
(5)	pool in the lower regions of the body, making it difficult to circulate blood to critical organs such as the brain. Terrestrial snakes, in particular, exhibit adaptations that aid in circulating blood against the force of gravity.
(10)	The problem confronting terrestrial snakes is best illustrated by what happens to sea snakes when removed from their supportive medium. Because the
(15)	vertical pressure gradients within the blood vessels are counteracted by similar pressure gradients in the surrounding water, the distribution of blood throughout the body of sea snakes remains about the same regardless of their
(20)	orientation in space, provided they remain in the ocean. When removed from the water and tilted at various angles with the head up, however, blood pressure at their midpoint drops significantly, and at brain level falls to zero.

(25) That many terrestrial snakes in similar spatial orientations do not experience
(30) this kind of circulatory failure suggests that certain adaptations enable them
to regulate blood pressure more effectively in those orientations.
(35) One such adaptation is the closer proximity of the terrestrial snake's heart to
its head, which helps to ensure circulation to the brain, regardless of the
(40) snake's orientation in space. The heart of sea snakes can be located near the
middle of the body, a position that minimizes the work entailed in circulating
(45) blood to both extremities. In arboreal snakes, however, which dwell in trees
and often assume a vertical posture, the average distance from the heart to the
head can be as little as 15 percent of overall body length. Such a location
requires that blood circulated to the tail of the snake travel a greater distance
back to the heart, a problem solved by another adaptation. When climbing,
arboreal snakes often pause momentarily to wiggle their bodies, causing
waves of muscle contraction that advance from the lower torso to the head. By
compressing the veins and forcing blood forward, these contractions
apparently improve the flow of venous blood returning to the heart.

Questions 18–25 refer to the passage.

18. The passage provides information in support of which of the following assertions?
- (A) The disadvantages of an adaptation to a particular feature of an environment often outweigh the advantages of such an adaptation.
 - (B) An organism's reaction to being placed in an environment to which it is not well adapted can sometimes illustrate the problems that have been solved by the adaptations of organisms indigenous to that environment.
 - (C) The effectiveness of an organism's adaptation to a particular feature of its environment can only be evaluated by examining the effectiveness with which organisms of other species have adapted to a similar feature of a different environment.
 - (D) Organisms of the same species that inhabit strikingly different environments will often adapt in remarkably similar ways to the few features of those environments that are common.
 - (E) Different species of organisms living in the same environment will seldom adapt to features of that environment in the same way.
19. According to the passage, one reason that the distribution of blood in the sea snake changes little while the creature remains in the ocean is that
- (A) the heart of the sea snake tends to be located near the center of its body
 - (B) pressure gradients in the water surrounding the sea snake counter the effects of vertical pressure gradients within its blood vessels
 - (C) the sea snake assumes a vertical posture less frequently than do the

terrestrial and the arboreal snake

(D) the sea snake often relies on waves of muscle contractions to help move blood from the torso to the head

(E) the force of pressure gradients in the water surrounding the sea snake exceeds that of vertical pressure gradients within its circulatory system

20. It can be inferred from the passage that which of the following is true of species of terrestrial snakes that often need to assume a vertical posture?

(A) They are more likely to be susceptible to circulatory failure in vertical postures than are sea snakes.

(B) Their hearts are less likely to be located at the midpoint of their bodies than is the case with sea snakes.

(C) They cannot counteract the pooling of blood in lower regions of their bodies as effectively as sea snakes can.

(D) The blood pressure at their midpoint decreases significantly when they are tilted with their heads up.

(E) They are unable to rely on muscle contractions to move venous blood from the lower torso to the head.

21. The author describes the behavior of the circulatory system of sea snakes when they are removed from the ocean (see lines 17–20) primarily in order to

(A) illustrate what would occur in the circulatory system of terrestrial snakes without adaptations that enable them to regulate their blood pressure in vertical orientations

(B) explain why arboreal snakes in vertical orientations must rely on muscle contractions to restore blood pressure to the brain

(C) illustrate the effects of circulatory failure on the behavior of arboreal snakes

(D) illustrate the superiority of the circulatory system of the terrestrial snake to that of the sea snake

(E) explain how changes in spatial orientation can adversely affect the circulatory system of snakes with hearts located in relatively close proximity to their heads

22. It can be inferred from the passage that which of the following is a true statement about sea snakes?

(A) They frequently rely on waves of muscle contractions from the lower torso to the head to supplement the work of the heart.

(B) They cannot effectively regulate their blood pressure when placed in

seawater and tilted at an angle with the head pointed downward.

(C) They are more likely to have a heart located in close proximity to their heads than are arboreal snakes.

(D) They become acutely vulnerable to the effects of gravitational pressure on their circulatory system when they are placed in a terrestrial environment.

(E) Their cardiovascular system is not as complicated as that of arboreal snakes.

23. The author suggests that which of the following is a disadvantage that results from the location of a snake's heart in close proximity to its head?

(A) A decrease in the efficiency with which the snake regulates the flow of blood to the brain

(B) A decrease in the number of orientations in space that a snake can assume without loss of blood flow to the brain

(C) A decrease in blood pressure at the snake's midpoint when it is tilted at various angles with its head up

(D) An increase in the tendency of blood to pool at the snake's head when the snake is tilted at various angles with its head down

(E) An increase in the amount of effort required to distribute blood to and from the snake's tail

24. The primary purpose of the third paragraph is to

(A) introduce a topic that is not discussed earlier in the passage

(B) describe a more efficient method of achieving an effect discussed in the previous paragraph

(C) draw a conclusion based on information elaborated in the previous paragraph

(D) discuss two specific examples of phenomena mentioned at the end of the previous paragraph

(E) introduce evidence that undermines a view reported earlier in the passage

25. In the passage, the author is primarily concerned with doing which of the following?

(A) Explaining adaptations that enable the terrestrial snake to cope with the effects of gravitational pressure on its circulatory system

(B) Comparing the circulatory system of the sea snake with that of the terrestrial snake

(C) Explaining why the circulatory system of the terrestrial snake is different from that of the sea snake

(D) Pointing out features of the terrestrial snake’s cardiovascular system that make it superior to that of the sea snake

(E) Explaining how the sea snake is able to neutralize the effects of gravitational pressure on its circulatory system

Line	In 1988 services moved ahead of manufacturing as the main product of the United States economy. But what is meant by “services”? Some economists
(5)	define a service as something that is produced and consumed simultaneously, for example, a haircut. The broader, classical definition is that a service is an
(10)	intangible something that cannot be touched or stored. Yet electric utilities can store energy, and computer programmers save information electronically. Thus, the classical definition is hard to sustain.
(15)	The United States government’s definition is more practical: services are the residual category that includes everything that is not agriculture or industry.
(20)	Under this definition, services includes activities as diverse as engineering and driving a bus. However, besides lacking a strong conceptual framework, this definition fails to recognize the distinction between service industries and
(25)	service occupations. It categorizes workers based on their company’s final product rather than on the actual work the employees perform. Thus, the
(30)	many service workers employed by manufacturers—bookkeepers or janitors, for example—would fall under the industrial rather than the services category. Such ambiguities reveal the arbitrariness of this definition and suggest that, although practical for government purposes, it does not accurately reflect the composition of the current United States economy.

Questions 26–30 refer to the passage.

26. The author of the passage is primarily concerned with

- (A) discussing research data underlying several definitions
- (B) arguing for the adoption of a particular definition
- (C) exploring definitions of a concept
- (D) comparing the advantages of several definitions
- (E) clarifying some ambiguous definitions

27. In comparing the United States government’s definition of services with the classical definition, the author suggests that the classical definition is

- (A) more pragmatic
- (B) more difficult to apply
- (C) less ambiguous

(D) more widely used

(E) more arbitrary

28. The passage suggests which of the following about service workers in the United States?

(A) The number of service workers may be underestimated by the definition of services used by the government.

(B) There were fewer service workers than agricultural workers before 1988.

(C) The number of service workers was almost equal to the number of workers employed in manufacturing until 1988.

(D) Most service workers are employed in service occupations rather than in service industries.

(E) Most service workers are employed in occupations where they provide services that do not fall under the classical definition of services.

29. The author of the passage mentions which of the following as one disadvantage of the United States government's definition of services?

(A) It is less useful than the other definitions mentioned in the passage.

(B) It is narrower in scope than the other definitions mentioned in the passage.

(C) It is based on the final product produced rather than on the type of work performed.

(D) It does not recognize the diversity of occupations within the service industries.

(E) It misclassifies many workers who are employed in service industries.

30. The author refers to "service workers employed by manufacturers" (line 23) primarily in order to point out

(A) a type of worker not covered by the United States government's system of classifying occupations

(B) a flaw in the United States government's definition of services

(C) a factor that has influenced the growth of the service economy in the United States

(D) a type of worker who is classified on the basis of work performed rather than on the basis of the company's final product

(E) the diversity of the workers who are referred to as service workers

Line	Current feminist theory, in validating women's own stories of their experience, has encouraged scholars of women's history to view the use of

(5)	women's oral narratives as the methodology, next to the use of women's written autobiography, that brings historians closest to the "reality" of women's lives. Such narratives, unlike most standard histories, represent
(10)	experience from the perspective of women, affirm the importance of women's contributions, and furnish present-day women with historical continuity that is essential to their identity, individually and collectively.
(15)	Scholars of women's history should, however, be as cautious about accepting oral narratives at face value as they already are about written memories. Oral narratives are no more likely than are written narratives to provide a
(20)	disinterested commentary on events or people. Moreover, the stories people tell to explain themselves are shaped by narrative devices and storytelling
(25)	conventions, as well as by other cultural and historical factors, in ways that the storytellers may be unaware of. The political rhetoric of a particular era, for example, may influence women's interpretations of the significance of their experience. Thus a woman who views the Second World War as pivotal in increasing the social acceptance of women's paid work outside the home may reach that conclusion partly and unwittingly because of wartime rhetoric encouraging a positive view of women's participation in such work.

Questions 31–36 refer to the passage.

31. The passage is primarily concerned with
- (A) contrasting the benefits of one methodology with the benefits of another
 - (B) describing the historical origins and inherent drawbacks of a particular methodology
 - (C) discussing the appeal of a particular methodology and some concerns about its use
 - (D) showing that some historians' adoption of a particular methodology has led to criticism of recent historical scholarship
 - (E) analyzing the influence of current feminist views on women's interpretations of their experience
32. According to the passage, which of the following shapes the oral narratives of women storytellers?
- (A) The conventions for standard histories in the culture in which a woman storyteller lives
 - (B) The conventions of storytelling in the culture in which a woman storyteller lives
 - (C) A woman storyteller's experience with distinctive traditions of storytelling developed by the women in her family of origin
 - (D) The cultural expectations and experiences of those who listen to oral

narratives

(E) A woman storyteller's familiarity with the stories that members of other groups in her culture tell to explain themselves

33. The author of the passage would be most likely to make which of the following recommendations to scholars of women's history?

(A) They should take into account their own life experiences when interpreting the oral accounts of women's historical experiences.

(B) They should assume that the observations made in women's oral narratives are believed by the intended audience of the story.

(C) They should treat skeptically observations reported in oral narratives unless the observations can be confirmed in standard histories.

(D) They should consider the cultural and historical context in which an oral narrative was created before arriving at an interpretation of such a narrative.

(E) They should rely on information gathered from oral narratives only when equivalent information is not available in standard histories.

34. Which of the following best describes the function of the last sentence of the passage?

(A) It describes an event that historians view as crucial in recent women's history.

(B) It provides an example of how political rhetoric may influence the interpretations of experience reported in women's oral narratives.

(C) It provides an example of an oral narrative that inaccurately describes women's experience during a particular historical period.

(D) It illustrates the point that some women are more aware than others of the social forces that shape their oral narratives.

(E) It identifies the historical conditions that led to the social acceptance of women's paid work outside the home.

35. According to the passage, scholars of women's history should refrain from doing which of the following?

(A) Relying on traditional historical sources when women's oral narratives are unavailable

(B) Focusing on the influence of political rhetoric on women's perceptions to the exclusion of other equally important factors

(C) Attempting to discover the cultural and historical factors that influence the stories women tell

(D) Assuming that the conventions of women's written autobiographies are

similar to the conventions of women's oral narratives

(E) Accepting women's oral narratives less critically than they accept women's written histories

36. According to the passage, each of the following is a difference between women's oral narratives and most standard histories EXCEPT:

(A) Women's oral histories validate the significance of women's achievements.

(B) Women's oral histories depict experience from the point of view of women.

(C) Women's oral histories acknowledge the influence of well-known women.

(D) Women's oral histories present today's women with a sense of their historical relationship to women of the past.

(E) Women's oral histories are crucial to the collective identity of today's women.

Line	Manufacturers have to do more than build large manufacturing plants to realize economies of scale. It is true that as the capacity of a manufacturing
(5)	operation rises, costs per unit of output fall as plant size approaches
(10)	“minimum efficient scale,” where the cost per unit of output reaches a
(15)	minimum, determined roughly by the state of existing technology and size of the potential market. However, minimum efficient scale cannot be fully
(20)	realized unless a steady “throughput” (the flow of materials through a plant)
(25)	is attained. The throughput needed to maintain the optimal scale of production requires careful coordination not only of the flow of goods through
(30)	the production process, but also of the flow of input from suppliers and the
(35)	flow of output to wholesalers and final consumers. If throughput falls below a critical point, unit costs rise sharply and profits disappear. A manufacturer's
(40)	fixed costs and “sunk costs” (original capital investment in the physical plant) do not decrease when production declines due to inadequate supplies of raw
(45)	materials, problems on the factory floor, or inefficient sales networks.
	Consequently, potential economies of scale are based on the physical and engineering characteristics of the production facilities—that is, on tangible
	capital—but realized economies of scale are operational and organizational, and depend on knowledge, skills, experience, and teamwork—that is, on
	organized human capabilities, or intangible capital.
	The importance of investing in intangible capital becomes obvious when one looks at what happens in new capital-intensive manufacturing industries.
	Such industries are quickly dominated, not by the first firms to acquire
	technologically sophisticated plants of theoretically optimal size, but rather by
	the first to exploit the full potential of such plants. Once some firms achieve

this, a market becomes extremely hard to enter. Challengers must construct comparable plants and do so after the first movers have already worked out problems with suppliers or with new production processes. Challengers must create distribution networks and marketing systems in markets where first movers have all the contacts and know-how. And challengers must recruit management teams to compete with those that have already mastered these functional and strategic activities.

Questions 37–41 refer to the passage.

37. The passage suggests that in order for a manufacturer in a capital-intensive industry to have a decisive advantage over competitors making similar products, the manufacturer must
- (A) be the first in the industry to build production facilities of theoretically optimal size
 - (B) make every effort to keep fixed and sunk costs as low as possible
 - (C) be one of the first to operate its manufacturing plants at minimum efficient scale
 - (D) produce goods of higher quality than those produced by direct competitors
 - (E) stockpile raw materials at production sites in order to ensure a steady flow of such materials
38. The passage suggests that which of the following is true of a manufacturer's fixed and sunk costs?
- (A) The extent to which they are determined by market conditions for the goods being manufactured is frequently underestimated.
 - (B) If they are kept as low as possible, the manufacturer is very likely to realize significant profits.
 - (C) They are the primary factor that determines whether a manufacturer will realize economies of scale.
 - (D) They should be on a par with the fixed and sunk costs of the manufacturer's competitors.
 - (E) They are not affected by fluctuations in a manufacturing plant's throughput.
39. In the context of the passage as a whole, the second paragraph serves primarily to
- (A) provide an example to support the argument presented in the first paragraph
 - (B) evaluate various strategies discussed in the first paragraph

(C) introduce evidence that undermines the argument presented in the first paragraph

(D) anticipate possible objections to the argument presented in the first paragraph

(E) demonstrate the potential dangers of a commonly used strategy

40. The passage LEAST supports the inference that a manufacturer's throughput could be adversely affected by

(A) a mistake in judgment regarding the selection of a wholesaler

(B) a breakdown in the factory's machinery

(C) a labor dispute on the factory floor

(D) an increase in the cost per unit of output

(E) a drop in the efficiency of the sales network

41. The primary purpose of the passage is to

(A) point out the importance of intangible capital for realizing economies of scale in manufacturing

(B) show that manufacturers frequently gain a competitive advantage from investment in large manufacturing facilities

(C) argue that large manufacturing facilities often fail because of inadequate investment in both tangible and intangible capital

(D) suggest that most new industries are likely to be dominated by firms that build large manufacturing plants early

(E) explain why large manufacturing plants usually do not help manufacturers achieve economies of scale

Line	A small number of the forest species of lepidoptera (moths and butterflies, which exist as caterpillars during most of their life cycle) exhibit regularly
(5)	recurring patterns of population growth and decline—such fluctuations in population are known as population cycles. Although many different variables influence population levels, a regular pattern such as a population cycle seems
(10)	to imply a dominant, driving force. Identification of that driving force, however, has proved surprisingly elusive despite considerable research. The
(15)	common approach of studying causes of population cycles by measuring the mortality caused by different agents, such as predatory birds or parasites, has been unproductive in the case of lepidoptera. Moreover, population ecologists'
(20)	attempts to alter cycles by changing the caterpillars' habitat and by reducing caterpillar populations have not succeeded. In short, the evidence implies that
(25)	these insect populations, if not self-regulating, may at least be regulated by an agent more intimately connected with the insect than are predatory birds or

parasites.

- (30) Recent work suggests that this agent may be a virus. For many years, viral disease had been reported in declining populations of caterpillars, but
- (35) population ecologists had usually considered viral disease to have contributed to the decline once it was underway rather than to have initiated it. The recent work has been made possible by new techniques of molecular biology that
- (40) allow viral DNA to be detected at low concentrations in the environment. Nuclear polyhedrosis viruses are hypothesized to be the driving force behind population cycles in lepidoptera in part because the viruses themselves follow
- (45) an infectious cycle in which, if protected from direct sunlight, they may remain virulent for many years in the environment, embedded in durable crystals of polyhedrin protein. Once ingested by a caterpillar, the crystals
- (50) dissolve, releasing the virus to infect the insect's cells. Late in the course of the infection, millions of new virus particles are formed and enclosed in polyhedrin crystals. These crystals reenter the environment after the insect dies and decomposes, thus becoming available to infect other caterpillars. One of the attractions of this hypothesis is its broad applicability. Remarkably, despite significant differences in habitat and behavior, many species of lepidoptera have population cycles of similar length, between eight and 11 years. Nuclear polyhedrosis viral infection is one factor these disparate species share.

Questions 42–47 refer to the passage.

42. The primary purpose of the passage is to
- (A) describe the development of new techniques that may help to determine the driving force behind population cycles in lepidoptera
 - (B) present evidence that refutes a particular theory about the driving force behind population cycles in lepidoptera
 - (C) present a hypothesis about the driving force behind population cycles in lepidoptera
 - (D) describe the fluctuating patterns of population cycles in lepidoptera
 - (E) question the idea that a single driving force is behind population cycles in lepidoptera
43. It can be inferred from the passage that the mortality caused by agents such as predatory birds or parasites was measured in an attempt to
- (A) develop an explanation for the existence of lepidoptera population cycles
 - (B) identify behavioral factors in lepidoptera that affect survival rates
 - (C) identify possible methods for controlling lepidoptera population growth
 - (D) provide evidence that lepidoptera populations are self-regulating

(E) determine the life stages of lepidoptera at which mortality rates are highest

44. Which of the following, if true, would most weaken the author's conclusion in lines 18–22?

(A) New research reveals that the number of species of birds and parasites that prey on lepidoptera has dropped significantly in recent years.

(B) New experiments in which the habitats of lepidoptera are altered in previously untried ways result in the shortening of lepidoptera population cycles.

(C) Recent experiments have revealed that the nuclear polyhedrosis virus is present in a number of predators and parasites of lepidoptera.

(D) Differences among the habitats of lepidoptera species make it difficult to assess the effects of weather on lepidoptera population cycles.

(E) Viral disease is typically observed in a large proportion of the lepidoptera population.

45. According to the passage, before the discovery of new techniques for detecting viral DNA, population ecologists believed that viral diseases

(A) were not widely prevalent among insect populations generally

(B) affected only the caterpillar life stage of lepidoptera

(C) were the driving force behind lepidoptera population cycles

(D) attacked already declining caterpillar populations

(E) infected birds and parasites that prey on various species of lepidoptera

46. According to the passage, nuclear polyhedrosis viruses can remain virulent in the environment only when

(A) the polyhedrin protein crystals dissolve

(B) caterpillar populations are in decline

(C) they are present in large numbers

(D) their concentration in a particular area remains low

(E) they are sheltered from direct sunlight

47. It can be inferred from the passage that while inside its polyhedrin protein crystals, the nuclear polyhedrosis virus

(A) is exposed to direct sunlight

(B) is attractive to predators

(C) cannot infect caterpillars' cells

(D) cannot be ingested by caterpillars

(E) cannot be detected by new techniques of molecular biology

(This passage was adapted from an article written in 1992.)

Line	Some observers have attributed the dramatic growth in temporary employment that occurred in the United States during the 1980s to increased participation in the workforce by certain groups, such as first-time or reentering workers, who supposedly prefer such arrangements. However, statistical analyses reveal that demographic changes in the workforce did not correlate with variations in the total number of temporary workers. Instead, these analyses suggest that factors affecting employers account for the rise in temporary employment. One factor is product demand: temporary employment is favored by employers who are adapting to fluctuating demand for products while at the same time seeking to reduce overall labor costs. Another factor is labor's reduced bargaining strength, which allows employers more control over the terms of employment. Given the analyses, which reveal that growth in temporary employment now far exceeds the level explainable by recent workforce entry rates of groups said to prefer temporary jobs, firms should be discouraged from creating excessive numbers of temporary positions. Government policymakers should consider mandating benefit coverage for temporary employees, promoting pay equity between temporary and permanent workers, assisting labor unions in organizing temporary workers, and encouraging firms to assign temporary jobs primarily to employees who explicitly indicate that preference.
(5)	
(10)	
(15)	
(20)	
(25)	

Questions 48–54 refer to the passage.

48. The primary purpose of the passage is to

- (A) present the results of statistical analyses and propose further studies
- (B) explain a recent development and predict its eventual consequences
- (C) identify the reasons for a trend and recommend measures to address it
- (D) outline several theories about a phenomenon and advocate one of them
- (E) describe the potential consequences of implementing a new policy and argue in favor of that policy

49. According to the passage, which of the following is true of the “factors affecting employers” that are mentioned in lines 10–19?

- (A) Most experts cite them as having initiated the growth in temporary employment that occurred during the 1980s.
- (B) They may account for the increase in the total number of temporary workers during the 1980s.

(C) They were less important than demographic change in accounting for the increase of temporary employment during the 1980s.

(D) They included a sharp increase in the cost of labor during the 1980s.

(E) They are more difficult to account for than are other factors involved in the growth of temporary employment during the 1980s.

50. The passage suggests which of the following about the use of temporary employment by firms during the 1980s?

(A) It enabled firms to deal with fluctuating product demand far more efficiently than they did before the 1980s.

(B) It increased as a result of increased participation in the workforce by certain demographic groups.

(C) It was discouraged by government-mandated policies.

(D) It was a response to preferences indicated by certain employees for more flexible working arrangements.

(E) It increased partly as a result of workers' reduced ability to control the terms of their employment.

51. The passage suggests which of the following about the workers who took temporary jobs during the 1980s?

(A) Their jobs frequently led to permanent positions within firms.

(B) They constituted a less demographically diverse group than has been suggested.

(C) They were occasionally involved in actions organized by labor unions.

(D) Their pay declined during the decade in comparison with the pay of permanent employees.

(E) They did not necessarily prefer temporary employment to permanent employment.

52. The first sentence in the passage suggests that the "observers" mentioned in line 1 would be most likely to predict which of the following?

(A) That the number of new temporary positions would decline as fewer workers who preferred temporary employment entered the workforce

(B) That the total number of temporary positions would increase as fewer workers were able to find permanent positions

(C) That employers would have less control over the terms of workers' employment as workers increased their bargaining strength

(D) That more workers would be hired for temporary positions as product

demand increased

(E) That the number of workers taking temporary positions would increase as more workers in any given demographic group entered the workforce

53. In the context of the passage, the word “excessive” (line 22) most closely corresponds to which of the following phrases?

(A) Far more than can be justified by worker preferences

(B) Far more than can be explained by fluctuations in product demand

(C) Far more than can be beneficial to the success of the firms themselves

(D) Far more than can be accounted for by an expanding national economy

(E) Far more than can be attributed to increases in the total number of people in the workforce

54. The passage mentions each of the following as an appropriate kind of governmental action EXCEPT

(A) getting firms to offer temporary employment primarily to a certain group of people

(B) encouraging equitable pay for temporary and permanent employees

(C) facilitating the organization of temporary workers by labor unions

(D) establishing guidelines on the proportion of temporary workers that firms should employ

(E) ensuring that temporary workers obtain benefits from their employers

Line	Among the myths taken as fact by the environmental managers of most corporations is the belief that environmental regulations affect all competitors
(5)	in a given industry uniformly. In reality, regulatory costs—and therefore compliance—fall unevenly, economically disadvantaging some companies and benefiting others. For example, a plant situated near a number of larger
(10)	noncompliant competitors is less likely to attract the attention of local regulators than is an isolated plant, and less attention means lower costs. Additionally, large plants can spread compliance costs such as waste
(15)	treatment across a larger revenue base; on the other hand, some smaller plants may not even be subject to certain provisions such as permit or
(20)	reporting requirements by virtue of their size. Finally, older production technologies often continue to generate toxic wastes that were not regulated when the technology was first adopted. New regulations have imposed
(25)	extensive compliance costs on companies still using older industrial coal-fired burners that generate high sulfur dioxide and nitrogen oxide outputs, for
(30)	example, whereas new facilities generally avoid processes that would create such waste products. By realizing that they have discretion and that not all

industries are affected equally by environmental regulation, environmental managers can help their companies to achieve a competitive edge by anticipating regulatory pressure and exploring all possibilities for addressing how changing regulations will affect their companies specifically.

Questions 55–58 refer to the passage.

55. It can be inferred from the passage that a large plant might have to spend more than a similar but smaller plant on environmental compliance because the larger plant is
- (A) more likely to attract attention from local regulators
 - (B) less likely to be exempt from permit and reporting requirements
 - (C) less likely to have regulatory costs passed on to it by companies that supply its raw materials
 - (D) more likely to employ older production technologies
 - (E) more likely to generate wastes that are more environmentally damaging than those generated by smaller plants
56. According to the passage, which of the following statements about sulfur dioxide and nitrogen oxide outputs is true?
- (A) Older production technologies cannot be adapted so as to reduce production of these outputs as waste products.
 - (B) Under the most recent environmental regulations, industrial plants are no longer permitted to produce these outputs.
 - (C) Although these outputs are environmentally hazardous, some plants still generate them as waste products despite the high compliance costs they impose.
 - (D) Many older plants have developed innovative technological processes that reduce the amounts of these outputs generated as waste products.
 - (E) Since the production processes that generate these outputs are less costly than alternative processes, these less expensive processes are sometimes adopted despite their acknowledged environmental hazards.
57. Which of the following best describes the relationship of the statement about large plants (lines 12–17) to the passage as a whole?
- (A) It presents a hypothesis that is disproved later in the passage.
 - (B) It highlights an opposition between two ideas mentioned in the passage.
 - (C) It provides examples to support a claim made earlier in the passage.
 - (D) It exemplifies a misconception mentioned earlier in the passage.

(E) It draws an analogy between two situations described in the passage.

58. The primary purpose of the passage is to

(A) address a widespread environmental management problem and suggest possible solutions

(B) illustrate varying levels of compliance with environmental regulation among different corporations

(C) describe the various alternatives to traditional methods of environmental management

(D) advocate increased corporate compliance with environmental regulation

(E) correct a common misconception about the impact of environmental regulations

Line	In <i>Winters v. United States</i> (1908), the Supreme Court held that the right to use waters flowing through or adjacent to the Fort Belknap Indian
(5)	Reservation was reserved to American Indians by the treaty establishing the reservation. Although this treaty did not mention water rights, the Court ruled that the federal government, when it created the reservation, intended to deal
(10)	fairly with American Indians by reserving for them the waters without which their lands would have been useless. Later decisions, citing <i>Winters</i> ,
(15)	established that courts can find federal rights to reserve water for particular purposes if (1) the land in question lies within an enclave under exclusive federal jurisdiction, (2) the land has been formally withdrawn from federal
(20)	public lands—i.e., withdrawn from the stock of federal lands available for private use under federal land use laws—and set aside or reserved, and (3) the
(25)	circumstances reveal the government intended to reserve water as well as land when establishing the reservation.
(30)	Some American Indian tribes have also established water rights through the courts based on their traditional diversion and use of certain waters prior to the United States' acquisition of sovereignty. For example, the Rio Grande
(35)	pueblos already existed when the United States acquired sovereignty over New Mexico in 1848. Although they at that time became part of the United States, the pueblo lands never formally constituted a part of federal public lands; in
(40)	any event, no treaty, statute, or executive order has ever designated or withdrawn the pueblos from public lands as American Indian reservations. This fact, however, has not barred application of the <i>Winters</i> doctrine. What
(45)	constitutes an American Indian reservation is a question of practice, not of legal definition, and the pueblos have always been treated as reservations by the United States. This pragmatic approach is buttressed by <i>Arizona v. California</i> (1963), wherein the Supreme Court indicated that the manner in which any type of federal reservation is created does not affect the application to it of the <i>Winters</i> doctrine. Therefore, the reserved water rights of Pueblo

Indians have priority over other citizens' water rights as of 1848, the year in which pueblos must be considered to have become reservations.

Questions 59–65 refer to the passage.

59. According to the passage, which of the following was true of the treaty establishing the Fort Belknap Indian Reservation?
- (A) It was challenged in the Supreme Court a number of times.
 - (B) It was rescinded by the federal government, an action that gave rise to the *Winters* case.
 - (C) It cited American Indians' traditional use of the land's resources.
 - (D) It failed to mention water rights to be enjoyed by the reservation's inhabitants.
 - (E) It was modified by the Supreme Court in *Arizona v. California*.
60. The passage suggests that, if the criteria discussed in lines 10–20 were the only criteria for establishing a reservation's water rights, which of the following would be true?
- (A) The water rights of the inhabitants of the Fort Belknap Indian Reservation would not take precedence over those of other citizens.
 - (B) Reservations established before 1848 would be judged to have no water rights.
 - (C) There would be no legal basis for the water rights of the Rio Grande pueblos.
 - (D) Reservations other than American Indian reservations could not be created with reserved water rights.
 - (E) Treaties establishing reservations would have to mention water rights explicitly in order to reserve water for a particular purpose.
61. Which of the following most accurately summarizes the relationship between *Arizona v. California* in lines 38–42, and the criteria citing the *Winters* doctrine in lines 10–20?
- (A) *Arizona v. California* abolishes these criteria and establishes a competing set of criteria for applying the *Winters* doctrine.
 - (B) *Arizona v. California* establishes that the *Winters* doctrine applies to a broader range of situations than those defined by these criteria.
 - (C) *Arizona v. California* represents the sole example of an exception to the criteria as they were set forth in the *Winters* doctrine.
 - (D) *Arizona v. California* does not refer to the *Winters* doctrine to justify

water rights, whereas these criteria do rely on the *Winters* doctrine.

(E) *Arizona v. California* applies the criteria derived from the *Winters* doctrine only to federal lands other than American Indian reservations.

62. The “pragmatic approach” mentioned in lines 37–38 of the passage is best defined as one that

(A) grants recognition to reservations that were never formally established but that have traditionally been treated as such

(B) determines the water rights of all citizens in a particular region by examining the actual history of water usage in that region

(C) gives federal courts the right to reserve water along with land even when it is clear that the government originally intended to reserve only the land

(D) bases the decision to recognize the legal rights of a group on the practical effect such a recognition is likely to have on other citizens

(E) dictates that courts ignore precedents set by such cases as *Winters v. United States* in deciding what water rights belong to reserved land

63. The author cites the fact that the Rio Grande pueblos were never formally withdrawn from public lands primarily in order to do which of the following?

(A) Suggest why it might have been argued that the *Winters* doctrine ought not to apply to pueblo lands

(B) Imply that the United States never really acquired sovereignty over pueblo lands

(C) Argue that the pueblo lands ought still to be considered part of federal public lands

(D) Support the argument that the water rights of citizens other than American Indians are limited by the *Winters* doctrine

(E) Suggest that federal courts cannot claim jurisdiction over cases disputing the traditional diversion and use of water by Pueblo Indians

64. The primary purpose of the passage is to

(A) trace the development of laws establishing American Indian reservations

(B) explain the legal basis for the water rights of American Indian tribes

(C) question the legal criteria often used to determine the water rights of American Indian tribes

(D) discuss evidence establishing the earliest date at which the federal government recognized the water rights of American Indians

(E) point out a legal distinction between different types of American Indian reservations

65. The passage suggests that the legal rights of citizens other than American Indians to the use of water flowing into the Rio Grande pueblos are

- (A) guaranteed by the precedent set in *Arizona v. California*
- (B) abolished by the *Winters* doctrine
- (C) deferred to the Pueblo Indians whenever treaties explicitly require this
- (D) guaranteed by federal land-use laws
- (E) limited by the prior claims of the Pueblo Indians

Line	Milankovitch proposed in the early twentieth century that the ice ages were caused by variations in the Earth's orbit around the Sun. For some time this
(5)	theory was considered untestable, largely because there was no sufficiently precise chronology of the ice ages with which the orbital variations could be matched.
(10)	To establish such a chronology it is necessary to determine the relative amounts of land ice that existed at various times in the Earth's past. A recent discovery makes such a determination possible: relative land-ice volume for a
(15)	given period can be deduced from the ratio of two oxygen isotopes, 16 and 18, found in ocean sediments. Almost all the oxygen in water is oxygen 16, but a
(20)	few molecules out of every thousand incorporate the heavier isotope 18. When an ice age begins, the continental ice sheets grow, steadily reducing the amount of water evaporated from the ocean that will eventually return to it.
(25)	Because heavier isotopes tend to be left behind when water evaporates from the ocean surfaces, the remaining ocean water becomes progressively
(30)	enriched in oxygen 18. The degree of enrichment can be determined by analyzing ocean sediments of the period, because these sediments are composed of calcium carbonate shells of marine organisms, shells that were
(35)	constructed with oxygen atoms drawn from the surrounding ocean. The higher the ratio of oxygen 18 to oxygen 16 in a sedimentary specimen, the
(40)	more land ice there was when the sediment was laid down. As an indicator of shifts in the Earth's climate, the isotope record has two advantages. First, it is a global record: there is remarkably little variation in
(45)	isotope ratios in sedimentary specimens taken from different continental locations. Second, it is a more continuous record than that taken from rocks on land. Because of these advantages, sedimentary evidence can be dated with
(50)	sufficient accuracy by radiometric methods to establish a precise chronology of the ice ages. The dated isotope record shows that the fluctuations in global ice volume over the past several hundred thousand years have a pattern: an
(55)	ice age occurs roughly once every 100,000 years. These data have established a strong connection between variations in the Earth's orbit and the periodicity

of the ice ages.

However, it is important to note that other factors, such as volcanic particulates or variations in the amount of sunlight received by the Earth, could potentially have affected the climate. The advantage of the Milankovitch theory is that it is testable; changes in the Earth's orbit can be calculated and dated by applying Newton's laws of gravity to progressively earlier configurations of the bodies in the solar system. Yet the lack of information about other possible factors affecting global climate does not make them unimportant.

Questions 66–71 refer to the passage.

66. In the passage, the author is primarily interested in
- (A) suggesting an alternative to an outdated research method
 - (B) introducing a new research method that calls an accepted theory into question
 - (C) emphasizing the instability of data gathered from the application of a new scientific method
 - (D) presenting a theory and describing a new method to test that theory
 - (E) initiating a debate about a widely accepted theory
67. The author of the passage would be most likely to agree with which of the following statements about the Milankovitch theory?
- (A) It is the only possible explanation for the ice ages.
 - (B) It is too limited to provide a plausible explanation for the ice ages, despite recent research findings.
 - (C) It cannot be tested and confirmed until further research on volcanic activity is done.
 - (D) It is one plausible explanation, though not the only one, for the ice ages.
 - (E) It is not a plausible explanation for the ice ages, although it has opened up promising possibilities for future research.
68. It can be inferred from the passage that the isotope record taken from ocean sediments would be less useful to researchers if which of the following were true?
- (A) It indicated that lighter isotopes of oxygen predominated at certain times.
 - (B) It had far more gaps in its sequence than the record taken from rocks on land.
 - (C) It indicated that climate shifts did not occur every 100,000 years.

(D) It indicated that the ratios of oxygen 16 and oxygen 18 in ocean water were not consistent with those found in fresh water.

(E) It stretched back for only a million years.

69. According to the passage, which of the following is true of the ratios of oxygen isotopes in ocean sediments?

(A) They indicate that sediments found during an ice age contain more calcium carbonate than sediments formed at other times.

(B) They are less reliable than the evidence from rocks on land in determining the volume of land ice.

(C) They can be used to deduce the relative volume of land ice that was present when the sediment was laid down.

(D) They are more unpredictable during an ice age than in other climatic conditions.

(E) They can be used to determine atmospheric conditions at various times in the past.

70. It can be inferred from the passage that precipitation formed from evaporated ocean water has

(A) the same isotopic ratio as ocean water

(B) less oxygen 18 than does ocean water

(C) less oxygen 18 than has the ice contained in continental ice sheets

(D) a different isotopic composition than has precipitation formed from water on land

(E) more oxygen 16 than has precipitation formed from fresh water

71. It can be inferred from the passage that calcium carbonate shells

(A) are not as susceptible to deterioration as rocks

(B) are less common in sediments formed during an ice age

(C) are found only in areas that were once covered by land ice

(D) contain radioactive material that can be used to determine a sediment's isotopic composition

(E) reflect the isotopic composition of the water at the time the shells were formed

Line (5)	Two works published in 1984 demonstrate contrasting approaches to writing the history of United States women. Buel and Buel's biography of Mary Fish (1736–1818) makes little effort to place her story in the context of recent historiography on women. Lebsock, meanwhile, attempts not only to write the

(10)	history of women in one southern community, but also to redirect two decades of historiographical debate as to whether women gained or lost status in the nineteenth century as compared with the eighteenth century. Although both books offer the reader the opportunity to assess this controversy
(15)	regarding women's status, only Lebsock's deals with it directly. She examines several different aspects of women's status, helping to refine and resolve the
(20)	issues. She concludes that while women gained autonomy in some areas, especially in the private sphere, they lost it in many aspects of the economic sphere. More importantly, she shows that the debate itself depends on frame
(25)	of reference: in many respects, women lost power in relation to men, for example, as certain jobs (delivering babies, supervising schools) were taken
(30)	over by men. Yet women also gained power in comparison with their previous status, owning a higher proportion of real estate, for example. In contrast, Buel and Buel's biography provides ample raw material for questioning the myth, fostered by some historians, of a colonial golden age in the eighteenth century but does not give the reader much guidance in analyzing the controversy over women's status.

Questions 72–77 refer to the passage.

72. The primary purpose of the passage is to
- (A) examine two sides of a historiographical debate
 - (B) call into question an author's approach to a historiographical debate
 - (C) examine one author's approach to a historiographical debate
 - (D) discuss two authors' works in relationship to a historiographical debate
 - (E) explain the prevalent perspective on a historiographical debate
73. The author of the passage mentions the supervision of schools primarily in order to
- (A) remind readers of the role education played in the cultural changes of the nineteenth century in the United States
 - (B) suggest an area in which nineteenth-century American women were relatively free to exercise power
 - (C) provide an example of an occupation for which accurate data about women's participation are difficult to obtain
 - (D) speculate about which occupations were considered suitable for United States women of the nineteenth century
 - (E) illustrate how the answers to questions about women's status depend on particular contexts
74. With which of the following characterizations of Lebsock's contribution to the

controversy concerning women's status in the nineteenth-century United States would the author of the passage be most likely to agree?

- (A) Lebsock has studied women from a formerly neglected region and time period.
- (B) Lebsock has demonstrated the importance of frame of reference in answering questions about women's status.
- (C) Lebsock has addressed the controversy by using women's current status as a frame of reference.
- (D) Lebsock has analyzed statistics about occupations and property that were previously ignored.
- (E) Lebsock has applied recent historiographical methods to the biography of a nineteenth-century woman.

75. According to the passage, Lebsock's work differs from Buel and Buel's work in that Lebsock's work

- (A) uses a large number of primary sources
- (B) ignores issues of women's legal status
- (C) refuses to take a position on women's status in the eighteenth century
- (D) addresses larger historiographical issues
- (E) fails to provide sufficient material to support its claims

76. The passage suggests that Lebsock believes that compared to nineteenth-century American women, eighteenth-century American women were

- (A) in many respects less powerful in relation to men
- (B) more likely to own real estate
- (C) generally more economically independent
- (D) more independent in conducting their private lives
- (E) less likely to work as school superintendents

77. The passage suggests that Buel and Buel's biography of Mary Fish provides evidence for which of the following views of women's history?

- (A) Women have lost power in relation to men since the colonial era.
- (B) Women of the colonial era were not as likely to be concerned with their status as were women in the nineteenth century.
- (C) The colonial era was not as favorable for women as some historians have believed.
- (D) Women had more economic autonomy in the colonial era than in the

nineteenth century.

(E) Women's occupations were generally more respected in the colonial era than in the nineteenth century.

Line	It was once believed that the brain was independent of metabolic processes occurring elsewhere in the body. In recent studies, however, we have
(5)	discovered that the production and release in brain neurons of the neurotransmitter serotonin (neurotransmitters are compounds that neurons use to transmit signals to other cells) depend directly on the food that the
(10)	body processes.
	Our first studies sought to determine whether the increase in serotonin observed in rats given a large injection of the amino acid tryptophan might
(15)	also occur after rats ate meals that change tryptophan levels in the blood. We found that, immediately after the rats began to eat, parallel elevations occurred in blood tryptophan, brain tryptophan, and brain serotonin levels.
(20)	These findings suggested that the production and release of serotonin in brain neurons were normally coupled with blood-tryptophan increases. In later studies we found that injecting insulin into a rat's bloodstream also caused
(25)	parallel elevations in blood and brain tryptophan levels and in serotonin levels. We then decided to see whether the secretion of the animal's own
(30)	insulin similarly affected serotonin production.
	We gave the rats a carbohydrate-containing meal that we knew would elicit insulin secretion. As we had hypothesized, the blood tryptophan level and the
(35)	concentrations of tryptophan and of serotonin in the brain increased after the meal.
(40)	Surprisingly, however, when we added a large amount of protein to the meal, brain tryptophan and serotonin levels fell. Since protein contains tryptophan, why should it depress brain tryptophan levels? The answer lies in the
(45)	mechanism that provides blood tryptophan to the brain cells. This same mechanism also provides the brain cells with other amino acids found in protein, such as tyrosine and leucine. The consumption of protein increases blood concentration of the other amino acids much more, proportionately, than it does that of tryptophan.
	The more protein is in a meal, the lower is the ratio of the resulting blood-tryptophan concentration to the concentration of competing amino acids, and the more slowly is tryptophan provided to the brain. Thus the more protein in a meal, the less serotonin subsequently produced and released.

Questions 78–86 refer to the passage.

78. Which of the following titles best summarizes the contents of the passage?

(A) Neurotransmitters: Their Crucial Function in Cellular Communication

(B) Diet and Survival: An Old Relationship Reexamined

(C) The Blood Supply and the Brain: A Reciprocal Dependence

(D) Amino Acids and Neurotransmitters: The Connection between Serotonin Levels and Tyrosine

(E) The Effects of Food Intake on the Production and Release of Serotonin: Some Recent Findings

79. According to the passage, the speed with which tryptophan is provided to the brain cells of a rat varies with the

(A) amount of protein present in a meal

(B) concentration of serotonin in the brain before a meal

(C) concentration of leucine in the blood rather than with the concentration of tyrosine in the blood after a meal

(D) concentration of tryptophan in the brain before a meal

(E) number of serotonin-containing neurons

80. According to the passage, when the authors began their first studies, they were aware that

(A) they would eventually need to design experiments that involved feeding rats high concentrations of protein

(B) tryptophan levels in the blood were difficult to monitor with accuracy

(C) serotonin levels increased after rats were fed meals rich in tryptophan

(D) there were many neurotransmitters whose production was dependent on metabolic processes elsewhere in the body

(E) serotonin levels increased after rats were injected with a large amount of tryptophan

81. According to the passage, one reason that the authors gave rats carbohydrates was to

(A) depress the rats' tryptophan levels

(B) prevent the rats from contracting diseases

(C) cause the rats to produce insulin

(D) demonstrate that insulin is the most important substance secreted by the body

(E) compare the effect of carbohydrates with the effect of proteins

82. According to the passage, the more protein a rat consumes, the lower will be the

(A) ratio of the rat's blood-tryptophan concentration to the amount of serotonin produced and released in the rat's brain

- (B) ratio of the rat's blood-tryptophan concentration to the concentration in its blood of the other amino acids contained in the protein
- (C) ratio of the rat's blood-tyrosine concentration to its blood-leucine concentration
- (D) number of neurotransmitters of any kind that the rat will produce and release
- (E) number of amino acids the rat's blood will contain

83. The authors' discussion of the "mechanism that provides blood tryptophan to the brain cells" (lines 34–35) is meant to

- (A) stimulate further research studies
- (B) summarize an area of scientific investigation
- (C) help explain why a particular research finding was obtained
- (D) provide supporting evidence for a controversial scientific theory
- (E) refute the conclusions of a previously mentioned research study

84. According to the passage, an injection of insulin was most similar in its effect on rats to an injection of

- (A) tyrosine
- (B) leucine
- (C) blood
- (D) tryptophan
- (E) protein

85. It can be inferred from the passage that which of the following would be LEAST likely to be a potential source of aid to a patient who was not adequately producing and releasing serotonin?

- (A) Meals consisting almost exclusively of protein
- (B) Meals consisting almost exclusively of carbohydrates
- (C) Meals that would elicit insulin secretion
- (D) Meals that had very low concentrations of tyrosine
- (E) Meals that had very low concentrations of leucine

86. It can be inferred from the passage that the authors initially held which of the following hypotheses about what would happen when they fed large amounts of protein to rats?

- (A) The rats' brain serotonin levels would not decrease.

(B) The rats' brain tryptophan levels would decrease.

(C) The rats' tyrosine levels would increase less quickly than would their leucine levels.

(D) The rats would produce more insulin.

(E) The rats would produce neurotransmitters other than serotonin.

Line	Acting on the recommendation of a British government committee investigating the high incidence in white lead factories of illness among
(5)	employees, most of whom were women, the Home Secretary proposed in 1895 that Parliament enact legislation that would prohibit women from holding
(10)	most jobs in white lead factories. Although the Women's Industrial Defence Committee (WIDC), formed in 1892 in response to earlier legislative attempts
(15)	to restrict women's labor, did not discount the white lead trade's potential health dangers, it opposed the proposal, viewing it as yet another instance of
	limiting women's work opportunities.
(20)	Also opposing the proposal was the Society for Promoting the Employment of Women (SPEW), which attempted to challenge it by investigating the causes
(25)	of illness in white lead factories. SPEW contended, and WIDC concurred, that controllable conditions in such factories were responsible for the development
(30)	of lead poisoning. SPEW provided convincing evidence that lead poisoning could be avoided if workers were careful and clean and if already extant
	workplace safety regulations were stringently enforced. However, the Women's Trade Union League (WTUL), which had ceased in the late 1880s to
	oppose restrictions on women's labor, supported the eventually enacted proposal, in part because safety regulations were generally not being enforced
	in white lead factories, where there were no unions (and little prospect of any) to pressure employers to comply with safety regulations.

Questions 87–89 refer to the passage.

87. The passage suggests that WIDC differed from WTUL in which of the following ways?

(A) WIDC believed that the existing safety regulations were adequate to protect women's health, whereas WTUL believed that such regulations needed to be strengthened.

(B) WIDC believed that unions could not succeed in pressuring employers to comply with such regulations, whereas WTUL believed that unions could succeed in doing so.

(C) WIDC believed that lead poisoning in white lead factories could be avoided by controlling conditions there, whereas WTUL believed that lead poisoning in such factories could not be avoided no matter how stringently safety regulations were enforced.

(D) At the time that the legislation concerning white lead factories was proposed, WIDC was primarily concerned with addressing health conditions in white lead factories, whereas WTUL was concerned with improving working conditions in all types of factories.

(E) At the time that WIDC was opposing legislative attempts to restrict women's labor, WTUL had already ceased to do so.

88. Which of the following, if true, would most clearly support the contention attributed to SPEW in lines 17–20?

(A) Those white lead factories that most strongly enforced regulations concerning worker safety and hygiene had the lowest incidences of lead poisoning among employees.

(B) The incidence of lead poisoning was much higher among women who worked in white lead factories than among women who worked in other types of factories.

(C) There were many household sources of lead that could have contributed to the incidence of lead poisoning among women who also worked outside the home in the late nineteenth century.

(D) White lead factories were more stringent than were certain other types of factories in their enforcement of workplace safety regulations.

(E) Even brief exposure to the conditions typically found in white lead factories could cause lead poisoning among factory workers.

89. The passage is primarily concerned with

(A) presenting various groups' views of the motives of those proposing certain legislation

(B) contrasting the reasoning of various groups concerning their positions on certain proposed legislation

(C) tracing the process whereby certain proposed legislation was eventually enacted

(D) assessing the success of tactics adopted by various groups with respect to certain proposed legislation

(E) evaluating the arguments of various groups concerning certain proposed legislation

Line (5)	In 1955 Maurice Duverger published <i>The Political Role of Women</i> , the first behavioralist, multinational comparison of women's electoral participation ever to use election data and survey data together. His study analyzed women's patterns of voting, political candidacy, and political activism in four European countries during the first half of the twentieth century. Duverger's

(10) research findings were that women voted somewhat less frequently than men
(15) (the difference narrowing the longer women had the vote) and were slightly
more conservative.
Duverger's work set an early standard for the sensitive analysis of women's
electoral activities. Moreover, to Duverger's credit, he placed his findings in
(20) the context of many of the historical processes that had shaped these
activities. However, since these contexts have changed over time, Duverger's
(25) approach has proved more durable than his actual findings. In addition,
Duverger's discussion of his findings was hampered by his failure to consider
(30) certain specific factors important to women's electoral participation at the
time he collected his data: the influence of political regimes, the effects of
economic factors, and the ramifications of political and social relations
between women and men. Given this failure, Duverger's study foreshadowed
the enduring limitations of the behavioralist approach to the multinational
study of women's political participation.

Questions 90–95 refer to the passage.

90. The primary purpose of the passage is to
- (A) evaluate a research study
 - (B) summarize the history of a research area
 - (C) report new research findings
 - (D) reinterpret old research findings
 - (E) reconcile conflicting research findings
91. According to the passage, Duverger's study was unique in 1955 in that it
- (A) included both election data and survey data
 - (B) gathered data from sources never before used in political studies
 - (C) included an analysis of historical processes
 - (D) examined the influence on voting behavior of the relationships between women and men
 - (E) analyzed not only voting and political candidacy but also other political activities
92. Which of the following characteristics of a country is most clearly an example of a factor that Duverger, as described in the passage, failed to consider in his study?
- (A) A large population
 - (B) A predominantly Protestant population
 - (C) A predominantly urban population

(D) A one-party government

(E) Location in the heart of Europe

93. The author implies that Duverger's actual findings are

(A) limited because they focus on only four countries

(B) inaccurate in their description of the four countries in the early 1950s

(C) out-of-date in that they are inapplicable in the four countries today

(D) flawed because they are based on unsound data

(E) biased by Duverger's political beliefs

94. The passage implies that, in comparing four European countries, Duverger found that the voting rates of women and men were most different in the country in which women

(A) were most politically active

(B) ran for office most often

(C) held the most conservative political views

(D) had the most egalitarian relations with men

(E) had possessed the right to vote for the shortest time

95. The author implies that some behavioralist research involving the multinational study of women's political participation that followed Duverger's study did which of the following?

(A) Ignored Duverger's approach

(B) Suffered from faults similar to those in Duverger's study

(C) Focused on political activism

(D) Focused on the influences of political regimes

(E) Focused on the political and social relations between women and men

Line	It is an odd but indisputable fact that the seventeenth-century English women who are generally regarded as among the forerunners of modern feminism are
(5)	almost all identified with the Royalist side in the conflict between Royalists and Parliamentarians known as the English Civil Wars. Since Royalist
(10)	ideology is often associated with the radical patriarchalism of seventeenth-century political theorist Robert Filmer—a patriarchalism that equates family and kingdom and asserts the divinely ordained absolute power of the king
(15)	and, by analogy, of the male head of the household—historians have been understandably puzzled by the fact that Royalist women wrote the earliest
(20)	extended criticisms of the absolute subordination of women in marriage and the earliest systematic assertions of women's rational and moral equality with

men. Some historians have questioned the facile equation of Royalist ideology with Filmerian patriarchalism; and indeed, there may have been no consistent differences between Royalists and Parliamentarians on issues of family organization and women's political rights, but in that case one would expect early feminists to be equally divided between the two sides. Catherine Gallagher argues that Royalism engendered feminism because the ideology of absolute monarchy provided a transition to an ideology of the absolute self. She cites the example of the notoriously eccentric author Margaret Cavendish (1626–1673), duchess of Newcastle. Cavendish claimed to be as ambitious as any woman could be, but knowing that as a woman she was excluded from the pursuit of power in the real world, she resolved to be mistress of her own world, the “immaterial world” that any person can create within her own mind—and, as a writer, on paper. In proclaiming what she called her “singularity,” Cavendish insisted that she was a self-sufficient being within her mental empire, the center of her own subjective universe rather than a satellite orbiting a dominant male planet. In justifying this absolute singularity, Cavendish repeatedly invoked the model of the absolute monarch, a figure that became a metaphor for the self-enclosed, autonomous nature of the individual person. Cavendish's successors among early feminists retained her notion of woman's sovereign self, but they also sought to break free from the complete political and social isolation that her absolute singularity entailed.

Questions 96–101 refer to the passage.

96. The author of the passage refers to Robert Filmer (see line 9) primarily in order to
- (A) show that Royalist ideology was somewhat more radical than most historians appear to realize
 - (B) qualify the claim that patriarchalism formed the basis of Royalist ideology
 - (C) question the view that most early feminists were associated with the Royalist faction
 - (D) highlight an apparent tension between Royalist ideology and the ideas of early feminists
 - (E) argue that Royalists held conflicting opinions on issues of family organization and women's political rights
97. The passage suggests which of the following about the seventeenth-century English women mentioned in line 2?
- (A) Their status as forerunners of modern feminism is not entirely justified.
 - (B) They did not openly challenge the radical patriarchalism of Royalist Filmerian ideology.

(C) Cavendish was the first among these women to criticize women's subordination in marriage and assert women's equality with men.

(D) Their views on family organization and women's political rights were diametrically opposed to those of both Royalist and Parliamentary ideology.

(E) Historians would be less puzzled if more of them were identified with the Parliamentary side in the English Civil Wars.

98. The passage suggests that Margaret Cavendish's decision to become an author was motivated, at least in part, by a desire to

(A) justify her support for the Royalist cause

(B) encourage her readers to work toward eradicating Filmerian patriarchalism

(C) persuade other women to break free from their political and social isolation

(D) analyze the causes for women's exclusion from the pursuit of power

(E) create a world over which she could exercise total control

99. The phrase "a satellite orbiting a dominant male planet" (lines 41–42) refers most directly to

(A) Cavendish's concept that each woman is a sovereign self

(B) the complete political and social isolation of absolute singularity

(C) the immaterial world that a writer can create on paper

(D) the absolute subordination of women in a patriarchal society

(E) the metaphorical figure of the absolute monarch

100. The primary purpose of the passage is to

(A) trace the historical roots of a modern sociopolitical movement

(B) present one scholar's explanation for a puzzling historical phenomenon

(C) contrast two interpretations of the ideological origins of a political conflict

(D) establish a link between the ideology of an influential political theorist and that of a notoriously eccentric writer

(E) call attention to some points of agreement between opposing sides in an ideological debate

101. Which of the following, if true, would most clearly undermine Gallagher's explanation of the link between Royalism and feminism?

- (A) Because of their privileged backgrounds, Royalist women were generally better educated than were their Parliamentary counterparts.
- (B) Filmer himself had read some of Cavendish’s early writings and was highly critical of her ideas.
- (C) Cavendish’s views were highly individual and were not shared by the other Royalist women who wrote early feminist works.
- (D) The Royalist and Parliamentary ideologies were largely in agreement on issues of family organization and women’s political rights.
- (E) The Royalist side included a sizable minority faction that was opposed to the more radical tendencies of Filmerian patriarchalism.

Line	Frazier and Mosteller assert that medical research could be improved by a move toward larger, simpler clinical trials of medical treatments. Currently,
(5)	researchers collect far more background information on patients than is strictly required for their trials—substantially more than hospitals collect—
(10)	thereby escalating costs of data collection, storage, and analysis. Although limiting information collection could increase the risk that researchers will
(15)	overlook facts relevant to a study, Frazier and Mosteller contend that such risk, never entirely eliminable from research, would still be small in most
(20)	studies. Only in research on entirely new treatments are new and unexpected variables likely to arise.
(25)	Frazier and Mosteller propose not only that researchers limit data collection on individual patients but also that researchers enroll more patients in clinical
(30)	trials, thereby obtaining a more representative sample of the total population with the disease under study. Often researchers restrict study participation to
	patients who have no ailments besides those being studied. A treatment judged successful under these ideal conditions can then be evaluated under
	normal conditions. Broadening the range of trial participants, Frazier and Mosteller suggest, would enable researchers to evaluate a treatment’s efficacy
	for diverse patients under various conditions and to evaluate its effectiveness for different patient subgroups. For example, the value of a treatment for a
	progressive disease may vary according to a patient’s stage of disease. Patients’ ages may also affect a treatment’s efficacy.

Questions 102–106 refer to the passage.

102. The passage is primarily concerned with

- (A) identifying two practices in medical research that may affect the accuracy of clinical trials
- (B) describing aspects of medical research that tend to drive up costs
- (C) evaluating an analysis of certain shortcomings of current medical research practices

(D) describing proposed changes to the ways in which clinical trials are conducted

(E) explaining how medical researchers have traditionally conducted clinical trials and how such trials are likely to change

103. Which of the following can be inferred from the passage about a study of the category of patients referred to in lines 20–22?

(A) Its findings might have limited applicability.

(B) It would be prohibitively expensive in its attempt to create ideal conditions.

(C) It would be the best way to sample the total population of potential patients.

(D) It would allow researchers to limit information collection without increasing the risk that important variables could be overlooked.

(E) Its findings would be more accurate if it concerned treatments for a progressive disease than if it concerned treatments for a nonprogressive disease.

104. It can be inferred from the passage that a study limited to patients like those mentioned in lines 20–22 would have which of the following advantages over the kind of study proposed by Frazier and Mosteller?

(A) It would yield more data and its findings would be more accurate.

(B) It would cost less in the long term, though it would be more expensive in its initial stages.

(C) It would limit the number of variables researchers would need to consider when evaluating the treatment under study.

(D) It would help researchers to identify subgroups of patients with secondary conditions that might also be treatable.

(E) It would enable researchers to assess the value of an experimental treatment for the average patient.

105. The author mentions patients' ages (line 32) primarily in order to

(A) identify the most critical variable differentiating subgroups of patients

(B) cast doubt on the advisability of implementing Frazier and Mosteller's proposals about medical research

(C) indicate why progressive diseases may require different treatments at different stages

(D) illustrate a point about the value of enrolling a wide range of patients in clinical trials

(E) substantiate an argument about the problems inherent in enrolling large numbers of patients in clinical trials

106. According to the passage, which of the following describes a result of the way in which researchers generally conduct clinical trials?

(A) They expend resources on the storage of information likely to be irrelevant to the study they are conducting.

(B) They sometimes compromise the accuracy of their findings by collecting and analyzing more information than is strictly required for their trials.

(C) They avoid the risk of overlooking variables that might affect their findings, even though doing so raises their research costs.

(D) Because they attempt to analyze too much information, they overlook facts that could emerge as relevant to their studies.

(E) In order to approximate the conditions typical of medical treatment, they base their methods of information collection on those used by hospitals.

Line	There are recent reports of apparently drastic declines in amphibian populations and of extinctions of a number of the world's endangered
(5)	amphibian species. These declines, if real, may be signs of a general trend toward extinction, and many environmentalists have claimed that immediate
(10)	environmental action is necessary to remedy this "amphibian crisis," which, in their view, is an indicator of general and catastrophic environmental
	degradation due to human activity.
(15)	To evaluate these claims, it is useful to make a preliminary distinction that is far too often ignored. A declining population should not be confused with an
(20)	endangered one. An endangered population is always rare, almost always small, and, by definition, under constant threat of extinction even without a
(25)	proximate cause in human activities. Its disappearance, however unfortunate, should come as no great surprise. Moreover, chance events—which may
(30)	indicate nothing about the direction of trends in population size—may lead to its extinction. The probability of extinction due to such random factors
	depends on the population size and is independent of the prevailing direction of change in that size.
(35)	For biologists, population declines are potentially more worrisome than extinctions. Persistent declines, especially in large populations, indicate a
(40)	changed ecological context. Even here, distinctions must again be made among declines that are only apparent (in the sense that they are part of
(45)	habitual cycles or of normal fluctuations), declines that take a population to some lower but still acceptable level, and those that threaten extinction (e.g., by taking the number of individuals below the minimum viable population). Anecdotal reports of population decreases cannot distinguish among these

(50)

possibilities, and some amphibian populations have shown strong fluctuations in the past.

It is indisputably true that there is simply not enough long-term scientific data on amphibian populations to enable researchers to identify real declines in amphibian populations. Many fairly common amphibian species declared all but extinct after severe declines in the 1950s and 1960s have subsequently recovered, and so might the apparently declining populations that have generated the current appearance of an amphibian crisis. Unfortunately, long-term data will not soon be forthcoming, and postponing environmental action while we wait for it may doom species and whole ecosystems to extinction.

Questions 107–112 refer to the passage.

107. The primary purpose of the passage is to
- (A) assess the validity of a certain view
 - (B) distinguish between two phenomena
 - (C) identify the causes of a problem
 - (D) describe a disturbing trend
 - (E) allay concern about a particular phenomenon
108. It can be inferred from the passage that the author believes which of the following to be true of the environmentalists mentioned in lines 5–6?
- (A) They have wrongly chosen to focus on anecdotal reports rather than on the long-term data that are currently available concerning amphibians.
 - (B) Their recommendations are flawed because their research focuses too narrowly on a single category of animal species.
 - (C) Their certainty that population declines in general are caused by environmental degradation is not warranted.
 - (D) They have drawn premature conclusions concerning a crisis in amphibian populations from recent reports of declines.
 - (E) They have overestimated the effects of chance events on trends in amphibian populations.
109. It can be inferred from the passage that the author believes which of the following to be true of the amphibian extinctions that have recently been reported?
- (A) They have resulted primarily from human activities causing environmental degradation.
 - (B) They could probably have been prevented if timely action had been taken to protect the habitats of amphibian species.
 - (C) They should not come as a surprise, because amphibian populations

generally have been declining for a number of years.

(D) They have probably been caused by a combination of chance events.

(E) They do not clearly constitute evidence of general environmental degradation.

110. According to the passage, each of the following is true of endangered amphibian species EXCEPT:

(A) They are among the rarest kinds of amphibians.

(B) They generally have populations that are small in size.

(C) They are in constant danger of extinction.

(D) Those with decreasing populations are the most likely candidates for immediate extinction.

(E) They are in danger of extinction due to events that sometimes have nothing to do with human activities.

111. Which of the following most accurately describes the organization of the passage?

(A) A question is raised, a distinction regarding it is made, and the question is answered.

(B) An interpretation is presented, its soundness is examined, and a warning is given.

(C) A situation is described, its consequences are analyzed, and a prediction is made.

(D) Two interpretations of a phenomenon are described, and one of them is rejected as invalid.

(E) Two methods for analyzing a phenomenon are compared, and further study of the phenomenon is recommended.

112. Which of the following best describes the function of the sentence in lines 35–38?

(A) To give an example of a particular kind of study

(B) To cast doubt on an assertion made in the previous sentence

(C) To raise an objection to a view presented in the first paragraph

(D) To provide support for a view presented in the first paragraph

(E) To introduce an idea that will be countered in the following paragraph

Line (5)	While the most abundant and dominant species within a particular ecosystem is often crucial in perpetuating the ecosystem, a “keystone” species, here defined as one whose effects are much larger than would be predicted from its abundance, can also play a vital role. But because complex species interactions may be involved, identifying a keystone species by removing the species and

(10) observing changes in the ecosystem is problematic. It might seem that certain traits would clearly define a species as a keystone species; for example, *Pisaster ochraceus* is often a keystone predator because it consumes and
(15) suppresses mussel populations, which in the absence of this starfish can be a dominant species. But such predation on a dominant or potentially dominant
(20) species occurs in systems that do as well as in systems that do not have species that play keystone roles. Moreover, whereas *P. ochraceus* occupies an unambiguous keystone role on wave-exposed rocky headlands, in more wave-sheltered habitats the impact of *P. ochraceus* predation is weak or
(25) nonexistent, and at certain sites sand burial is responsible for eliminating mussels. Keystone status appears to depend on context, whether of particular
(30) geography or of such factors as community diversity (for example, a reduction in species diversity may thrust more of the remaining species into keystone roles) and length of species interaction (since newly arrived species in particular may dramatically affect ecosystems).

Questions 113–116 refer to the passage.

113. The passage mentions which of the following as a factor that affects the role of *P. ochraceus* as a keystone species within different habitats?
- (A) The degree to which the habitat is sheltered from waves
 - (B) The degree to which other animals within a habitat prey on mussels
 - (C) The fact that mussel populations are often not dominant within some habitats occupied by *P. ochraceus*
 - (D) The size of the *P. ochraceus* population within the habitat
 - (E) The fact that there is great species diversity within some habitats occupied by *P. ochraceus*
114. Which of the following hypothetical experiments most clearly exemplifies the method of identifying species' roles that the author considers problematic?
- (A) A population of seals in an Arctic habitat is counted in order to determine whether it is the dominant species in that ecosystem.
 - (B) A species of fish that is a keystone species in one marine ecosystem is introduced into another marine ecosystem to see whether the species will come to occupy a keystone role.
 - (C) In order to determine whether a species of monkey is a keystone species within a particular ecosystem, the monkeys are removed from that ecosystem and the ecosystem is then studied.
 - (D) Different mountain ecosystems are compared to determine how geography affects a particular species' ability to dominate its ecosystem.

(E) In a grassland experiencing a changing climate, patterns of species extinction are traced in order to evaluate the effect of climate changes on keystone species in that grassland.

115. Which of the following, if true, would most clearly support the argument about keystone status advanced in the last sentence of the passage (lines 24–31)?

(A) A species of bat is primarily responsible for keeping insect populations within an ecosystem low, and the size of the insect population in turn affects bird species within that ecosystem.

(B) A species of iguana occupies a keystone role on certain tropical islands, but does not play that role on adjacent tropical islands that are inhabited by a greater number of animal species.

(C) Close observation of a savannah ecosystem reveals that more species occupy keystone roles within that ecosystem than biologists had previously believed.

(D) As a keystone species of bee becomes more abundant, it has a larger effect on the ecosystem it inhabits.

(E) A species of moth that occupies a keystone role in a prairie habitat develops coloration patterns that camouflage it from potential predators.

116. The passage suggests which of the following about the identification of a species as a keystone species?

(A) Such an identification depends primarily on the species' relationship to the dominant species.

(B) Such an identification can best be made by removing the species from a particular ecosystem and observing changes that occur in the ecosystem.

(C) Such an identification is likely to be less reliable as an ecosystem becomes less diverse.

(D) Such an identification seems to depend on various factors within the ecosystem.

(E) Such an identification can best be made by observing predation behavior.

Line	After evidence was obtained in the 1920s that the universe is expanding, it became reasonable to ask: Will the universe continue to expand indefinitely,
(5)	or is there enough mass in it for the mutual attraction of its constituents to bring this expansion to a halt? It can be calculated that the critical density of matter needed to brake the expansion and “close” the universe is equivalent to
(10)	three hydrogen atoms per cubic meter. But the density of the observable universe—luminous matter in the form of galaxies—comes to only a fraction of this. If the expansion of the universe is to stop, there must be enough

(15)	invisible matter in the universe to exceed the luminous matter in density by a factor of roughly 70.
(20)	Our contribution to the search for this “missing matter” has been to study the rotational velocity of galaxies at various distances from their center of rotation. It has been known for some time that outside the bright nucleus of a
(25)	typical spiral galaxy luminosity falls off rapidly with distance from the center. If luminosity were a true indicator of mass, most of the mass would be
(30)	concentrated toward the center. Outside the nucleus the rotational velocity would decrease geometrically with distance from the center, in conformity with Kepler’s law. Instead we have found that the rotational velocity in spiral
(35)	galaxies either remains constant with increasing distance from the center or increases slightly. This unexpected result indicates that the falloff in luminous
(40)	mass with distance from the center is balanced by an increase in nonluminous mass.
	Our findings suggest that as much as 90 percent of the mass of the universe is not radiating at any wavelength with enough intensity to be detected on the Earth. Such dark matter could be in the form of extremely dim stars of low mass, of large planets like Jupiter, or of black holes, either small or massive. While it has not yet been determined whether this mass is sufficient to close the universe, some physicists consider it significant that estimates are converging on the critical value.

Questions 117–121 refer to the passage.

117. The passage is primarily concerned with
- (A) defending a controversial approach
 - (B) criticizing an accepted view
 - (C) summarizing research findings
 - (D) contrasting competing theories
 - (E) describing an innovative technique
118. The authors’ study indicates that, in comparison with the outermost regions of a typical spiral galaxy, the region just outside the nucleus can be characterized as having
- (A) higher rotational velocity and higher luminosity
 - (B) lower rotational velocity and higher luminosity
 - (C) lower rotational velocity and lower luminosity
 - (D) similar rotational velocity and higher luminosity
 - (E) similar rotational velocity and similar luminosity
119. The authors’ suggestion that “as much as 90 percent of the mass of the universe is

not radiating at any wavelength with enough intensity to be detected on the Earth” (lines 34–37) would be most weakened if which of the following were discovered to be true?

- (A) Spiral galaxies are less common than types of galaxies that contain little nonluminous matter.
- (B) Luminous and nonluminous matter are composed of the same basic elements.
- (C) The bright nucleus of a typical spiral galaxy also contains some nonluminous matter.
- (D) The density of the observable universe is greater than most previous estimates have suggested.
- (E) Some galaxies do not rotate or rotate too slowly for their rotational velocity to be measured.

120. It can be inferred from information presented in the passage that if the density of the universe were equivalent to significantly less than three hydrogen atoms per cubic meter, which of the following would be true as a consequence?

- (A) Luminosity would be a true indicator of mass.
- (B) Different regions in spiral galaxies would rotate at the same velocity.
- (C) The universe would continue to expand indefinitely.
- (D) The density of the invisible matter in the universe would have to be more than 70 times the density of the luminous matter.
- (E) More of the invisible matter in spiral galaxies would have to be located in their nuclei than in their outer regions.

121. The authors propose all of the following as possibly contributing to the “missing matter” in spiral galaxies EXCEPT

- (A) massive black holes
- (B) small black holes
- (C) small, dim stars
- (D) massive stars
- (E) large planets

Line	Jon Clark’s study of the effect of the modernization of a telephone exchange on exchange maintenance work and workers is a solid contribution to a debate that encompasses two lively issues in the history and sociology of technology: technological determinism and social constructivism.
(5)	
(10)	Clark makes the point that the characteristics of a technology have a decisive influence on job skills and work organization. Put more strongly, technology

(15) can be a primary determinant of social and managerial organization. Clark believes this possibility has been obscured by the recent sociological fashion, exemplified by Braverman's analysis, that emphasizes the way machinery reflects social choices. For Braverman, the shape of a technological system is subordinate to the manager's desire to wrest control of the labor process from

(20) the workers. Technological change is construed as the outcome of negotiations among interested parties who seek to incorporate their own interests into the design and configuration of the machinery. This position represents the new mainstream called social constructivism.

(25) The constructivists gain acceptance by misrepresenting technological determinism: technological determinists are supposed to believe, for example, that machinery imposes appropriate forms of order on society. The alternative to constructivism, in other words, is to view technology as existing outside

(30) society, capable of directly influencing skills and work organization. Clark refutes the extremes of the constructivists by both theoretical and empirical arguments. Theoretically he defines "technology" in terms of relationships between social and technical variables. Attempts to reduce the meaning of technology to cold, hard metal are bound to fail, for machinery is

(35) just scrap unless it is organized functionally and supported by appropriate systems of operation and maintenance. At the empirical level Clark shows how a change at the telephone exchange from maintenance-intensive electromechanical switches to semielectronic switching systems altered work tasks, skills, training opportunities, administration, and organization of workers. Some changes Clark attributes to the particular way management and labor unions negotiated the introduction of the technology, whereas others are seen as arising from the capabilities and nature of the technology itself. Thus Clark helps answer the question: "When is social choice decisive and when are the concrete characteristics of technology more important?"

Questions 122–129 refer to the passage.

122. The primary purpose of the passage is to

- (A) advocate a more positive attitude toward technological change
- (B) discuss the implications for employees of the modernization of a telephone exchange
- (C) consider a successful challenge to the constructivist view of technological change
- (D) challenge the position of advocates of technological determinism
- (E) suggest that the social causes of technological change should be studied in real situations

123. Which of the following statements about the modernization of the telephone exchange is supported by information in the passage?

- (A) The new technology reduced the role of managers in labor negotiations.
- (B) The modernization was implemented without the consent of the employees directly affected by it.
- (C) The modernization had an impact that went significantly beyond maintenance routines.
- (D) Some of the maintenance workers felt victimized by the new technology.
- (E) The modernization gave credence to the view of advocates of social constructivism.

124. Which of the following most accurately describes Clark's opinion of Braverman's position?

- (A) He respects its wide-ranging popularity.
- (B) He disapproves of its misplaced emphasis on the influence of managers.
- (C) He admires the consideration it gives to the attitudes of the workers affected.
- (D) He is concerned about its potential to impede the implementation of new technologies.
- (E) He is sympathetic to its concern about the impact of modern technology on workers.

125. The information in the passage suggests that which of the following statements from hypothetical sociological studies of change in industry most clearly exemplifies the social constructivists' version of technological determinism?

- (A) It is the available technology that determines workers' skills, rather than workers' skills influencing the application of technology.
- (B) All progress in industrial technology grows out of a continuing negotiation between technological possibility and human need.
- (C) Some organizational change is caused by people; some is caused by computer chips.
- (D) Most major technological advances in industry have been generated through research and development.
- (E) Some industrial technology eliminates jobs, but educated workers can create whole new skills areas by the adaptation of the technology.

126. The information in the passage suggests that Clark believes that which of the following would be true if social constructivism had not gained widespread acceptance?

- (A) Businesses would be more likely to modernize without considering the social consequences of their actions.

(B) There would be greater understanding of the role played by technology in producing social change.

(C) Businesses would be less likely to understand the attitudes of employees affected by modernization.

(D) Modernization would have occurred at a slower rate.

(E) Technology would have played a greater part in determining the role of business in society.

127. According to the passage, constructivists employed which of the following to promote their argument?

(A) Empirical studies of business situations involving technological change

(B) Citation of managers supportive of their position

(C) Construction of hypothetical situations that support their view

(D) Contrasts of their view with a misstatement of an opposing view

(E) Descriptions of the breadth of impact of technological change

128. The author of the passage uses the expression “are supposed to” in line 25 primarily in order to

(A) suggest that a contention made by constructivists regarding determinists is inaccurate

(B) define the generally accepted position of determinists regarding the implementation of technology

(C) engage in speculation about the motivation of determinists

(D) lend support to a comment critical of the position of determinists

(E) contrast the historical position of determinists with their position regarding the exchange modernization

129. Which of the following statements about Clark’s study of the telephone exchange can be inferred from information in the passage?

(A) Clark’s reason for undertaking the study was to undermine Braverman’s analysis of the function of technology.

(B) Clark’s study suggests that the implementation of technology should be discussed in the context of conflict between labor and management.

(C) Clark examined the impact of changes in the technology of switching at the exchange in terms of overall operations and organization.

(D) Clark concluded that the implementation of new switching technology was equally beneficial to management and labor.

(E) Clark’s analysis of the change in switching systems applies only narrowly to the situation at the particular exchange that he studied.

Line	Jacob Burckhardt’s view that Renaissance European women “stood on a footing of perfect equality” with Renaissance men has been repeatedly cited
(5)	by feminist scholars as a prelude to their presentation of rich historical evidence of women’s inequality. In striking contrast to Burckhardt, Joan Kelly
(10)	in her famous 1977 essay, “Did Women Have a Renaissance?” argued that the Renaissance was a period of economic and social decline for women relative
(15)	both to Renaissance men and to medieval women. Recently, however, a significant trend among <i>feminist scholars</i> has entailed a rejection of both
(20)	Kelly’s dark vision of the Renaissance and Burckhardt’s rosy one. Many recent works by these scholars stress the ways in which differences among
(25)	Renaissance women—especially in terms of social status and religion—work to complicate the kinds of generalizations both Burckhardt and Kelly made on
(30)	the basis of their observations about upper-class Italian women. The trend is also evident, however, in works focusing on those middle- and
(35)	upper-class European women whose ability to write gives them disproportionate representation in the historical record. Such women were,
(40)	simply by virtue of their literacy, members of a tiny minority of the population, so it is risky to take their descriptions of their experiences as
(45)	typical of “female experience” in any general sense. Tina Krontiris, for example, in her fascinating study of six Renaissance women writers, does tend
(50)	at times to conflate “women” and “women writers,” assuming that women’s gender, irrespective of other social differences, including literacy, allows us to
	view women as a homogeneous social group and make that group an object of analysis. Nonetheless, Krontiris makes a significant contribution to the field
	and is representative of those authors who offer what might be called a cautiously optimistic assessment of Renaissance women’s achievements,
	although she also stresses the social obstacles Renaissance women faced when they sought to raise their “oppositional voices.” Krontiris is concerned
	to show women intentionally negotiating some power for themselves (at least in the realm of public discourse) against potentially constraining ideologies,
	but in her sober and thoughtful concluding remarks, she suggests that such verbal opposition to cultural stereotypes was highly circumscribed; women
	seldom attacked the basic assumptions in the ideologies that oppressed them.

Questions 130–136 refer to the passage.

130. The author of the passage discusses Krontiris primarily to provide an example of a writer who
- (A) is highly critical of the writings of certain Renaissance women
 - (B) supports Kelly’s view of women’s status during the Renaissance
 - (C) has misinterpreted the works of certain Renaissance women

(D) has rejected the views of both Burckhardt and Kelly

(E) has studied Renaissance women in a wide variety of social and religious contexts

131. According to the passage, Krontiris's work differs from that of the scholars mentioned in line 12 in which of the following ways?

(A) Krontiris's work stresses the achievements of Renaissance women rather than the obstacles to their success.

(B) Krontiris's work is based on a reinterpretation of the work of earlier scholars.

(C) Krontiris's views are at odds with those of both Kelly and Burckhardt.

(D) Krontiris's work focuses on the place of women in Renaissance society.

(E) Krontiris's views are based exclusively on the study of a privileged group of women.

132. According to the passage, feminist scholars cite Burckhardt's view of Renaissance women primarily for which of the following reasons?

(A) Burckhardt's view forms the basis for most arguments refuting Kelly's point of view.

(B) Burckhardt's view has been discredited by Kelly.

(C) Burckhardt's view is one that many feminist scholars wish to refute.

(D) Burckhardt's work provides rich historical evidence of inequality between Renaissance women and men.

(E) Burckhardt's work includes historical research supporting the arguments of the feminist scholars.

133. It can be inferred that both Burckhardt and Kelly have been criticized by the scholars mentioned in line 12 for which of the following?

(A) Assuming that women writers of the Renaissance are representative of Renaissance women in general

(B) Drawing conclusions that are based on the study of an atypical group of women

(C) Failing to describe clearly the relationship between social status and literacy among Renaissance women

(D) Failing to acknowledge the role played by Renaissance women in opposing cultural stereotypes

(E) Failing to acknowledge the ways in which social status affected the creative activities of Renaissance women

134. The author of the passage suggests that Krontiris incorrectly assumes that
- (A) social differences among Renaissance women are less important than the fact that they were women
 - (B) literacy among Renaissance women was more prevalent than most scholars today acknowledge
 - (C) during the Renaissance, women were able to successfully oppose cultural stereotypes relating to gender
 - (D) Renaissance women did not face many difficult social obstacles relating to their gender
 - (E) in order to attain power, Renaissance women attacked basic assumptions in the ideologies that oppressed them
135. The last sentence in the passage serves primarily to
- (A) suggest that Krontiris's work is not representative of recent trends among feminist scholars
 - (B) undermine the argument that literate women of the Renaissance sought to oppose social constraints imposed on them
 - (C) show a way in which Krontiris's work illustrates a "cautiously optimistic" assessment of Renaissance women's achievements
 - (D) summarize Krontiris's view of the effect of literacy on the lives of upper- and middle-class Renaissance women
 - (E) illustrate the way in which Krontiris's study differs from the studies done by Burckhardt and Kelly
136. The author of the passage implies that the women studied by Krontiris are unusual in which of the following ways?
- (A) They faced obstacles less formidable than those faced by other Renaissance women.
 - (B) They have been seen by historians as more interesting than other Renaissance women.
 - (C) They were more concerned about recording history accurately than were other Renaissance women.
 - (D) Their perceptions are more likely to be accessible to historians than are those of most other Renaissance women.
 - (E) Their concerns are likely to be of greater interest to feminist scholars than are the ideas of most other Renaissance women.

Line	Most attempts by physicists to send particles faster than the speed of light involve a remarkable phenomenon called quantum tunneling, in which

(5) particles travel through solid barriers that appear to be impenetrable. If you
throw a ball at a wall, you expect it to bounce back, not to pass straight
(10) through it. Yet subatomic particles perform the equivalent feat. Quantum
theory says that there is a distinct, albeit small, probability that such a particle
(15) will tunnel its way through a barrier; the probability declines exponentially as
the thickness of the barrier increases. Though the extreme rapidity of
quantum tunneling was noted as early as 1932, not until 1955 was it
hypothesized—by Wigner and Eisenbud—that tunneling particles sometimes
(20) travel faster than light. Their grounds were calculations that suggested that
the time it takes a particle to tunnel through a barrier increases with the
thickness of the barrier until tunneling time reaches a maximum; beyond that
(25) maximum, tunneling time stays the same regardless of barrier thickness. This
would imply that once maximum tunneling time is reached, tunneling speed
(30) will increase without limit as barrier thickness increases. Several recent
experiments have supported this hypothesis that tunneling particles
sometimes reach superluminal speed. According to measurements performed
by Raymond Chiao and colleagues, for example, photons can pass through an
optical filter at 1.7 times the speed of light.

Questions 137–139 refer to the passage.

137. The author of the passage mentions calculations about tunneling time and barrier thickness in order to
- (A) suggest that tunneling time is unrelated to barrier thickness
 - (B) explain the evidence by which Wigner and Eisenbud discovered the phenomenon of tunneling
 - (C) describe data recently challenged by Raymond Chiao and colleagues
 - (D) question why particles engaged in quantum tunneling rarely achieve extremely high speeds
 - (E) explain the basis for Wigner and Eisenbud's hypothesis
138. The passage implies that if tunneling time reached no maximum in increasing with barrier thickness, then
- (A) tunneling speed would increase with barrier thickness
 - (B) tunneling speed would decline with barrier thickness
 - (C) tunneling speed would vary with barrier thickness
 - (D) tunneling speed would not be expected to increase without limit
 - (E) successful tunneling would occur even less frequently than it does
139. Which of the following statements about the earliest scientific investigators of quantum tunneling can be inferred from the passage?

- (A) They found it difficult to increase barrier thickness continually.
- (B) They anticipated the later results of Chiao and his colleagues.
- (C) They did not suppose that tunneling particles could travel faster than light.
- (D) They were unable to observe instances of successful tunneling.
- (E) They made use of photons to study the phenomenon of tunneling.

7.5 Answer Key

1. B
2. B
3. D
4. A
5. C
6. D
7. B
8. D
9. D
10. B
11. E
12. A
13. A
14. C
15. D
16. B
17. B
18. B
19. B
20. B
21. A
22. D
23. E
24. D
25. A
26. C
27. B
28. A
29. C

30. B
31. C
32. B
33. D
34. B
35. E
36. C
37. C
38. E
39. A
40. D
41. A
42. C
43. A
44. B
45. D
46. E
47. C
48. C
49. B
50. E
51. E
52. A
53. A
54. D
55. B
56. C
57. C
58. E
59. D
60. C

61. B
62. A
63. A
64. B
65. E
66. D
67. D
68. B
69. C
70. B
71. E
72. D
73. E
74. B
75. D
76. C
77. C
78. E
79. A
80. E
81. C
82. B
83. C
84. D
85. A
86. A
87. E
88. A
89. B
90. A
91. A

02. D
03. C
04. E
05. B
06. D
07. E
08. E
09. D
10. B
11. C
12. D
13. A
14. C
15. D
16. A
17. A
18. D
19. E
20. D
21. B
22. C
23. B
24. C
25. B
26. D
27. C
28. D
29. A
30. C
31. D
32. C

- 23. C
- 24. B
- 25. A
- 26. B
- 27. D
- 28. A
- 29. C
- 30. D
- 31. E
- 32. C
- 33. B
- 34. A
- 35. C
- 36. D
- 37. E
- 38. D
- 39. C

7.6 Answer Explanations

The following discussion of reading comprehension is intended to familiarize you with the most efficient and effective approaches to the kinds of problems common to reading comprehension. The particular questions in this chapter are generally representative of the kinds of reading comprehension questions you will encounter on the GMAT exam. Remember that it is the problem solving strategy that is important, not the specific details of a particular question.

Questions 1–4 refer to the passage on page 366.

1. According to the passage, theory B states that which of the following is a factor that enables a schooling fish to escape predators?
 - (A) The tendency of fish to form compact groups
 - (B) The movement of other fish within the school
 - (C) The inability of predators to detect schools
 - (D) The ability of fish to hide behind one another in a school
 - (E) The great speed with which a school can disperse

Supporting idea

This question depends on understanding what the passage states about theory B, the “confusion effect.” One element of theory B is that predators may experience sensory confusion created by large numbers of moving fish in a school.

A The compactness of groups of schooling fish is an element of theory A, not theory B.

B Correct. It is the movement of schooling fish around a predator that creates sensory confusion in the predator; this movement may distract the predator and help protect individual fish in the school.

C According to the passage’s description of theory A, predators are actually slightly more likely to detect schools than they are to detect individual fish.

D Theory B does not involve fish hiding behind one another but rather moving around the predator.

E The passage does not discuss the speed of dispersal of schools of fish.

The correct answer is B.

2. According to the passage, both theory A and theory B have been developed to explain how
 - (A) fish hide from predators by forming schools
 - (B) forming schools functions to protect fish from predators

- (C) schooling among fish differs from other protective behaviors
- (D) small fish are able to make rapid decisions
- (E) small fish are able to survive in an environment densely populated by large predators

Supporting idea

The passage states in its first paragraph that two theories were developed to explain why schooling occurs in so many fish species and that they both assume that schooling helps protect fish from predators.

A While theory A involves an explanation of how schooling makes an individual fish less likely to be found by predators, theory B explains how schooling protects fish even when they are detected by predators.

B Correct. Both theory A and theory B begin with the assumption that schooling provides protection from predators, and each theory offers a different explanation for how that protection occurs.

C The passage does not discuss protective behaviors other than schooling.

D The decision-making ability of predators, not schooling fish, is discussed in the passage; schooling is presented as an instinctive behavior.

E The passage suggests that only theory B helps explain schooling behavior in environments where many predators, large or otherwise, are found, and that theory A explains schooling in areas where predators are not as abundant.

The correct answer is B.

3. According to one explanation of the “confusion effect,” a fish that swims in a school will have greater advantages for survival if it
- (A) tends to be visible for no more than 200 meters
 - (B) stays near either the front or the rear of a school
 - (C) is part of a small school rather than a large school
 - (D) is very similar in appearance to the other fish in the school
 - (E) is medium-sized

Inference

The “confusion effect” is discussed in the third and fourth paragraphs. The first explanation of the “confusion effect” proposes that because predators prefer to select distinctive prey, they find it difficult to select one fish from among many that look the same.

A The 200-meter visibility of fish is part of the explanation for theory A, not

theory B (the “confusion effect”).

B The location of an individual fish within a school is not discussed in the passage as being important to the “confusion effect.”

C The size of a school of fish is not discussed as an element of the “confusion effect.”

D Correct. Because predators, according to the “confusion effect,” prefer to select prey that is distinct from the rest of the school, a fish that is similar in appearance to the other fish in its school would most likely enjoy a survival advantage.

E The size of a fish relative to the other fish in its school would most likely contribute to its ability to survive: that is, if it resembled other fish in size, it would be safer, based on what the passage says about the “confusion effect.” Furthermore, the passage gives no reason to think that merely being medium-sized would confer any advantage (unless the other fish were medium-sized as well).

The correct answer is D.

4. The author is primarily concerned with
- (A) discussing different theories
 - (B) analyzing different techniques
 - (C) defending two hypotheses
 - (D) refuting established beliefs
 - (E) revealing new evidence

Main idea

Determining the author’s primary concern depends on understanding the focus of the passage as a whole. The author presents two theories that purport to account for why fish, particularly small fish, tend to school and explains the arguments of proponents of each theory.

A Correct. The author discusses two theories—identified as theory A and theory B—that account for the tendency of fish to school.

B The author is not concerned with different techniques in the passage.

C The two theories of why fish school could be referred to as hypotheses, but the author is not primarily concerned with defending them; rather, the passage explains how each attempts to account for the phenomenon in question.

D The author presents, rather than refutes, beliefs about why fish tend to school.

E The author reveals no evidence, new or otherwise, in the passage. The passage is a general discussion of scientific opinions based on existing evidence.

The correct answer is A.

Questions 5–7 refer to the passage on page 368.

5. The primary purpose of the passage is to
- (A) explain why a particular business strategy has been less successful than was once anticipated
 - (B) propose an alternative to a particular business strategy that has inadvertently caused ecological damage
 - (C) present a concern about the possible consequences of pursuing a particular business strategy
 - (D) make a case for applying a particular business strategy on a larger scale than is currently practiced
 - (E) suggest several possible outcomes of companies' failure to understand the economic impact of a particular business strategy

Main idea

This question requires understanding the passage as a whole. The passage starts out defining a goal—ecoefficiency—that has become popular among companies throughout the world and that would be expected to bring overall ecological benefits. It then immediately introduces Senge and Carstedt, who have concerns about this idea. The rest of the passage is devoted to explaining their concerns, though the passage does not present a particular alternative strategy.

A The passage never discusses whether ecoefficiency is or is not successful but only the possible consequences of it.

B Lines 26–28 state that Senge and Carstedt believe that a *new systemic approach* must be found, but a particular alternative strategy is never offered.

C Correct. After defining ecoefficiency, the rest of the passage is devoted to describing the concerns Senge and Carstedt have about it as a goal for companies.

D The passage reports on particular concerns about the strategy and does not advocate expanding its adoption.

E The passage is concerned with environmental impact, not economic impact.

The correct answer is C.

6. The passage mentions which of the following as a possible consequence of companies' realization of greater profits through ecoefficiency?
- (A) The companies may be able to sell a greater number of products by lowering prices.
 - (B) The companies may be better able to attract investment capital in the global market.
 - (C) The profits may be reinvested to increase economic growth through ecoefficiency.
 - (D) The profits may be used as investment capital for industries that are not ecoefficient.
 - (E) The profits may encourage companies to make further innovations in reducing production waste.

Supporting ideas

This question asks for identification of an example given in the passage of what could result from the greater profits that may come with ecoefficiency. Such profits are specifically mentioned only in lines 14 and 17. The increased growth and profits referred to in line 14 are associated with increased waste generated indirectly by ecoefficient companies. The growth and profits referred to in line 17 are associated with investment of this capital in industries that may not be ecoefficient.

- A The prices of companies' products are not mentioned in the passage.
- B Greater investment in ecoefficient companies by outside sources is not mentioned in the passage.
- C The passage mentions increased profits from ecoefficiency but not the use of these profits to then increase growth through further ecoefficiency.
- D Correct.** Lines 14–19 state explicitly that company profits from ecoefficiency may be invested in eco-inefficient industries.
- E The passage does not discuss whether companies will use increased profits from ecoefficiency to become more ecoefficient.

The correct answer is D.

7. The passage implies that which of the following is a possible consequence of a company's adoption of innovations that increase its ecoefficiency?
- (A) Company profits resulting from such innovations may be reinvested in that company with no guarantee that the company will continue to make further improvements in ecoefficiency.
 - (B) Company growth fostered by cost savings from such innovations may allow that company to manufacture a greater number of products that will

be used and discarded, thus worsening environmental stress.

(C) A company that fails to realize significant cost savings from such innovations may have little incentive to continue to minimize the environmental impact of its production processes.

(D) A company that comes to depend on such innovations to increase its profits and growth may be vulnerable in the global market to competition from old-style eco-inefficient industries.

(E) A company that meets its ecoefficiency goals is unlikely to invest its increased profits in the development of new and innovative ecoefficiency measures.

Inference

The answer to this question will be an inference about what may result from a company's increased ecoefficiency. The passage suggests several outcomes from such an increase: a general worsening of the environment; a tendency for companies to manufacture more of particular products, which will then be thrown away by consumers; the possibility that increased profits will result in greater investment in industries that are not ecoefficient; and even the possibility that ecoefficiency might allow so much growth that more total waste will be produced and more overall wildlife habitat destroyed.

A The passage suggests generally that ecoefficiency will increase companies' profits, but there is no suggestion that these companies will therefore then abandon ecoefficiency as a goal.

B Correct. Lines 6–12 strongly suggest that it is possible that the increased growth that may come from ecoefficiency may result in more products being manufactured, which may result in more waste as those products are discarded by consumers.

C The passage does not suggest that ecoefficiency may fail to increase a company's profits.

D The passage suggests that ecoefficiency has allowed many companies to increase profits, but it does not suggest that eco-inefficient companies are more profitable or competitive in the global marketplace.

E As with answer choice (A), there is no suggestion that companies are likely to abandon ecoefficient strategies once they have realized increased profits from such strategies.

The correct answer is B.

Questions 8–10 refer to the passage on page 370.

8. The primary purpose of the passage is to

- (A) challenge recent findings that appear to contradict earlier findings
- (B) present two sides of an ongoing scientific debate
- (C) report answers to several questions that have long puzzled researchers
- (D) discuss evidence that has caused a long-standing belief to be revised
- (E) attempt to explain a commonly misunderstood biological phenomenon

Main idea

This question depends on understanding the passage as a whole. The passage begins by describing a long-held belief regarding humans' circadian rhythms: that the SCN control them. It then goes on to explain that new findings have led scientists to believe that other organs and tissues may be involved in regulating the body's circadian rhythms as well.

A The passage does not challenge the more-recent findings. Furthermore, the recent findings that the passage recounts do not contradict earlier findings; rather, when placed alongside those earlier findings, they have led scientists to reach additional conclusions.

B The passage does not discuss a two-sided debate; no findings or conclusions are disputed by any figures in the passages.

C There is only one question at issue in the passage: whether the SCN alone control human circadian rhythms. Furthermore, nothing in the passage suggests that researchers have been puzzled for a long time about this.

D Correct. The new evidence regarding circadian rhythm–related gene activity in all the body's tissue has led scientists to revise their long-standing belief that the SCN alone control circadian rhythms.

E The biological phenomenon of circadian rhythms is not, at least as far as the passage is concerned, misunderstood. Its causes are being investigated and refined.

The correct answer is D.

9. The passage mentions each of the following as a function regulated by the SCNs in some animals EXCEPT
- (A) activity level
 - (B) blood pressure
 - (C) alertness
 - (D) vision
 - (E) temperature

Supporting idea

This question asks about what is NOT specifically mentioned in the passage with regard to functions regulated by the SCN. Those functions, as identified in the passage, are blood pressure, body temperature, activity level, alertness, and the release of melatonin.

A The passage includes activity level in its list of functions regulated by the SCN.

B The passage includes blood pressure in its list of functions regulated by the SCN.

C The passage includes alertness in its list of functions regulated by the SCN.

D Correct. While the passage does say that cells in the human retina transmit information to the SCN, there is no suggestion that the SCN reciprocally control vision.

E The passage includes temperature in its list of functions regulated by the SCN.

The correct answer is D.

10. The author of the passage would probably agree with which of the following statements about the SCNs?

(A) The SCNs are found in other organs and tissues of the body besides the hypothalamus.

(B) The SCNs play a critical but not exclusive role in regulating circadian rhythms.

(C) The SCNs control clock genes in a number of tissues and organs throughout the body.

(D) The SCNs are a less significant factor in regulating blood pressure than scientists once believed.

(E) The SCNs are less strongly affected by changes in light levels than they are by other external cues.

Main idea

The author of the passage discusses the SCN in the passage in order to explain that they are most likely not, as long believed, solely responsible for the control of our circadian rhythms.

A The author states that the SCN are nerve clusters in the hypothalamus, and nothing in the passage contradicts or undermines the supposition that they are only in the hypothalamus.

B Correct. The author points out in the second paragraph that the SCN

control core circadian function, but that circadian clocks found elsewhere in the body have an effect as well.

C The evidence offered in the second paragraph about the activity of the clock gene in rat livers suggests that these clock genes are not under the SCN's control. The passage does not suggest that the SCN control any of the non-SCN controllers of circadian rhythms.

D The author states in the second paragraph that scientists do not dispute the idea that the SCN regulate blood pressure.

E The first paragraph indicates that the SCN respond to light levels; clock genes in other tissues are the ones that may respond to other external cues.

The correct answer is B.

Questions 11–13 refer to the passage on page 372.

11. According to the passage, the difference in the amount of cratering on Callisto's and Io's respective surfaces can probably be explained by the difference between these two moons with respect to which of the following factors?
- (A) Size
 - (B) Ice content
 - (C) The rate of bombardment by comets and asteroids
 - (D) The influence of Jupiter's other moons
 - (E) The level of geological activity

Supporting idea

Cratering is discussed in the second paragraph. The passage states that Callisto is heavily cratered, while Io has no detectable craters. Io is the moon closest to Jupiter, and Callisto is the farthest away. Their relative positions are accompanied by a corresponding difference in geological activity: Io is very geologically active, while Callisto is not active at all. Io's geological activity means that it is being regularly resurfaced, so it is unlikely to retain any evidence of cratering—unlike Callisto, which experiences no resurfacing, leaving its craters intact.

A While the passage makes clear that Callisto is larger than Io, it does not address whether their relative size explains the difference in their respective amounts of cratering.

B According to the passage, Callisto and Io differ in terms of their ice content, but nothing in the passage indicates that that content affects the cratering on their surfaces.

C The passage states that Io experiences a higher rate of bombardment than Callisto does, but while that bombardment most likely causes cratering on

Io, its surface does not retain those craters. Thus, the rate of bombardment does not, in itself, explain the difference in cratering on the surface of the two moons.

D The only other moons of Jupiter discussed in the passage are Ganymede and Europa, and the passage does not consider their effect on the cratering of Callisto and Io.

E Correct. Because Io experiences a high degree of geological activity, its surface is continuously resurfaced, which means that the surface shows no craters. Callisto, on the other hand, is not geologically active and thus is not resurfaced regularly, which explains why its surface is heavily cratered.

The correct answer is E.

12. Which of the following best describes the purpose of the second paragraph of the passage?

(A) To provide further evidence of the systematic variation in the characteristics of Jupiter's four largest moons

(B) To present a comprehensive theory to explain the systematic variation in the characteristics of Jupiter's four largest moons

(C) To explain the significance of the systematic variation in the characteristics of Jupiter's four largest moons

(D) To introduce facts that contradict conventional assumptions about Jupiter's four largest moons

(E) To contrast the characteristics of Jupiter's four largest moons with the characteristics of the planets of the solar system

Evaluation

This question depends on understanding how the second paragraph functions in the context of the passage as a whole. The first paragraph discusses the way in which the composition of Jupiter's four largest moons varies with distance from Jupiter, and the second paragraph extends the idea of distance-based variation to geological activity and surface appearance.

A Correct. The second paragraph presents evidence related to the amount of geological activity and surface cratering in order to extend the first paragraph's suggestion that the characteristics of Jupiter's four largest moons vary systematically based on their distance from Jupiter.

B The passage does not offer a theory to account for the systematic variation in the characteristics of Jupiter's largest moons; it merely describes several instances of that variation.

C The second paragraph provides more examples of the systematic variation

in the characteristics of Jupiter's largest moons rather than explaining that variation's significance.

D The passage describes Jupiter's moons but does not identify any conventional assumptions about those moons that are contradicted by facts introduced in the passage.

E The first paragraph suggests that Jupiter's moons exhibit differences in characteristics that are more "systematic" than are those of the planets in the solar system, but the characteristics are not themselves contrasted; in fact, the first paragraph suggests that they are similar. The second paragraph does not discuss the planets of the solar system at all.

The correct answer is A.

13. The author's reference to Jupiter's gravity in line 25 serves primarily to
- (A) indicate why the absence of craters on Io's surface is surprising
 - (B) explain the presence of craters on the surface of Jupiter's four largest moons
 - (C) provide an explanation for the lack of geological activity on Callisto
 - (D) contrast Jupiter's characteristics with the characteristics of its four largest moons
 - (E) illustrate the similarity between Jupiter's four largest moons and the planets of the solar system

Evaluation

The reference to Jupiter's gravity is part of the author's discussion of cratering on Jupiter's moons; Jupiter's gravity is strong enough to attract comets and asteroids that then bombard its inner moons. A high bombardment rate would seem to indicate that a great deal of cratering would occur on those inner moons, and yet the passage reports that, unexpectedly, on the innermost moon, Io, no craters have been detected.

A Correct. Jupiter's gravity attracts comets and asteroids, which increases the bombardment rate of its inner moons, including Io. This bombardment makes it surprising that Io's surface shows no cratering.

B The passage discusses the likely effect of Jupiter's gravity on its inner moons but not its outer moons; two of the large moons the passage discusses are outer moons.

C According to the passage, Callisto, an outer moon, lacks geological activity because of its distance from Jupiter; Jupiter's gravity is not offered as a contributing factor to this inactivity.

D The passage does not contrast Jupiter with its moons; rather, it compares

the moons to one another.

E The first paragraph of the passage suggests that Jupiter's moons vary in a way similar to that of the planets of the solar system, but the author does not refer to Jupiter's gravity to illustrate the similarity in this variation.

The correct answer is A.

Questions 14–17 refer to the passage on page 374.

14. According to the passage, which of the following contributed to Marcus Garvey's success?

(A) He introduced cultural and historical consciousness to the African American community.

(B) He believed enthusiastically in the traditional American success ethos.

(C) His audience had already formed a consciousness that made it receptive to his message.

(D) His message appealed to critics of African American support for United States military involvement in the First World War.

(E) He supported the movement to protest segregation that had emerged prior to his arrival in the United States.

Supporting idea

To answer this question, find what the passage states explicitly about how Marcus Garvey achieved his success. The passage begins by stating that Garvey arrived at the right time: that returning African American soldiers were primed to receive what he had to say about the African American community. These soldiers already held strong beliefs about their rights to opportunities for success; the passage concludes that the divide between the soldiers' expectations and their experiences led to Garvey's success.

A The passage states that African American people were in possession of a strong cultural and historical consciousness prior to Garvey's arrival in the United States.

B The passage attributes belief in the traditional American success ethos to African American people who joined the armed forces; it does not mention Garvey's beliefs on this subject.

C Correct. African American soldiers who had experienced segregation during the First World War were ready to hear what Garvey had to say.

D Critics of African American support for United States involvement in the First World War are not mentioned in the passage.

E While Garvey most likely would have supported a movement to protest

segregation, such a movement is not discussed in the passage.

The correct answer is C.

15. The passage suggests that many African American people responded to their experiences in the armed forces in which of the following ways?
- (A) They maintained as civilians their enthusiastic allegiance to the armed forces.
 - (B) They questioned United States involvement in the First World War.
 - (C) They joined political organizations to protest the segregation of African American troops and the indignities they suffered in the military.
 - (D) They became aware of the gap between their expectations and the realities of American culture.
 - (E) They repudiated Garvey's message of pride and unity.

Inference

According to the passage, African Americans enthusiastically joined the armed services but were confronted with continued segregation, both in the military and when they returned home. The passage does not explicitly state their response to these experiences, but a response can be inferred. The second paragraph, refers to anthropologist Anthony F. C. Wallace, who argued that a revitalization movement may be brought about by the perception of a gap between expectations and reality, and such a revitalization did occur in African American communities following the First World War; thus, many African American people may have become aware of a gap such as Wallace described.

A The passage states that African American troops experienced segregation and other indignities while in the military; these experiences could reasonably be inferred to have dampened their enthusiasm for the armed forces. Regardless, the passage does not suggest an enthusiastic allegiance.

B The passage describes African American people's enthusiasm about joining the military. Although they experienced segregation and other indignities while in the military, the passage does not suggest that their opinion about involvement in the war changed.

C While African American troops may have joined political organizations, the passage does not provide any actual evidence of this having occurred.

D Correct. The fact that, as the passage states, a revitalization movement occurred in the African American community following the First World War suggests that the returning soldiers did become aware of the gap between their expectations of an improved situation with regard to segregation and the reality of continued segregation in the United States.

E The passage does not suggest that African American troops repudiated Garvey's message. On the contrary, it states that Garvey built *the largest revitalization movement in African American history*. This suggests that the members of the African American community, including the returning soldiers, were extremely receptive to Garvey's message.

The correct answer is D.

16. It can be inferred from the passage that the "scholars" mentioned in line 24 believe which of the following to be true?
- (A) Revitalization resulted from the political activism of returning African American soldiers following the First World War.
 - (B) Marcus Garvey had to change a number of prevailing attitudes in order for his mass movement to find a foothold in the United States.
 - (C) The prevailing sensibility of the African American community provided the foundation of Marcus Garvey's political appeal.
 - (D) Marcus Garvey hoped to revitalize consciousness of cultural and historical identity in the African American community.
 - (E) The goal of the mass movement that Marcus Garvey helped bring into being was to build on the pride and unity among African Americans.

Inference

To determine what it is logical to infer regarding the scholars discussed in the third paragraph, look at the context in which they are mentioned. According to the passage, these scholars argue that Garvey was responsible for creating a particular consciousness within the African American community, a consciousness that the passage identifies as *identity, strength, and [a] sense of history*. Unlike the passage author, these scholars believe strongly in Garvey's responsibility for this consciousness, so they would most likely reject any suggestion that it existed prior to his arrival and activism.

A According to the passage, the scholars believe that Garvey was responsible for the creation of the consciousness that led to revitalization, which suggests that revitalization resulted from Garvey's activism, not soldiers' activism.

B Correct. According to the passage, the scholars believe that Garvey created the consciousness that led to his revitalization movement. This suggests that he had to change prevailing attitudes in order to foster this new consciousness.

C According to the passage, the scholars believe that Garvey created a new consciousness in the African American community; thus, the prevailing sensibility could not have provided a foundation for his appeal.

D According to the passage, the scholars believe that Garvey built his revitalization movement on a new consciousness of cultural and historical identity, not a previously existing one.

E According to the passage, the scholars' position is that Garvey's movement was built on a new sense of pride and unity that he provided, and that that sense did not precede Garvey's work.

The correct answer is B.

17. According to the passage, many African American people joined the armed forces during the First World War for which of the following reasons?

(A) They wished to escape worsening economic conditions in African American communities.

(B) They expected to fulfill ideals of personal attainment.

(C) They sought to express their loyalty to the United States.

(D) They hoped that joining the military would help advance the cause of desegregation.

(E) They saw military service as an opportunity to fulfill Marcus Garvey's political vision.

Supporting idea

This question depends on identifying what the passage states directly about African American people's reasons for joining the armed forces. The reason offered by the passage is that the African American people who entered the armed forces did so because they were *hoping to participate in the traditional American ethos of individual success*.

A Although this is a plausible reason for entering the armed forces, the passage does not discuss economic conditions.

B Correct. The passage states that African American people who joined the armed forces during the First World War wanted to achieve individual success.

C The passage does not discuss African American people's loyalty to the United States.

D The passage states that African American troops experienced segregation, but it does not suggest that they had hoped their joining the military would promote desegregation.

E The passage suggests that African American troops did not become aware of Marcus Garvey's political vision until after they returned from the First World War.

The correct answer is B.

Questions 18–25 refer to the passage on page 376.

18. The passage provides information in support of which of the following assertions?
- (A) The disadvantages of an adaptation to a particular feature of an environment often outweigh the advantages of such an adaptation.
 - (B) An organism's reaction to being placed in an environment to which it is not well adapted can sometimes illustrate the problems that have been solved by the adaptations of organisms indigenous to that environment.
 - (C) The effectiveness of an organism's adaptation to a particular feature of its environment can only be evaluated by examining the effectiveness with which organisms of other species have adapted to a similar feature of a different environment.
 - (D) Organisms of the same species that inhabit strikingly different environments will often adapt in remarkably similar ways to the few features of those environments that are common.
 - (E) Different species of organisms living in the same environment will seldom adapt to features of that environment in the same way.

Application

This question requires recognizing a principle underlying the passage's overall discussion. The passage makes a general claim about terrestrial animals' need to overcome the effect of gravity on their blood circulation systems, and it then uses the specific example of terrestrial snakes to illustrate this claim. To help identify the adaptations used by terrestrial snakes, the passage describes what happens to sea snakes, which are aquatic and less affected by gravity's influence, when they are subjected to a terrestrial environment. The specific problems faced by these snakes strongly suggest that terrestrial snakes have developed ways to overcome these problems. The passage then identifies specific physiological differences between sea snakes and terrestrial snakes that demonstrate how terrestrial snakes overcome gravity's influence.

A The passage discusses how species have successfully adapted to their specific environments and does not mention that these adaptations create disadvantages in that environment.

B Correct. The passage discusses the problems faced by sea snakes when they are subjected to a terrestrial environment and then examines terrestrial snakes to illustrate how certain adaptations solved these problems.

C The passage is not concerned with evaluating the effectiveness of species' adaptations to their environments; it takes for granted that these adaptations are effective.

D The passage is concerned with how species adapt differently to different environments and not with how adaptations to different environments are similar.

E The passage discusses how different environments affect how species have adapted, not how different species adapt to a similar environment.

The correct answer is B.

19. According to the passage, one reason that the distribution of blood in the sea snake changes little while the creature remains in the ocean is that

(A) the heart of the sea snake tends to be located near the center of its body

(B) pressure gradients in the water surrounding the sea snake counter the effects of vertical pressure gradients within its blood vessels

(C) the sea snake assumes a vertical posture less frequently than do the terrestrial and the arboreal snake

(D) the sea snake often relies on waves of muscle contractions to help move blood from the torso to the head

(E) the force of pressure gradients in the water surrounding the sea snake exceeds that of vertical pressure gradients within its circulatory system

Supporting ideas

This question asks for an identification of factual information in the passage. Given that the contrast between sea snakes and terrestrial snakes is being used to identify adaptations used by terrestrial animals to overcome the effect of gravity on their circulation systems, the passage needs initially to illustrate why it is that sea snakes are not confronted with the same problems that gravity causes for terrestrial snakes. This information therefore needs to come fairly early in the passage.

A The passage identifies the location of a sea snake's heart as a factor that minimizes the effort required to pump blood to both extremities but not as a cause of the even distribution of blood in sea snakes.

B Correct. The passage states explicitly in lines 11–17 that while sea snakes are in the ocean, the vertical pressure gradients in their blood vessels are counteracted by the pressure gradients in the water.

C The passage does not discuss the frequency with which any snakes assume certain postures.

D The passage discusses muscle contractions only in relation to arboreal snakes.

E The passage states that the vertical pressures within sea snakes' blood vessels are *counteracted* (line 13) by the water's pressure, which suggests

that the pressures are equalized, not that one force exceeds the other.

The correct answer is B.

20. It can be inferred from the passage that which of the following is true of species of terrestrial snakes that often need to assume a vertical posture?
- (A) They are more likely to be susceptible to circulatory failure in vertical postures than are sea snakes.
 - (B) Their hearts are less likely to be located at the midpoint of their bodies than is the case with sea snakes.
 - (C) They cannot counteract the pooling of blood in lower regions of their bodies as effectively as sea snakes can.
 - (D) The blood pressure at their midpoint decreases significantly when they are tilted with their heads up.
 - (E) They are unable to rely on muscle contractions to move venous blood from the lower torso to the head.

Inference

This question requires using information given about how arboreal snakes, which are frequently in vertical postures, have adapted to gravity's influence to make an assumption that other terrestrial snakes that are frequently in these postures are likely to have similar adaptations. The passage implies that sea snakes have hearts at the midpoint of their bodies because the water's pressure gradients help distribute blood evenly. It then illustrates that arboreal snakes have hearts closer to their heads to help keep blood flowing to their brain when they are in vertical postures.

A The passage does not suggest that any of the snakes mentioned are ill-adapted to their particular environments.

B Correct. The passage states that arboreal snakes have hearts close to their heads and not at the midpoints of their bodies, so it is reasonable to conclude that any terrestrial snake that frequently assumes vertical postures would be unlikely to have hearts at their bodies' midpoint.

C As with answer choice (A), the passage does not suggest that any species of snake is ill-adapted to its environment.

D The passage states that sea snakes lose pressure at their midpoints when they are tilted on land with heads up but that terrestrial snakes do not have this problem.

E Because arboreal snakes use muscle contractions to circulate blood when they are vertical, it is likely that most terrestrial snakes that frequently assume vertical postures also have this capability.

The correct answer is B.

21. The author describes the behavior of the circulatory system of sea snakes when they are removed from the ocean (see lines 17–20) primarily in order to
- (A) illustrate what would occur in the circulatory system of terrestrial snakes without adaptations that enable them to regulate their blood pressure in vertical orientations
 - (B) explain why arboreal snakes in vertical orientations must rely on muscle contractions to restore blood pressure to the brain
 - (C) illustrate the effects of circulatory failure on the behavior of arboreal snakes
 - (D) illustrate the superiority of the circulatory system of the terrestrial snake to that of the sea snake
 - (E) explain how changes in spatial orientation can adversely affect the circulatory system of snakes with hearts located in relatively close proximity to their heads

Evaluation

Answering this question requires understanding why sea snakes have been brought into the passage's overall discussion about how terrestrial animals have overcome the influence of gravity on their blood circulation. The passage uses the effects that gravity has on sea snakes when they are taken out of water to identify problems that terrestrial snakes must have adapted to in order to survive.

A Correct. The passage uses the problems sea snakes have when taken out of water to illustrate that without certain adaptations, terrestrial snakes would likely have similar problems.

B The passage discusses sea snakes to illustrate problems faced by terrestrial snakes, not to explain how terrestrial snakes have adapted to gravity's influence.

C The passage does not discuss the effects of circulatory failure on arboreal snakes.

D The passage does not compare or contrast the effectiveness of the various adaptations used by different snakes.

E The passage does not imply that snakes with hearts close to their heads are adversely affected by spatial positions.

The correct answer is A.

22. It can be inferred from the passage that which of the following is a true statement about sea snakes?

- (A) They frequently rely on waves of muscle contractions from the lower torso to the head to supplement the work of the heart.
- (B) They cannot effectively regulate their blood pressure when placed in seawater and tilted at an angle with the head pointed downward.
- (C) They are more likely to have a heart located in close proximity to their heads than are arboreal snakes.
- (D) They become acutely vulnerable to the effects of gravitational pressure on their circulatory system when they are placed in a terrestrial environment.
- (E) Their cardiovascular system is not as complicated as that of arboreal snakes.

Inference

Answering this question requires understanding why sea snakes are discussed in the passage and what happens to them when they are taken out of water and subjected to the force of gravity. The second paragraph implies strongly that sea snakes will not survive certain terrestrial situations for which they are not adapted.

- A The passage associates muscle contractions to circulate blood with arboreal snakes only.
- B According to the passage, sea snakes' inability to regulate blood pressure occurs only when they are taken out of water.
- C The passage states clearly that arboreal snakes have hearts closer to their heads than do sea snakes.
- D Correct.** The passage states that in certain postures, sea snakes placed in a terrestrial environment will lose all blood pressure at their brains, which is an acute vulnerability.
- E The passage does not provide the information needed to compare the complexity of the various snakes discussed.

The correct answer is D.

23. The author suggests that which of the following is a disadvantage that results from the location of a snake's heart in close proximity to its head?
- (A) A decrease in the efficiency with which the snake regulates the flow of blood to the brain
 - (B) A decrease in the number of orientations in space that a snake can assume without loss of blood flow to the brain
 - (C) A decrease in blood pressure at the snake's midpoint when it is tilted at various angles with its head up

(D) An increase in the tendency of blood to pool at the snake's head when the snake is tilted at various angles with its head down

(E) An increase in the amount of effort required to distribute blood to and from the snake's tail

Inference

This question asks for an inference about the location of a snake's heart being closer to the brain than to the midpoint of its body. In the third paragraph, the passage states that in terrestrial snakes, which must fight the influence of gravity, the closer proximity of the heart to the head ensures blood circulation to the brain. The passage notes, however, that this makes it more difficult for such snakes to maintain blood circulation to the tail.

A The passage states that snakes have brains closer to their heads to more efficiently circulate blood to the brain.

B The passage suggests that having the heart close to the head increases the spatial orientations a snake can assume without losing blood flow to the brain, rather than decreases the number of orientations.

C The passage indicates that this is true only of sea snakes with hearts near their body's midpoint.

D The passage mentions blood pooling in the lower portions of a terrestrial organism's body but does not imply that blood can pool at a snake's head.

E Correct. Because, as the passage states, it is more difficult for a snake with its heart close to its head to circulate blood to the tail, and therefore its body is likely to put more effort into circulating blood to the tail.

The correct answer is E.

24. The primary purpose of the third paragraph is to

(A) introduce a topic that is not discussed earlier in the passage

(B) describe a more efficient method of achieving an effect discussed in the previous paragraph

(C) draw a conclusion based on information elaborated in the previous paragraph

(D) discuss two specific examples of phenomena mentioned at the end of the previous paragraph

(E) introduce evidence that undermines a view reported earlier in the passage

Evaluation

Answering this question requires recognizing how the passage develops its main

point. The first paragraph sets up a general claim about gravity's influence on terrestrial organisms. The second paragraph then describes the ill effects that gravity has on sea snakes to identify problems that terrestrial snakes have had to adapt to. The third paragraph then uses examples to illustrate how terrestrial snakes have adapted to gravity's influence.

A The topic of the third paragraph is the adaptations developed by terrestrial snakes to survive gravity's influence, which is part of the discussion in both the first and second paragraphs.

B There is no comparison in the passage of the efficiency of the different methods used by snakes to adapt to gravity's influence.

C The third paragraph is concerned with illustrating certain adaptations used by snakes and offers no conclusions about the problems terrestrial snakes have had to adapt to, which is the topic of the second paragraph.

D Correct. The end of the second paragraph refers to *certain adaptations* (line 23) that the third paragraph then goes on to identify and discuss.

E The third paragraph supports the main idea of the passage and is not used to counter any claim made earlier.

The correct answer is D.

25. In the passage, the author is primarily concerned with doing which of the following?

(A) Explaining adaptations that enable the terrestrial snake to cope with the effects of gravitational pressure on its circulatory system

(B) Comparing the circulatory system of the sea snake with that of the terrestrial snake

(C) Explaining why the circulatory system of the terrestrial snake is different from that of the sea snake

(D) Pointing out features of the terrestrial snake's cardiovascular system that make it superior to that of the sea snake

(E) Explaining how the sea snake is able to neutralize the effects of gravitational pressure on its circulatory system

Main idea

Answering this question involves assessing what the passage as a whole is attempting to do. While the passage begins by making a general claim about gravity's influence on the cardiovascular systems of terrestrial animals, it immediately points to terrestrial snakes as a good example supporting this claim. The rest of the passage is then devoted to illustrating, using the observations involving sea snakes, how gravity's influence has shaped the cardiovascular

systems of terrestrial snakes.

A Correct. The entire passage is devoted to an explanation of how terrestrial snakes have adapted to gravity's influence.

B While the passage does compare the systems of the two snakes, it does so for the larger purpose of demonstrating gravity's influence on terrestrial snakes.

C The passage is more concerned with *how* the systems of the two snakes are different, rather than *why*, in order to identify how terrestrial snakes have adapted to gravity's influence.

D There is no judgment in the passage as to the superiority of one snake's system over the other.

E While the passage does explain how sea snakes do this, it does so only for the larger purpose of identifying how terrestrial snakes have adapted to gravity's influence.

The correct answer is A.

Questions 26–30 refer to the passage on page 380.

26. The author of the passage is primarily concerned with

(A) discussing research data underlying several definitions

(B) arguing for the adoption of a particular definition

(C) exploring definitions of a concept

(D) comparing the advantages of several definitions

(E) clarifying some ambiguous definitions

Main idea

The author's primary concern is found by considering the passage as a whole. In the first paragraph, the author raises the central question regarding the meaning of *services* and then examines two definitions. The second paragraph analyzes the United States government's definition of *services* in more detail. The author is primarily interested in exploring different definitions of *services*.

A No research data are presented.

B The author points out the weakness of several definitions rather than giving reasons to adopt a particular one.

C Correct. The author considers several definitions of *services*.

D The author largely analyzes the disadvantages of the definitions.

E The author points out problems in the definitions rather than providing clarifications of the definitions themselves.

The correct answer is C.

27. In comparing the United States government's definition of services with the classical definition, the author suggests that the classical definition is
- (A) more pragmatic
 - (B) more difficult to apply
 - (C) less ambiguous
 - (D) more widely used
 - (E) more arbitrary

Inference

This question asks the reader to find information that is suggested but not directly stated in the passage. The author discusses the classical definition at the end of the first paragraph, pointing out two examples in which it does not apply and concluding that this definition is *hard to sustain*. By comparison, the government's definition is *more practical* because it is easy to apply; everything that is not agriculture or industry is defined as a service. An examination of the analysis of both definitions reveals that, according to the author, the classical definition is harder to apply.

A The author describes the United States government's definition as *more practical* or pragmatic.

B Correct. Citing two cases in which the classical definition does not apply, the author implies that this definition is harder to apply than the government's.

C Although the United States government's definition is said to lead to *ambiguities*, the examples given to suggest difficulties with the classical definition indicate that it may be at least as ambiguous.

D The author does not say that the classical definition is more widely used.

E The author calls the government's definition arbitrary.

The correct answer is B.

28. The passage suggests which of the following about service workers in the United States?
- (A) The number of service workers may be underestimated by the definition of services used by the government.
 - (B) There were fewer service workers than agricultural workers before 1988.
 - (C) The number of service workers was almost equal to the number of workers employed in manufacturing until 1988.

(D) Most service workers are employed in service occupations rather than in service industries.

(E) Most service workers are employed in occupations where they provide services that do not fall under the classical definition of services.

Inference

The question's use of the word *suggests* means that the answer depends on making an inference. According to the author, one of the failures of the government's definition of services is that *the many service workers employed by manufacturers—bookkeepers or janitors, for example—would fall under the industrial rather than the services category* (lines 22–26). This example shows that the number of service workers is likely to be underestimated.

A Correct. Because some service workers are included in the industrial category, it is possible that the total number of service workers may be underestimated.

B The passage does not provide the information to support this statement.

C The author says that services moved ahead of manufacturing as the *main product* in 1988 but does not discuss the number of workers in either area.

D The passage does not provide the information to support this statement.

E The passage does not provide the information to support this statement.

The correct answer is A.

29. The author of the passage mentions which of the following as one disadvantage of the United States government's definition of services?

(A) It is less useful than the other definitions mentioned in the passage.

(B) It is narrower in scope than the other definitions mentioned in the passage.

(C) It is based on the final product produced rather than on the type of work performed.

(D) It does not recognize the diversity of occupations within the service industries.

(E) It misclassifies many workers who are employed in service industries.

Supporting ideas

This question is based on specific information explicitly stated in the passage. According to the author, the government's definition fails because *it categorizes workers based on their company's final product rather than on the actual work the employees perform* (lines 20–22).

A The author calls this definition *practical for government purposes*, so for

the government it is more useful than other definitions.

B The definition *includes everything that is not agriculture or industry*, while the classical definition does not include occupations that are clearly services; the government's definition is thus not narrower.

C Correct. Workers are categorized by the final product of their company rather than by the type of work they perform at that company.

D Diversity of occupations within the service industries is not discussed.

E The definition misclassifies service workers employed in manufacturing, not service industries.

The correct answer is C.

30. The author refers to "service workers employed by manufacturers" (line 23) primarily in order to point out

(A) a type of worker not covered by the United States government's system of classifying occupations

(B) a flaw in the United States government's definition of services

(C) a factor that has influenced the growth of the service economy in the United States

(D) a type of worker who is classified on the basis of work performed rather than on the basis of the company's final product

(E) the diversity of the workers who are referred to as service workers

Logical structure

The author discusses *the many service workers employed by manufacturers* to illustrate the failure of the government's definition to distinguish between service industries and service occupations. The resulting ambiguities, in the author's view, reveal the *arbitrariness* of the definition and its inaccuracy in reflecting the composition of the economy.

A The worker is covered but misclassified.

B Correct. The author uses this example to point out a serious shortcoming in the government's definition.

C The author mentions the growth of services at the beginning of the passage but does not explore the reasons for it.

D The situation of service workers employed by manufacturers is just the reverse; they are categorized by the company's final product, not by the work they do.

E The author had earlier cited and illustrated the diversity of service activities that are included in the government's residual category of services;

the focus here is instead the arbitrariness and inaccuracy, in the author's view, of the government's definition.

The correct answer is B.

Questions 31–36 refer to the passage on page 382.

31. The passage is primarily concerned with
- (A) contrasting the benefits of one methodology with the benefits of another
 - (B) describing the historical origins and inherent drawbacks of a particular methodology
 - (C) discussing the appeal of a particular methodology and some concerns about its use
 - (D) showing that some historians' adoption of a particular methodology has led to criticism of recent historical scholarship
 - (E) analyzing the influence of current feminist views on women's interpretations of their experience

Main idea

This question asks for an abstract view of what the passage as a whole is primarily doing. The passage introduces a particular methodology that scholars of women's history have been encouraged to employ, explaining why the use of the methodology is supported. The passage then goes on to raise some concerns about the use of the methodology and cites one example in which caution is needed.

A The passage is primarily concerned with only one methodology.

B The passage mentions why the methodology had been encouraged but does not give the history of its origins; while it cautions historians to employ the methodology carefully, it is not concerned with drawbacks of its proper use.

C Correct. The passage discusses why the use of a methodology is being encouraged and then offers some concerns about its use.

D The passage does not discuss any criticism of recent scholarship in women's history.

E There is no mention in the passage that feminist theory is influencing how women in general think about their experiences.

The correct answer is C.

32. According to the passage, which of the following shapes the oral narratives of women storytellers?
- (A) The conventions for standard histories in the culture in which a woman storyteller lives

- (B) The conventions of storytelling in the culture in which a woman storyteller lives
- (C) A woman storyteller's experience with distinctive traditions of storytelling developed by the women in her family of origin
- (D) The cultural expectations and experiences of those who listen to oral narratives
- (E) A woman storyteller's familiarity with the stories that members of other groups in her culture tell to explain themselves

Supporting ideas

This question asks for an identification of specific information provided by the passage. In the second paragraph, the passage describes certain concerns about using oral narratives. One of these concerns is that *the stories people tell to explain themselves are shaped by . . . storytelling conventions* (lines 17–19) and other influences tied to the teller's cultural and historical context.

A The passage uses *standard histories* (line 7) to refer to the usual work of scholars and not to something that influences oral narratives.

B Correct. The passage raises as a concern that oral narratives may be influenced by storytelling conventions present in the culture of the speaker.

C The passage does not mention the family of origin of women storytellers.

D The passage does not mention the expectations of the listeners of oral narratives.

E The passage does not discuss women storytellers' familiarity with the oral narratives belonging to other groups of women.

The correct answer is B.

33. The author of the passage would be most likely to make which of the following recommendations to scholars of women's history?
- (A) They should take into account their own life experiences when interpreting the oral accounts of women's historical experiences.
 - (B) They should assume that the observations made in women's oral narratives are believed by the intended audience of the story.
 - (C) They should treat skeptically observations reported in oral narratives unless the observations can be confirmed in standard histories.
 - (D) They should consider the cultural and historical context in which an oral narrative was created before arriving at an interpretation of such a narrative.
 - (E) They should rely on information gathered from oral narratives only when equivalent information is not available in standard histories.

Application

Answering this question involves recognizing what the author believes about oral narratives and then applying this belief to a hypothetical situation in which the author makes recommendations to scholars of women's history. While acknowledging the appeal of oral narratives to these scholars, in the second paragraph the author urges caution when using these narratives as sources of *disinterested commentary* (line 16). The passage then states that people's oral narratives are shaped by *cultural and historical factors* (line 20), which presumably relate to the cultural and historical context within which the narratives are spoken.

A The passage does not mention the personal life experiences of scholars.

B The passage does not mention the intended audiences of oral narratives.

C The passage mentions *standard histories* (line 7) only as a reference to scholarly works that often have shortcomings.

D Correct. The passage cautions that oral narratives may be biased due to cultural and historical factors, and it is therefore reasonable to suppose that the author would recommend that scholars consider this when using such information.

E The passage does not refer to oral narratives as being valuable only for filling a gap in the available historical record.

The correct answer is D.

34. Which of the following best describes the function of the last sentence of the passage?

(A) It describes an event that historians view as crucial in recent women's history.

(B) It provides an example of how political rhetoric may influence the interpretations of experience reported in women's oral narratives.

(C) It provides an example of an oral narrative that inaccurately describes women's experience during a particular historical period.

(D) It illustrates the point that some women are more aware than others of the social forces that shape their oral narratives.

(E) It identifies the historical conditions that led to the social acceptance of women's paid work outside the home.

Evaluation

This question requires recognizing how a particular part of the passage is related to the overall reasoning in the passage. The first paragraph introduces a methodology and describes the methodology's appeal. The second paragraph then raises

concerns about the use of the methodology, drawing attention to the cultural and historical bias that may be present in oral narratives. In line 21, the passage refers specifically to the influence *political rhetoric* may have on a woman's understanding of her experience. In the final sentence, the passage provides a specific hypothetical example of a woman at the time of the Second World War to illustrate this concern.

A The last sentence employs a hypothetical example and does not describe a particular event as being important to historians.

B Correct. After contending that political rhetoric may influence oral narratives, the passage uses the example of the Second World War in the final sentence to support this claim.

C The last sentence does not provide a particular example of an oral narrative.

D The passage does not claim that some women are more aware than others of the social forces that may bear on them.

E The passage does not claim that social conditions during the Second World War led to acceptance of women in the workplace.

The correct answer is B.

35. According to the passage, scholars of women's history should refrain from doing which of the following?

(A) Relying on traditional historical sources when women's oral narratives are unavailable

(B) Focusing on the influence of political rhetoric on women's perceptions to the exclusion of other equally important factors

(C) Attempting to discover the cultural and historical factors that influence the stories women tell

(D) Assuming that the conventions of women's written autobiographies are similar to the conventions of women's oral narratives

(E) Accepting women's oral narratives less critically than they accept women's written histories

Inference

Answering this question requires recognizing which option is directly inferable from information in the passage. After describing in the first paragraph why oral narratives are appealing to historians, the passage begins the second paragraph by imploring scholars of women's history to *be as cautious about accepting oral narratives . . . as . . . written memories* (lines 12–14). The passage then goes on to describe potential bias in oral narratives, suggesting that scholars should be as

critical of them as they are of written sources.

A The passage does not claim that traditional historical sources should be avoided by scholars.

B The passage mentions the influence of political rhetoric merely as one example of potential bias.

C The passage suggests that scholars *should* attempt to be aware of cultural and historical factors.

D The passage does not discuss the conventions of women's written autobiographies.

E Correct. The passage implies that written histories and oral narratives should receive the same level of critical scrutiny by scholars.

The correct answer is E.

36. According to the passage, each of the following is a difference between women's oral narratives and most standard histories EXCEPT:

(A) Women's oral histories validate the significance of women's achievements.

(B) Women's oral histories depict experience from the point of view of women.

(C) Women's oral histories acknowledge the influence of well-known women.

(D) Women's oral histories present today's women with a sense of their historical relationship to women of the past.

(E) Women's oral histories are crucial to the collective identity of today's women.

Supporting ideas

This question asks for information that is stated in the passage, and it requires a process of elimination. In line 7, oral narratives are presented as being *unlike most standard histories*, and the passage then goes on in lines 7–11 to list characteristics of oral histories that most standard histories do not have. The answer to this question will therefore contain a characteristic of women's oral histories that is not described in lines 7–11.

A The passage states that, unlike most standard histories, women's oral histories *affirm the importance of women's contributions* (lines 8–9).

B The passage states that, unlike most standard histories, women's oral histories *represent experience from the perspective of women* (lines 7–8).

C Correct. The passage does not mention the influence of well-known

women on women's oral histories.

D The passage states that, unlike most standard histories, women's oral histories *furnish present-day women with historical continuity* (lines 9–10).

E The passage states that, unlike most standard histories, women's oral histories furnish a historical sense that is *essential to their identity, individually and collectively* (line 11).

The correct answer is C.

Questions 37–41 refer to the passage on page 384.

37. The passage suggests that in order for a manufacturer in a capital-intensive industry to have a decisive advantage over competitors making similar products, the manufacturer must
- (A) be the first in the industry to build production facilities of theoretically optimal size
 - (B) make every effort to keep fixed and sunk costs as low as possible
 - (C) be one of the first to operate its manufacturing plants at minimum efficient scale
 - (D) produce goods of higher quality than those produced by direct competitors
 - (E) stockpile raw materials at production sites in order to ensure a steady flow of such materials

Inference

This question asks for an inference about what a manufacturer in a capital-intensive industry must do to have an advantage over competitors making similar products. The passage addresses this question by stating that advantage accrues to those firms that are the first to exploit the full potential of optimally sized, technologically sophisticated plants. In this context, exploiting the full potential of such plants means operating them at *minimum efficient scale*. Based on the definition in the first paragraph, this means that the plant must have an output of such a size that the cost per unit of output is at a minimum.

- A The passage says that for new capital-intensive firms to dominate the market, it is not enough for them to have optimally sized plants; the plants must also be operated in a way that fully exploits their potential.
- B While keeping fixed and sunk costs low would obviously help keep overall costs low, the passage does not suggest that this is decisive in enabling a firm to have an advantage over competitors.
- C Correct.** Being among the first manufacturers to operate plants at

minimum efficient scale means that those plants are being exploited to their full potential. This strategy would most likely give such manufacturers a decisive advantage over new firms hoping to compete effectively.

D The passage does not discuss the quality of goods made by manufacturers.

E The passage does not suggest that stockpiling raw materials is the most efficient way to ensure a steady flow of raw materials into the manufacturing process, though the passage states that such a steady flow is a factor in achieving minimum efficient scale.

The correct answer is C.

38. The passage suggests that which of the following is true of a manufacturer's fixed and sunk costs?

(A) The extent to which they are determined by market conditions for the goods being manufactured is frequently underestimated.

(B) If they are kept as low as possible, the manufacturer is very likely to realize significant profits.

(C) They are the primary factor that determines whether a manufacturer will realize economies of scale.

(D) They should be on a par with the fixed and sunk costs of the manufacturer's competitors.

(E) They are not affected by fluctuations in a manufacturing plant's throughput.

Inference

This question asks about what the passage implies about fixed and sunk costs. The passage states that when production declines due to certain factors, such costs remain at the same level (which may be high), and the cost per unit produced (*unit costs*) rises sharply.

A The passage discusses the impact of market conditions on determining what the optimal size of a manufacturing plant is (which affects fixed and sunk costs). But it makes no claim about the frequency with which such an impact is "underestimated."

B The passage emphasizes that failing to keep throughput at an efficiently high level reduces profitability because that failure results in increased cost per unit (to which, of course, the plant's fixed and sunk costs contribute). But the passage does not claim that keeping aggregate fixed and sunk costs very low is necessary in order to have the most competitive production operation.

C The passage emphasizes that the crucial factor in achieving economies of

scale is efficient operation of the production facilities, not the size of the firm's fixed and sunk costs (even though such costs are clearly in part determined by the size and design of the production facilities).

D While a manufacturer's fixed and sunk costs may be on a par with those of the manufacturer's competitors, the passage provides no grounds for inferring that there is any need for them to be (for example, physical plants that employ different technologies may have different price tags).

E Correct. According to the passage, "throughput" refers to the flow of materials through a plant. This flow can vary as a result of various factors, but fixed and sunk costs—financial resources already committed—remain the same regardless of such variation.

The correct answer is E.

39. In the context of the passage as a whole, the second paragraph serves primarily to
- (A) provide an example to support the argument presented in the first paragraph
 - (B) evaluate various strategies discussed in the first paragraph
 - (C) introduce evidence that undermines the argument presented in the first paragraph
 - (D) anticipate possible objections to the argument presented in the first paragraph
 - (E) demonstrate the potential dangers of a commonly used strategy

Evaluation

This question asks about the rhetorical function of the second paragraph. While the first paragraph argues that a crucial factor in achieving economies of scale is intangible capital, or organized human capabilities, the second paragraph uses the example of new capital-intensive manufacturing industries to help show that this is indeed the case.

A Correct. The second paragraph provides an example that illustrates the claims made in the first paragraph. It discusses the way in which intangible capital—e.g., distribution networks, marketing systems, smooth production processes, and qualified management teams—enables manufacturers in new capital-intensive manufacturing industries to realize economies of scale and achieve market dominance.

B The second paragraph does, in a sense, "evaluate" investment in intangible capital: it suggests that such investment is necessary. However, investment in intangible capital is the only strategy it discusses.

C The second paragraph supports rather than undermines the first

paragraph's argument.

D Nothing in the second paragraph suggests that there are, or could be, any objections to the first paragraph's argument.

E The second paragraph discusses the potential positive outcomes of investing in intangible capital. It suggests that there might be negative consequences to not making such investments, but it does not indicate that avoiding such investments is a commonly used strategy.

The correct answer is A.

40. The passage LEAST supports the inference that a manufacturer's throughput could be adversely affected by

(A) a mistake in judgment regarding the selection of a wholesaler

(B) a breakdown in the factory's machinery

(C) a labor dispute on the factory floor

(D) an increase in the cost per unit of output

(E) a drop in the efficiency of the sales network

Application

This question may be best approached by using an elimination strategy—first finding the four choices that can reasonably be inferred from the passage, and then checking to make sure that the remaining choice cannot reasonably be inferred. This requires understanding the information the passage gives about throughput, then making inferences about what can cause throughput to drop. The passage defines throughput generally as *the flow of materials through a plant* and goes on to explain that it involves coordination of the production process itself, as well as obtaining materials from suppliers and marketing and distributing the manufactured products. Anything that damages this flow of materials and products would be said to have an adverse effect on throughput.

A Making a poor judgment about a wholesaler would most likely have an adverse effect on throughput, in that it could affect *the flow of output to wholesalers and final consumers*.

B A breakdown in machinery would likely fall into the category of *problems on the factory floor* mentioned in the passage and would likely prove damaging to throughput because of its effect on the production process itself.

C A labor dispute would also likely fall into the category of *problems on the factory floor* mentioned in the passage and would probably cause a decline in production and thus adversely affect throughput.

D Correct. The passage emphasizes that changes in throughput can cause

increases or decreases in costs per unit. But the passage is not committed to any claims about how changes in costs per unit might affect throughput.

E The passage suggests that inefficient sales networks could cause a decline in production. Thus a decrease in sales efficiency would most likely adversely affect a manufacturer's ability to provide goods to consumers, and thus would create problems with throughput.

The correct answer is D.

41. The primary purpose of the passage is to

(A) point out the importance of intangible capital for realizing economies of scale in manufacturing

(B) show that manufacturers frequently gain a competitive advantage from investment in large manufacturing facilities

(C) argue that large manufacturing facilities often fail because of inadequate investment in both tangible and intangible capital

(D) suggest that most new industries are likely to be dominated by firms that build large manufacturing plants early

(E) explain why large manufacturing plants usually do not help manufacturers achieve economies of scale

Main idea

This question depends on understanding the passage as a whole. In general, it makes an argument for investing in intangible capital as a way for manufacturers to realize economies of scale, and it supports its argument with an example.

A Correct. The passage focuses on intangible capital as a crucial factor in realizing economies of scale.

B According to the passage, manufacturers gain competitive advantage by building plants of optimal size that they then fully exploit; nothing in the passage suggests that large plants are frequently optimal.

C The passage assumes that manufacturers invest appropriately in tangible capital and argues that it is important for them to invest in intangible capital as well.

D The passage states that new capital-intensive manufacturing industries are dominated not by firms that are the first to build large plants, but by firms that exploit the full potential of their plants.

E The passage indicates that economies of scale can be achieved in plants of optimal size. The passage does not suggest that large plants cannot be optimal.

The correct answer is A.

Questions 42–44 refer to the passage on page 386.

42. The primary purpose of the passage is to
- (A) describe the development of new techniques that may help to determine the driving force behind population cycles in lepidoptera
 - (B) present evidence that refutes a particular theory about the driving force behind population cycles in lepidoptera
 - (C) present a hypothesis about the driving force behind population cycles in lepidoptera
 - (D) describe the fluctuating patterns of population cycles in lepidoptera
 - (E) question the idea that a single driving force is behind population cycles in lepidoptera

Main idea

This question depends on understanding the passage as a whole in order to identify its purpose. The first paragraph defines population cycles of lepidoptera and discusses some ways those cycles have been studied. It suggests that a particular agent may regulate these cycles. The second paragraph describes a candidate for this agent: nuclear polyhedrosis viruses. The third paragraph explains why this hypothesis is compelling.

A The passage mentions new techniques in molecular biology, but it does so in order to explain why a particular candidate for the agent behind population cycles has come to light.

B The theory the passage presents is that there is a driving force behind lepidoptera population cycles. It does not refute this theory; rather, it offers a convincing case for nuclear polyhedrosis viruses as that force. It also discusses some previous approaches to seeking plausible hypotheses but does not focus on refuting any particular hypothesis.

C Correct. The passage is primarily concerned with presenting the hypothesis that nuclear polyhedrosis viruses are the driving force behind lepidoptera population cycles.

D The first paragraph describes the fluctuating patterns of lepidoptera population cycles, but it does so to explain what population cycles are, so that it can then go on to attempt to account for those cycles.

E The passage is concerned with making a case for nuclear polyhedrosis viruses as the driving force behind at least some lepidoptera population cycles, not with questioning the idea that there is a driving force.

The correct answer is C.

43. It can be inferred from the passage that the mortality caused by agents such as predatory birds or parasites was measured in an attempt to

- (A) develop an explanation for the existence of lepidoptera population cycles
- (B) identify behavioral factors in lepidoptera that affect survival rates
- (C) identify possible methods for controlling lepidoptera population growth
- (D) provide evidence that lepidoptera populations are self-regulating
- (E) determine the life stages of lepidoptera at which mortality rates are highest

Inference

The passage states that mortality caused by various agents, birds and parasites among them, was measured because this was the common approach to studying causes of population cycles. This in turn suggests that those scientists engaged in such measuring in the case of lepidoptera were attempting to come up with a definitive explanation for why those lepidoptera population cycles occurred.

A Correct. Measuring mortality caused by various agents was part of the attempt to determine the driving force behind lepidoptera population cycles.

B The passage does not indicate that behavioral factors in lepidoptera are related to their mortality as caused by agents such as predatory birds or parasites.

C The passage is concerned not with controlling lepidoptera population growth, but rather with determining why population cycles occur.

D According to the information in the passage, scientists sought to measure mortality caused by particular agents in order to determine the driving force behind lepidoptera population cycles. In suggesting that mortality caused by these agents is not that force, the measurements may have indicated that the cycles could be self-regulating, but they were not undertaken in order to provide such evidence.

E The passage discusses mortality primarily in the caterpillar stage and does not suggest that any research was directed toward comparing caterpillar mortality rates with mortality rates in other life stages of the insects.

The correct answer is A.

44. Which of the following, if true, would most weaken the author's conclusion in lines 18–22?

- (A) New research reveals that the number of species of birds and parasites that prey on lepidoptera has dropped significantly in recent years.
- (B) New experiments in which the habitats of lepidoptera are altered in

previously untried ways result in the shortening of lepidoptera population cycles.

(C) Recent experiments have revealed that the nuclear polyhedrosis virus is present in a number of predators and parasites of lepidoptera.

(D) Differences among the habitats of lepidoptera species make it difficult to assess the effects of weather on lepidoptera population cycles.

(E) Viral disease is typically observed in a large proportion of the lepidoptera population.

Evaluation

The sentence in question presents the author's conclusion that lepidoptera populations may be self-regulating or regulated by something more closely connected to the insects than predatory birds or parasites are. To weaken that conclusion requires weakening its support, namely, that mortality caused by predators and parasites seems not to affect population cycles, and that changing habitats and reducing populations has not altered population cycles either.

A A drop in birds and parasites preying on lepidoptera would not weaken the author's conclusion; mortality caused by these predators has not affected population cycles.

B Correct. New experiments involving changes in habitat that did succeed in altering population cycles would suggest that the populations are not in fact self-regulating, and that the search for another cycle-altering agent may be unnecessary.

C This finding would support the idea that the nuclear polyhedrosis virus is responsible for population cycles—that is, that the virus is the closely connected agent the author concludes is responsible.

D The suggestion that the effects of weather may not have been adequately assessed is remotely relevant to the author's conclusion, but the mere difficulty of assessing the effects provides no positive reason to suppose that weather may be the cause of the cycles. On the other hand, answer choice B does offer evidence for an alternative explanation.

E Viral disease is what the author ultimately suggests is the agent that drives the lepidoptera population cycles in question. The wide presence of viruses in lepidoptera could help support the author's conclusion.

The correct answer is B.

45. According to the passage, before the discovery of new techniques for detecting viral DNA, population ecologists believed that viral diseases

(A) were not widely prevalent among insect populations generally

- (B) affected only the caterpillar life stage of lepidoptera
- (C) were the driving force behind lepidoptera population cycles
- (D) attacked already declining caterpillar populations
- (E) infected birds and parasites that prey on various species of lepidoptera

Supporting Idea

This question addresses what the passage states directly about population ecologists' beliefs regarding viral diseases prior to the discovery of new viral DNA-detection techniques. The second paragraph of the passage states that these ecologists believed viral disease contributed to population decline that was already underway rather than initiating it.

- A The second paragraph states that viral disease had been reported; thus, population ecologists were aware of its existence in insect populations. The passage is consistent with ecologists having believed that it was prevalent.
- B The passage focuses mainly on the caterpillar life stage of lepidoptera, but there is nothing to suggest that scientists held particular beliefs regarding viral diseases' restriction to that life stage.
- C It is after, not before, the discovery of new techniques for detecting viral DNA when populations ecologists came to believe that such diseases were the driving force behind the population cycles.
- D Correct.** As stated in the passage, population ecologists believed that viral diseases contributed to already occurring population decline.
- E The passage does not discuss whether viral diseases may infect any lepidoptera predators.

The correct answer is D.

46. According to the passage, nuclear polyhedrosis viruses can remain virulent in the environment only when
- (A) the polyhedrin protein crystals dissolve
 - (B) caterpillar populations are in decline
 - (C) they are present in large numbers
 - (D) their concentration in a particular area remains low
 - (E) they are sheltered from direct sunlight

Supporting Idea

The passage states in the second paragraph that these viruses remain virulent for many years if they are protected from direct sunlight. They are embedded in crystals of polyhedrin protein.

A The viruses remain virulent partially because of their being contained in polyhedrin protein crystals. They would most likely not remain virulent if those crystals dissolved.

B The viruses remain virulent even when caterpillar populations are not in decline; that is how the viruses initiate new population declines.

C According to the passage, viral DNA has been detected in the environment at low concentrations, yet the viruses are still virulent. Thus, they need not be present in large numbers.

D Nothing in the passage indicates that the concentration of these viruses must be low for them to be virulent.

E Correct. The passage says that if the viruses are protected from direct sunlight, they remain virulent for many years. The context strongly suggests that if they are not so protected, they do not remain virulent.

The correct answer is E.

47. It can be inferred from the passage that while inside its polyhedrin protein crystals, the nuclear polyhedrosis virus

(A) is exposed to direct sunlight

(B) is attractive to predators

(C) cannot infect caterpillars' cells

(D) cannot be ingested by caterpillars

(E) cannot be detected by new techniques of molecular biology

Inference

The passage indicates that the polyhedrin protein crystals protect the nuclear polyhedrosis virus when it is in the environment. When a caterpillar ingests those crystals, they dissolve. That releases the virus, whereupon it infects the caterpillar's cells. Thus it is reasonable to infer that the virus must be released from the crystals before it can infect the caterpillar.

A The passage states that nuclear polyhedrosis viruses remain embedded in polyhedrin protein crystals if protected from direct sunlight, not that the virus is exposed to light when it is in the protein crystals.

B Nothing in the passage indicates that any organism preys on the virus itself or that it attracts predators to caterpillars that it infects.

C Correct. The virus must be released from the crystals before it can infect caterpillars' cells.

D The passage states that caterpillars ingest the polyhedrin protein crystals.

E According to the passage, new techniques of molecular biology enable the

detection of viral DNA in the environment. The nuclear polyhedrosis virus persists in the environment inside protein crystals. The passage suggests that the new techniques are able to detect the virus inside its crystals but does not provide any evidence about whether they detect it directly or infer its presence indirectly.

The correct answer is C.

Questions 48–54 refer to the passage on page 388.

48. The primary purpose of the passage is to

- (A) present the results of statistical analyses and propose further studies
- (B) explain a recent development and predict its eventual consequences
- (C) identify the reasons for a trend and recommend measures to address it
- (D) outline several theories about a phenomenon and advocate one of them
- (E) describe the potential consequences of implementing a new policy and argue in favor of that policy

Main idea

Understanding the author's purpose comes from a careful consideration of the whole passage. The author begins by noting one explanation for the rise in temporary employment, but dismisses it, finding another explanation more likely. The author closes the passage by making specific recommendations to counter the problems caused by temporary employment.

A The author uses statistical analyses as the basis of an explanation, but the analyses act only as support for the larger purpose of explaining a trend; no further studies are proposed.

B The author explores possible reasons for a recent development but recommends ways to curb or change that development; the author does not predict the consequences if the situation is left unchanged or the recommendations unmet.

C Correct. The author examines possible reasons for the rise in temporary employment and makes specific recommendations to change the current situation.

D The use of the phrase *several theories* is enough to make this inaccurate. Two types of explanation are suggested: employee preference or employer self-interest.

E The author makes recommendations but provides no arguments in support of those recommendations—merely suggesting that they are aimed at discouraging employers from creating too many temporary positions.

The correct answer is C.

49. According to the passage, which of the following is true of the “factors affecting employers” that are mentioned in lines 10–19?

- (A) Most experts cite them as having initiated the growth in temporary employment that occurred during the 1980s.
- (B) They may account for the increase in the total number of temporary workers during the 1980s.
- (C) They were less important than demographic change in accounting for the increase of temporary employment during the 1980s.
- (D) They included a sharp increase in the cost of labor during the 1980s.
- (E) They are more difficult to account for than are other factors involved in the growth of temporary employment during the 1980s.

Supporting idea

This question is based on information explicitly stated in lines 9–11. The statistical analyses *suggest that factors affecting employers account for the rise in temporary employment.*

A *Some observers* attribute the rise to the composition of the workforce; the passage does not identify what most experts believe.

B Correct. The factors affecting employers may explain the rise in temporary employment.

C The passage suggests that these factors were more important than demographic changes in explaining the rise.

D Although there is some suggestion in lines 15–16 that employers at some point experienced difficulty from the cost of labor, the passage does not suggest that a sharp increase in that cost occurred in the 1980s—and even suggests that labor costs may have decreased because of labor’s reduced bargaining strength.

E The issue of how to *account for* those factors (i.e., explain why they occurred) is not raised in the passage—so the issue of whether those factors are more difficult to account for than other factors is not raised.

The correct answer is B.

50. The passage suggests which of the following about the use of temporary employment by firms during the 1980s?

- (A) It enabled firms to deal with fluctuating product demand far more efficiently than they did before the 1980s.
- (B) It increased as a result of increased participation in the workforce by

certain demographic groups.

(C) It was discouraged by government-mandated policies.

(D) It was a response to preferences indicated by certain employees for more flexible working arrangements.

(E) It increased partly as a result of workers' reduced ability to control the terms of their employment.

Inference

Since the word *suggests* is used in the question, the answer is probably not directly stated in the passage and therefore has to be inferred. The author believes that the rise in temporary employment during the 1980s can be explained by two factors affecting employers: *product demand* and *labor's reduced bargaining strength*. Temporary employment allows employers to adapt their workforce to the fluctuating demand for their product. At this time, *labor's reduced bargaining strength* left employers, not workers, in greater control of the terms of employment.

A This goes too far beyond the information provided in the passage. The passage neither says nor implies anything about efficiency levels before the 1980s.

B The author says that *demographic changes in the workforce did not correlate with variations in the total number of temporary workers*, ruling out this explanation.

C In 1992, the author recommended government-mandated policies because they did not exist.

D The author says that *growth in temporary employment now far exceeds the level explainable by . . . groups said to prefer temporary jobs*.

E Correct. *Labor's reduced bargaining power* resulted in employers' increased control over the terms of employment.

The correct answer is E.

51. The passage suggests which of the following about the workers who took temporary jobs during the 1980s?

(A) Their jobs frequently led to permanent positions within firms.

(B) They constituted a less demographically diverse group than has been suggested.

(C) They were occasionally involved in actions organized by labor unions.

(D) Their pay declined during the decade in comparison with the pay of permanent employees.

(E) They did not necessarily prefer temporary employment to permanent employment.

Inference

The question's use of the word *suggests* indicates that the answer is probably not directly stated in the passage. The author says that the rise in temporary employment *now far exceeds the level explainable by recent workforce entry rates of groups said to prefer temporary jobs*. Thus, the number of workers employed on a temporary basis is far greater than the number of workers who actually do prefer temporary employment.

A No evidence is presented that temporary jobs led to permanent positions.

B The passage grants that there was *increased participation in the workforce by certain groups, such as first-time or reentering workers*. This suggests more rather than less demographic diversity.

C The role of temporary workers in labor unions is not discussed.

D The passage does suggest that the pay of temporary workers is less than that of permanent workers, but not that the pay of temporary workers *declined*.

E Correct. The passage indicates that the number of workers in temporary jobs was higher than the number of workers who stated a preference for temporary work.

The correct answer is E.

52. The first sentence in the passage suggests that the “observers” mentioned in line 1 would be most likely to predict which of the following?

(A) That the number of new temporary positions would decline as fewer workers who preferred temporary employment entered the workforce

(B) That the total number of temporary positions would increase as fewer workers were able to find permanent positions

(C) That employers would have less control over the terms of workers' employment as workers increased their bargaining strength

(D) That more workers would be hired for temporary positions as product demand increased

(E) That the number of workers taking temporary positions would increase as more workers in any given demographic group entered the workforce

Application

These observers specifically attribute the growth of temporary employment to *increased participation in the workforce by certain groups . . . who supposedly*

prefer such arrangements. On the basis of the passage's first sentence, any prediction these observers might make must be about the relation between the number of workers in temporary employment and the preference of these workers for temporary employment. No other issue is discussed. A rise in temporary employment could be explained only by a rise in the number of new workers who prefer temporary jobs, and a decline in temporary employment only by a decline in the number of new workers who prefer temporary work.

A Correct. By this rationale, the only reason for a decline in temporary employment would be a corresponding decline in the number of new workers who preferred temporary jobs.

B According to the observers, temporary employment would increase only if a greater number of employers who preferred temporary jobs entered the workforce.

C These observers are not said to consider control over the terms of employment.

D These observers are not said to consider the relationship between product demand and temporary employment.

E The number of workers taking temporary positions would rise only if they were composed of *certain groups, such as first-time or reentering workers*, who, the observers believe, prefer temporary work.

The correct answer is A.

53. In the context of the passage, the word “excessive” (line 22) most closely corresponds to which of the following phrases?

(A) Far more than can be justified by worker preferences

(B) Far more than can be explained by fluctuations in product demand

(C) Far more than can be beneficial to the success of the firms themselves

(D) Far more than can be accounted for by an expanding national economy

(E) Far more than can be attributed to increases in the total number of people in the workforce

Logical structure

In its context in this passage, the word *excessive* indicates a value-judgment by the author. The author recommends that firms be *discouraged from creating excessive numbers of temporary positions* on the basis of the statistical analyses, which show that the rise in temporary employment *now far exceeds the level explainable by recent workforce entry rates of groups said to prefer temporary jobs*. In the context of lines 23–29, it is clear that the author believes that the large expansion in temporary employment exclusively serves employer interests at the expense of

employee interests (including their preferences), and is, for that reason, excessive.

A Correct. An expansion of temporary employment that serves employer interests more than it serves employee interests (such as preferences) is considered by the author to be *excessive*.

B It is not because the expansion in temporary employment allows employers to respond to fluctuations in product demand that the author regards the expansion as *excessive*.

C The relation of temporary employment to the success of firms is not discussed.

D The relation of temporary employment to an expanding economy is not discussed.

E The author does not consider the issue of overall increases in the workforce as a whole, only the issue of increases in temporary employment.

The correct answer is A.

54. The passage mentions each of the following as an appropriate kind of governmental action EXCEPT

(A) getting firms to offer temporary employment primarily to a certain group of people

(B) encouraging equitable pay for temporary and permanent employees

(C) facilitating the organization of temporary workers by labor unions

(D) establishing guidelines on the proportion of temporary workers that firms should employ

(E) ensuring that temporary workers obtain benefits from their employers

Supporting ideas

The author closes the passage with a list of specific recommendations. Check that list against the possible answers. By the process of elimination, choose the one recommendation the author does not make. The author recommends that government policymakers consider: 1) *mandating benefit coverage for temporary employees*, 2) *promoting pay equity between temporary and permanent workers*, 3) *assisting labor unions in organizing temporary workers*, and 4) *encouraging firms to assign temporary jobs primarily to employees who explicitly indicate that preference*.

A The author does recommend that firms assign temporary jobs to workers who prefer temporary work.

B The author does recommend that pay equity between temporary and permanent workers be encouraged.

C The author does recommend that labor unions be assisted in organizing temporary workers.

D Correct. The author does not recommend that such guidelines be established.

E The author does recommend that benefit coverage for temporary workers be mandated.

The correct answer is D.

Questions 55–58 refer to the passage on page 390.

55. It can be inferred from the passage that a large plant might have to spend more than a similar but smaller plant on environmental compliance because the larger plant is

(A) more likely to attract attention from local regulators

(B) less likely to be exempt from permit and reporting requirements

(C) less likely to have regulatory costs passed on to it by companies that supply its raw materials

(D) more likely to employ older production technologies

(E) more likely to generate wastes that are more environmentally damaging than those generated by smaller plants

Inference

This item depends on understanding the implications of the passage's discussion of differences between large and small plants. It asks what might be true of a larger plant that would compel it to spend more than a smaller plant on environmental compliance. The passage addresses this issue by stating that smaller plants are often not subject to the same permit or reporting requirements that larger plants are.

A The likelihood of attracting regulatory attention is discussed only in the context of comparing plants that are *isolated* with small plants that are near large noncompliant ones. The passage does not suggest that size is generally the crucial determining factor in attracting regulatory attention.

B Correct. According to the passage, certain permit or reporting requirements may not apply to smaller plants; this suggests that larger plants are less likely than smaller plants to be exempt from these requirements, and thus that the larger plants would have to spend more to comply.

C The passage does not discuss the passing on of regulatory costs from suppliers to plants.

D The passage does not suggest that larger plants are any more likely than smaller plants to employ older production technologies.

E The passage does not distinguish between the types of wastes emitted by larger plants and those emitted by smaller plants.

The correct answer is B.

56. According to the passage, which of the following statements about sulfur dioxide and nitrogen oxide outputs is true?

(A) Older production technologies cannot be adapted so as to reduce production of these outputs as waste products.

(B) Under the most recent environmental regulations, industrial plants are no longer permitted to produce these outputs.

(C) Although these outputs are environmentally hazardous, some plants still generate them as waste products despite the high compliance costs they impose.

(D) Many older plants have developed innovative technological processes that reduce the amounts of these outputs generated as waste products.

(E) Since the production processes that generate these outputs are less costly than alternative processes, these less expensive processes are sometimes adopted despite their acknowledged environmental hazards.

Supporting idea

This item depends on identifying what the passage states explicitly about outputs of sulfur dioxide and nitrogen oxide. The passage says that plants that produce these outputs are those that use older industrial coal-fired burners, and that such plants are subject to extensive compliance costs imposed by new regulations.

A The passage does not address the question of whether older production technologies might be adapted to reduce outputs of sulfur dioxide and nitrogen oxide.

B The passage states that new regulations have imposed high compliance costs on companies that produce sulfur dioxide and nitrogen oxide outputs, not that these outputs are prohibited.

C Correct. The passage states that some companies are still using the older kinds of burners that generate sulfur dioxide and nitrogen oxide outputs, and that new regulations have imposed high compliance costs on these companies.

D The passage does not address the question of whether older plants have developed new processes to reduce the amounts of sulfur dioxide and nitrogen oxide they produce.

E Sulfur dioxide and nitrogen oxide outputs, the passage suggests, are produced only by older industrial coal-fired burners; newer facilities (using alternative processes) do not employ this technology, the expense of which is not mentioned in the passage.

The correct answer is C.

57. Which of the following best describes the relationship of the statement about large plants (lines 12–17) to the passage as a whole?
- (A) It presents a hypothesis that is disproved later in the passage.
 - (B) It highlights an opposition between two ideas mentioned in the passage.
 - (C) It provides examples to support a claim made earlier in the passage.
 - (D) It exemplifies a misconception mentioned earlier in the passage.
 - (E) It draws an analogy between two situations described in the passage.

Evaluation

This question asks about the role played in the passage by the following statement: *Additionally, large plants can spread compliance costs such as waste treatment across a larger revenue base; on the other hand, some smaller plants may not even be subject to certain provisions such as permit or reporting requirements by virtue of their size.* This statement describes situations in which compliance costs for plants of different sizes may differ, which serve as evidence in support of the passage's main claim: that environmental regulations do *not* affect all competitors in a given industry uniformly.

A The statement in question is not a hypothesis; rather, it reports factors that are known to affect the varying impact of environmental regulations.

B This is too vague to be a good description of the kind of relationship the question asks about. The highlighted statement does present a contrast—it suggests that larger plants' compliance costs are lower under some circumstances, while smaller plants' compliance costs are lower under other circumstances. But this purports to state two facts rather than mere *ideas*; they are contrasting facts but not in any meaningful sense *opposed*, since they can easily coexist.

C Correct. The statement provides examples to support the initial claim made in the passage that regulatory costs fall unevenly on competitors in an industry: large plants can spread compliance costs around, and smaller plants may not even have to pay certain costs.

D This statement helps to dispel, not exemplify, a misconception mentioned earlier in the passage—i.e., the myth that environmental regulations affect all companies in an industry the same way.

E The statement does not suggest that the situation of larger and smaller plants is similar (or analogous) to any other situation mentioned in the passage.

The correct answer is C.

58. The primary purpose of the passage is to

- (A) address a widespread environmental management problem and suggest possible solutions
- (B) illustrate varying levels of compliance with environmental regulation among different corporations
- (C) describe the various alternatives to traditional methods of environmental management
- (D) advocate increased corporate compliance with environmental regulation
- (E) correct a common misconception about the impact of environmental regulations

Main idea

This question depends on understanding the passage as a whole. Its first sentence indicates its main purpose: to dispel a myth about environmental regulations that is often taken as fact.

A The passage is not about the management of any environmental problem, which would be a problem about how to prevent or undo damage to the environment. The passage primarily aims to dispel a belief that the passage says is widely held by environmental managers.

B The passage refers to variations in firms' levels of compliance with environmental regulations, but its primary purpose is not to illustrate those varying levels, nor does it do so.

C The passage suggests that most environmental managers are mistaken about a key concept; its primary purpose is not to describe traditional methods of environmental management or alternatives to those traditional methods, nor does it do so.

D The passage takes no position on whether companies should increase their compliance with environmental regulation.

E Correct. The passage primarily aims to dispel the belief that environmental regulations affect all companies in an industry uniformly.

The correct answer is E.

Questions 59–65 refer to the passage on page 392.

59. According to the passage, which of the following was true of the treaty establishing

the Fort Belknap Indian Reservation?

- (A) It was challenged in the Supreme Court a number of times.
- (B) It was rescinded by the federal government, an action that gave rise to the *Winters* case.
- (C) It cited American Indians' traditional use of the land's resources.
- (D) It failed to mention water rights to be enjoyed by the reservation's inhabitants.
- (E) It was modified by the Supreme Court in *Arizona v. California*.

Supporting ideas

This question requires recognizing information that is explicitly stated in the passage. In the first sentence, the passage states that the Fort Belknap Indian Reservation was established by treaty. The following sentence begins by stating that this treaty *did not mention water rights* (lines 5–6); in other words, the right to use the water flowing through the reservation was not established by treaty.

A Although the Supreme Court ruled on water rights for the reservation established by the treaty, there is no evidence in the passage that the treaty itself was ever challenged in the Supreme Court.

B Although the *Winters* case resulted in water rights for the reservation established by the treaty, there is no evidence in the passage that the treaty was ever rescinded.

C The passage does not mention American Indians' traditional resource use as being tied to the treaty establishing the Fort Belknap Indian Reservation.

D Correct. The passage states explicitly that the treaty establishing the Fort Belknap Indian Reservation did not mention the right to use water flowing through the reservation.

E The passage does not mention the Fort Belknap Indian Reservation or the treaty that established it in relation to *Arizona v. California*.

The correct answer is D.

60. The passage suggests that, if the criteria discussed in lines 10–20 were the only criteria for establishing a reservation's water rights, which of the following would be true?
- (A) The water rights of the inhabitants of the Fort Belknap Indian Reservation would not take precedence over those of other citizens.
 - (B) Reservations established before 1848 would be judged to have no water rights.
 - (C) There would be no legal basis for the water rights of the Rio Grande

pueblos.

(D) Reservations other than American Indian reservations could not be created with reserved water rights.

(E) Treaties establishing reservations would have to mention water rights explicitly in order to reserve water for a particular purpose.

Inference

Answering this question requires making an inference based on information given in the passage. The question focuses on lines 10–20, where the passage provides a summary of the criteria used by the U.S. courts to establish water rights. The passage then explains that the Rio Grande pueblos used other means to establish water rights, noting that what *constitutes an American Indian reservation is a question of practice, not of legal definition* (lines 34–36). This strongly implies that establishing water rights for the Rio Grande pueblos required reference to legal language not contained in the criteria described in lines 10–20.

A Since the passage says that decisions setting the criteria in lines 10–20 cited the *Winters* case—which gave water rights to the Fort Belknap Indian Reservation—one can infer that the Fort Belknap reservation met all of those criteria.

B The criteria in lines 10–20 do not touch on specific dates of the transfer of sovereignty over particular lands.

C Correct. The passage demonstrates that for the Rio Grande pueblos, it was necessary to establish water rights based on criteria not contained in lines 10–20.

D The criteria described in lines 10–20 are not specific only to lands reserved for American Indians.

E The passage illustrates that *Winters* established water rights in the absence of any explicit mention of water rights in the treaty.

The correct answer is C.

61. Which of the following most accurately summarizes the relationship between *Arizona v. California* in lines 38–42, and the criteria citing the *Winters* doctrine in lines 10–20?

(A) *Arizona v. California* abolishes these criteria and establishes a competing set of criteria for applying the *Winters* doctrine.

(B) *Arizona v. California* establishes that the *Winters* doctrine applies to a broader range of situations than those defined by these criteria.

(C) *Arizona v. California* represents the sole example of an exception to the criteria as they were set forth in the *Winters* doctrine.

(D) *Arizona v. California* does not refer to the *Winters* doctrine to justify water rights, whereas these criteria do rely on the *Winters* doctrine.

(E) *Arizona v. California* applies the criteria derived from the *Winters* doctrine only to federal lands other than American Indian reservations.

Inference

This question requires inferring how one part of the passage bears on another part of the passage. The two parts referred to are the criteria described in lines 10–20 and *Arizona v. California*, which is referred to in lines 38–45. *Arizona v. California* shows that the establishment of water rights need not be tied to any previous legal definition of reservation lands but may be tied to the U.S. government’s practice merely of treating the land as reserved for American Indians. The criteria described in lines 10–20 apply to situations in which the land in question has been legally identified as reservation land. So *Arizona v. California* broadened the scope of *Winters* in establishing water rights.

A The passage illustrates that *Arizona v. California* does not supersede or deny any of the criteria in lines 10–20.

B Correct. The passage suggests that *practice* and not *legal definition* (lines 34–36) allows *Winters* to be applied to situations not covered by the criteria in lines 10–20.

C In stating that *some American Indian tribes have also established water rights* by means other than the criteria in lines 10–20, the first sentence of the second paragraph makes clear that *Arizona v. California* is not the sole exception to the criteria.

D The passage states that *Arizona v. California* does refer to *Winters*.

E The passage illustrates that *Arizona v. California* was directly relevant to the Pueblo Indians’ water rights.

The correct answer is B.

62. The “pragmatic approach” mentioned in lines 37–38 of the passage is best defined as one that

(A) grants recognition to reservations that were never formally established but that have traditionally been treated as such

(B) determines the water rights of all citizens in a particular region by examining the actual history of water usage in that region

(C) gives federal courts the right to reserve water along with land even when it is clear that the government originally intended to reserve only the land

(D) bases the decision to recognize the legal rights of a group on the practical effect such a recognition is likely to have on other citizens

(E) dictates that courts ignore precedents set by such cases as *Winters v. United States* in deciding what water rights belong to reserved land

Supporting ideas

This question requires recognizing what a particular phrase in the passage is referring to. The pragmatic approach the question refers to is introduced by the passage as *this* pragmatic approach. It is therefore necessary to identify which approach the passage has already referred to in this context, which in this case is contained in the sentence just prior to the reference. This sentence states that establishing what is an American Indian reservation is a matter of the U.S. government's practice and not of any formal, legal definition.

A Correct. The approach referred to as *pragmatic* involves establishing American Indian reservations based not on formal law but on the government's established practice of treating the lands as such.

B The approach referred to as *pragmatic* is not specific to establishing water rights.

C The approach referred to as *pragmatic* is not specific to establishing water rights.

D The approach referred to as *pragmatic* does not refer to balancing the rights of some people with rights of others.

E The approach referred to as *pragmatic* is shown to be consistent with and supportive of the rights established by *Winters*.

The correct answer is A.

63. The author cites the fact that the Rio Grande pueblos were never formally withdrawn from public lands primarily in order to do which of the following?
- (A) Suggest why it might have been argued that the *Winters* doctrine ought not to apply to pueblo lands
 - (B) Imply that the United States never really acquired sovereignty over pueblo lands
 - (C) Argue that the pueblo lands ought still to be considered part of federal public lands
 - (D) Support the argument that the water rights of citizens other than American Indians are limited by the *Winters* doctrine
 - (E) Suggest that federal courts cannot claim jurisdiction over cases disputing the traditional diversion and use of water by Pueblo Indians

Evaluation

Answering this question involves recognizing how a particular part of the passage

functions within the passage as a whole. The passage illustrates in the first paragraph that *Winters* was cited in the establishment of water rights based on a set of criteria that included the formal withdrawal of lands by the government. In the second paragraph, the case of the Rio Grande pueblos is introduced as an example of lands that had never been formally withdrawn by the government, raising the question of whether *Winters* would still be applicable in such situations. The passage then asserts that the situation of the pueblos *has not barred* (line 33) the application of *Winters*.

A Correct. While the passage affirms the application of *Winters* to the situation with the pueblos, it recognizes that it may initially appear that *Winters* does not apply.

B The passage states explicitly that the United States did gain official sovereignty over pueblo lands in 1848, when they *became part of the United States* (lines 27–28).

C The passage states explicitly that *the pueblo lands never formally constituted a part of federal public lands* (lines 28–30) and takes no stand on the issue of whether particular lands ought to be considered public lands.

D While one can infer that the rights of other citizens to use water could be limited by reserving water rights for residents of American Indian lands according to the *Winters* doctrine, the passage takes no stand on this issue.

E The passage does not mention the rights of federal courts to claim jurisdiction over particular water rights cases.

The correct answer is A.

64. The primary purpose of the passage is to

(A) trace the development of laws establishing American Indian reservations

(B) explain the legal basis for the water rights of American Indian tribes

(C) question the legal criteria often used to determine the water rights of American Indian tribes

(D) discuss evidence establishing the earliest date at which the federal government recognized the water rights of American Indians

(E) point out a legal distinction between different types of American Indian reservations

Main idea

This question requires recognizing the main topic of the passage, which is about the establishment of water rights on American Indian lands. Its intent is to explain or describe, and it does not take sides on any issue.

A The passage is primarily about establishing water rights, not establishing reservations.

B Correct. The passage is an explanation of water rights on American Indian lands.

C The passage describes legal criteria used to establish water rights on American Indian lands but does not take issue with them.

D The passage does not discuss the earliest date for water rights on American Indian lands.

E The passage is primarily about establishing water rights, not about types of reservations.

The correct answer is B.

65. The passage suggests that the legal rights of citizens other than American Indians to the use of water flowing into the Rio Grande pueblos are

(A) guaranteed by the precedent set in *Arizona v. California*

(B) abolished by the *Winters* doctrine

(C) deferred to the Pueblo Indians whenever treaties explicitly require this

(D) guaranteed by federal land-use laws

(E) limited by the prior claims of the Pueblo Indians

Inference

Answering this question requires recognizing what the passage implies. The passage illustrates at the beginning of the second paragraph that water rights were granted to Pueblo Indians based on their use of the water in the Rio Grande pueblos prior to U.S. sovereignty. The passage also later states that since the *Winters* doctrine applies, the water rights of Pueblo Indians *have priority over other citizens' water rights as of 1848* (lines 42–44), which implies that the water rights of citizens other than Pueblo Indians are limited.

A The passage illustrates that *Arizona v. California* reinforced the water rights of citizens residing on American Indian reservations; it does not imply a precedent ensuring water rights for other citizens.

B The passage states that the water rights of citizens other than Pueblo Indians are lower in priority, not abolished altogether.

C The passage does not mention that different water rights have been defined by different treaties.

D The passage does not mention that the water rights of citizens other than Pueblo Indians are guaranteed on pueblo lands.

E Correct. The passage states that the water rights of Pueblo Indians have

priority over other citizens' water rights, which thereby limits the rights of those citizens.

The correct answer is E.

Questions 66–71 refer to the passage on page 394.

66. In the passage, the author is primarily interested in
- (A) suggesting an alternative to an outdated research method
 - (B) introducing a new research method that calls an accepted theory into question
 - (C) emphasizing the instability of data gathered from the application of a new scientific method
 - (D) presenting a theory and describing a new method to test that theory
 - (E) initiating a debate about a widely accepted theory

Main idea

This question concerns the main point of the passage. A careful examination of the overall structure of the passage will reveal the main point. In the first paragraph, the author briefly presents Milankovitch's theory and explains why it could not be tested early on. In the second and third paragraphs, the author describes how a new method allows testing of the theory and shows how evidence from the testing supports the theory. While the final paragraph acknowledges that other factors should be considered, the author's primary interest in this passage is in presenting Milankovitch's theory and the recently discovered method for testing it.

- A A new research method is described, but no previous method is discussed.
- B As described in the passage, the new method tests and confirms the theory; there is no mention that the theory is accepted or that the method casts doubt on it.
- C Nothing in the passage suggests that "instability of data" is an issue.
- D Correct.** The author presents Milankovitch's theory and describes the oxygen isotope method of testing it.
- E The theory is nowhere said to be "widely accepted" and the author does not debate the theory.

The correct answer is D.

67. The author of the passage would be most likely to agree with which of the following statements about the Milankovitch theory?
- (A) It is the only possible explanation for the ice ages.
 - (B) It is too limited to provide a plausible explanation for the ice ages,

despite recent research findings.

(C) It cannot be tested and confirmed until further research on volcanic activity is done.

(D) It is one plausible explanation, though not the only one, for the ice ages.

(E) It is not a plausible explanation for the ice ages, although it has opened up promising possibilities for future research.

Application

The author's reaction to the statements about the Milankovitch theory must be based on how the author treats the theory in the passage. The first, second, and third paragraphs describe the theory and the use of a new research method to test the theory. The passage states that data from these tests *have established a strong connection between variations in the Earth's orbit and the periodicity of the ice ages*, suggesting that the author of the passage believes the theory is plausible. In the final paragraph, the author points to other factors that might be involved, suggesting that the theory might not provide a complete explanation.

A In the last paragraph, the author suggests that because there are still other untested factors that may have effects on climate, other explanations are possible.

B Though in the last paragraph the author points to other factors that may be involved, these are not presented by the author as indicating limitations that diminish the plausibility of the theory—they are acknowledged merely as possibilities that are not now understood—and nothing else in the passage suggests that the theory is “too limited.”

C The author shows how the theory has been tested; volcanic activity is not part of this theory.

D Correct. The author's presentation of the theory and the tests of the theory show that the author finds the theory plausible; the mention of other factors shows the author does not think that all other explanations have been ruled out, even if they are as yet untested.

E The theory was a plausible explanation from its beginning, but it was not testable until recently; scientists would be unlikely to try to devise means to test a theory that did not strike them as antecedently plausible.

The correct answer is D.

68. It can be inferred from the passage that the isotope record taken from ocean sediments would be less useful to researchers if which of the following were true?

(A) It indicated that lighter isotopes of oxygen predominated at certain times.

- (B) It had far more gaps in its sequence than the record taken from rocks on land.
- (C) It indicated that climate shifts did not occur every 100,000 years.
- (D) It indicated that the ratios of oxygen 16 and oxygen 18 in ocean water were not consistent with those found in fresh water.
- (E) It stretched back for only a million years.

Inference

To make an inference about the isotope record from ocean sediments, examine what the passage says about that record. The third paragraph discusses that record and lists its two advantages. First, it is a global record with *remarkably little variation* in samples from varied locations. Second, it is *more continuous* than the record from rocks. If either of these advantages were not true, then it is logical to infer that the record would be less useful.

A According to lines 14–16, the lighter isotope does predominate; this is part of the record and does not affect its usefulness.

B Correct. In lines 37–42, the author states that an advantage of the ocean record is that it is *a more continuous record than that taken from rocks on land*. If this were not true, the ocean record would be less useful.

C If the record were to show that the shifts did not occur every 100,000 years, Milankovitch's theory would be weakened. This impact on the theory does not make the isotope record less useful to researchers. The record is useful precisely because it can offer evidence to confirm or refute such theories.

D This inconsistency would not affect the usefulness of the ocean-water record. Researchers would simply need to accommodate the fresh-water inconsistency.

E The record would still be useful. Lines 42–46 attest to the establishment of a pattern based on data from *the past several hundred thousand years*.

The correct answer is B.

69. According to the passage, which of the following is true of the ratios of oxygen isotopes in ocean sediments?
- (A) They indicate that sediments found during an ice age contain more calcium carbonate than sediments formed at other times.
 - (B) They are less reliable than the evidence from rocks on land in determining the volume of land ice.
 - (C) They can be used to deduce the relative volume of land ice that was present when the sediment was laid down.

(D) They are more unpredictable during an ice age than in other climatic conditions.

(E) They can be used to determine atmospheric conditions at various times in the past.

Supporting ideas

The phrase *according to the passage* suggests that the answer to the question is most likely stated in the passage. Lines 12–14 state that the relative volume of land ice can be deduced from the ratio of oxygen 18 to oxygen 16 in ocean sediments.

A There is no evidence in the passage about this point.

B The ocean record is described in lines 38–39 as *more continuous*, so it is unlikely to be less reliable. In any case, reliability is not discussed.

C Correct. Lines 12–14 explain that *the land-ice volume for a given period can be deduced from the ratio of two oxygen isotopes*.

D There is no evidence in the passage to support this statement.

E The passage does not discuss the use of this record in determining past atmospheric conditions.

The correct answer is C.

70. It can be inferred from the passage that precipitation formed from evaporated ocean water has

(A) the same isotopic ratio as ocean water

(B) less oxygen 18 than does ocean water

(C) less oxygen 18 than has the ice contained in continental ice sheets

(D) a different isotopic composition than has precipitation formed from water on land

(E) more oxygen 16 than has precipitation formed from fresh water

Inference

Any inference about precipitation from evaporated ocean water needs to be based on what the passage says. Lines 20–22 show that *heavier isotopes tend to be left behind when water evaporates from the ocean surfaces*. Therefore, the evaporated water would contain less oxygen 18 and the remaining ocean water would contain more. It is logical to infer that precipitation formed from this evaporated water would also contain less oxygen 18.

A Lines 20–24 explain that the water remaining in the ocean after evaporation has more oxygen 18.

B Correct. Since *the heavier isotopes tend to be left behind*, there will be

less oxygen 18 in the evaporated water and in the precipitation that forms from it.

C The passage suggests that the ocean water evaporates and through subsequent precipitation helps form the ice sheets, so the amount of oxygen 18 in the ice sheets should be similar to the amount in the precipitation formed from the evaporated water.

D The passage does not discuss precipitation formed from water on land.

E The passage does not discuss precipitation formed from fresh water.

The correct answer is B.

71. It can be inferred from the passage that calcium carbonate shells

(A) are not as susceptible to deterioration as rocks

(B) are less common in sediments formed during an ice age

(C) are found only in areas that were once covered by land ice

(D) contain radioactive material that can be used to determine a sediment's isotopic composition

(E) reflect the isotopic composition of the water at the time the shells were formed

Inference

Any inference about calcium carbonate shells needs to be based on what the passage says about these shells. Lines 24–32 explain the role of these shells in forming sediments and establishing a chronology for ice ages. The shells *were constructed with oxygen atoms drawn from the surrounding ocean*. Lines 29–32 make it clear that if the sediments reveal a higher ratio of oxygen 18, it is because more oxygen 18 had been left behind when the ocean water evaporated and contributed to the growth of continental ice sheets. It can thus be inferred that the shells that make up those sediments must reflect the proportion of oxygen 18 found in the ocean water at the time they were formed.

A The only mention of rocks in the passage is a comparison of “gappiness” of the rock and sedimentary specimen records in lines 38–39; this information does not allow any firm inference to be made with respect to relative susceptibility to deterioration, though a more continuous record might be the result of less susceptibility to deterioration.

B The passage does not make any reference to the relative abundance of these shells during ice ages; no such inference can be drawn.

C The only information in the passage that might support this statement is found in lines 29–32, but that information, about the correlation between oxygen ratios in sediment specimens and land ice, describes a relation that

implies nothing about distributions of such specimens.

D Though the passage does indirectly indicate that the shells contained radioactive material, nothing in the passage suggests that radioactive material is used to determine isotopic composition.

E Correct. The passage explains that oxygen atoms in the surrounding water are one of the building blocks of calcium carbonate shells. The isotopic composition of the surrounding water changes during the ice age cycles, so it is logical that the isotopic composition of the shells will change depending on when they were formed.

The correct answer is E.

Questions 72–77 refer to the passage on page 396.

72. The primary purpose of the passage is to

- (A) examine two sides of a historiographical debate
- (B) call into question an author's approach to a historiographical debate
- (C) examine one author's approach to a historiographical debate
- (D) discuss two authors' works in relationship to a historiographical debate
- (E) explain the prevalent perspective on a historiographical debate

Main idea

This question requires understanding what the passage as a whole is attempting to do. The passage opens by introducing two books published in 1984 that both concern the history of women in the United States. The passage then makes it clear that one book deals *directly* (line 15) with the issue of women's status, while the other does not. The passage then goes on to discuss the perspective that each book takes and what each book has to offer for an assessment of women's status in the eighteenth and nineteenth centuries.

A The two books discussed in the passage do not take different sides on a particular debate but rather are described as being more or less useful to the debate itself.

B The passage focuses on how two different books contain information useful to a particular historiographical debate but does not call into question the approach of either book.

C The passage focuses on two authors' works, not one.

D Correct. The passage discusses what two different books have to offer in relation to a particular historiographical debate.

E The passage does not describe any perspective on a particular historiographical debate as being more prevalent than any other.

The correct answer is D.

73. The author of the passage mentions the supervision of schools primarily in order to
- (A) remind readers of the role education played in the cultural changes of the nineteenth century in the United States
 - (B) suggest an area in which nineteenth-century American women were relatively free to exercise power
 - (C) provide an example of an occupation for which accurate data about women's participation are difficult to obtain
 - (D) speculate about which occupations were considered suitable for United States women of the nineteenth century
 - (E) illustrate how the answers to questions about women's status depend on particular contexts

Evaluation

Answering this question depends on understanding what role a particular piece of information plays in the passage as a whole. The author implicitly supports Lebsock's contention (beginning at line 20) that different frames of reference can produce different perspectives on the debate about women's status in the eighteenth and nineteenth centuries. The author then summarizes different contexts cited by Lebsock to support the contention about frames of reference. As part of this summary, the author refers to *supervising schools* (lines 24–25) as an example of a job that apparently showed women losing power.

A The passage does not discuss the role of education in the nineteenth century.

B The passage does mention some ways in which, according to Lebsock, *women . . . gained power* (lines 25–26) in the nineteenth century, but *supervising schools* is not among them.

C The passage does not discuss the difficulty of obtaining data about particular occupations.

D The passage makes no judgments about the suitability for women of any jobs in the nineteenth century.

E Correct. The passage mentions supervising schools as part of an illustration of Lebsock's claim that the debate about women's status depends on the context being examined.

The correct answer is E.

74. With which of the following characterizations of Lebsock's contribution to the controversy concerning women's status in the nineteenth-century United States

would the author of the passage be most likely to agree?

- (A) Lebsock has studied women from a formerly neglected region and time period.
- (B) Lebsock has demonstrated the importance of frame of reference in answering questions about women's status.
- (C) Lebsock has addressed the controversy by using women's current status as a frame of reference.
- (D) Lebsock has analyzed statistics about occupations and property that were previously ignored.
- (E) Lebsock has applied recent historiographical methods to the biography of a nineteenth-century woman.

Supporting ideas

Answering this question requires recognizing information explicitly given in the passage. The passage introduces the work of Lebsock in line 6 and then goes on to describe several characteristics of Lebsock's book. In lines 20–22, the author introduces Lebsock's claim that the historiographical debate about women's status is dependent on frame of reference and calls that claim important; the passage then gives an example showing how frame of reference affects views of women's status. In so doing, the author displays an implicit agreement with Lebsock's discussion on this point.

A The author of the passage portrays neither the place nor time period that Lebsock focuses on as having been neglected by historians.

B Correct. The author describes as important Lebsock's idea that frame of reference informs the debate about women's status.

C According to the passage, Lebsock's book deals with women's status in the eighteenth and nineteenth centuries, not the present status of women.

D The passage does not mention or imply that Lebsock analyzed statistics in writing her book.

E Although the passage does describe Lebsock's book as pertaining to an ongoing historiographical debate, it identifies the book's topic as *women in one southern community* (lines 7–8), not the life of a single woman.

The correct answer is B.

75. According to the passage, Lebsock's work differs from Buel and Buel's work in that Lebsock's work
- (A) uses a large number of primary sources
 - (B) ignores issues of women's legal status

- (C) refuses to take a position on women's status in the eighteenth century
- (D) addresses larger historiographical issues
- (E) fails to provide sufficient material to support its claims

Supporting ideas

This question asks for recognition of information contained in the passage. In the first sentence, the passage states that Buel and Buel's work and Lebsock's work have *contrasting approaches*. The passage then proceeds, using descriptions of each work's approach, to illustrate how the works differ. The passage notes that Buel and Buel's work *makes little effort* to place its biographical subject *in the context of recent historiography on women* (lines 5–6), whereas Lebsock's work attempts *to redirect two decades of historiographical debate* about women's status.

- A Primary sources are not mentioned in the passage in relation to either work discussed.
- B The legal status of women is not mentioned in the passage.
- C Lebsock's work is described in the passage as attempting to redirect the debate about women's status in the eighteenth and nineteenth centuries.
- D Correct.** The passage suggests that by not placing its subject's story in the context of historiography, Buel and Buel's work does not therefore address larger historiographical issues, as Lebsock's does.
- E The passage tends to support Lebsock's views and does not refer to any lack of support for the claims made in Lebsock's work.

The correct answer is D.

76. The passage suggests that Lebsock believes that compared to nineteenth-century American women, eighteenth-century American women were
- (A) in many respects less powerful in relation to men
 - (B) more likely to own real estate
 - (C) generally more economically independent
 - (D) more independent in conducting their private lives
 - (E) less likely to work as school superintendents

Inference

This question requires making an inference based on information given in the passage. As part of the passage's description of Lebsock's contribution to the historiographical debate about women's status in the eighteenth and nineteenth centuries, Lebsock's conclusions about women's autonomy are described. As part of this description, the passage cites Lebsock's conclusion that nineteenth-century

women lost economic autonomy when compared to eighteenth-century women (lines 17–20).

A The passage states that in many ways women in the nineteenth century *lost power in relation to men* (line 23), which would imply that in those respects eighteenth-century women had more power in relation to men, not less. The only increase mentioned in nineteenth-century women's power is associated with owning more real estate.

B The passage states that more nineteenth-century women owned real estate.

C Correct. As the passage states, Lebsock concluded that nineteenth-century women lost economic autonomy compared to eighteenth-century women.

D The passage states that nineteenth-century women gained more independence in their private lives.

E The passage cites school superintendents as an example of an occupation more likely to be held by eighteenth-century women.

The correct answer is C.

77. The passage suggests that Buel and Buel's biography of Mary Fish provides evidence for which of the following views of women's history?

(A) Women have lost power in relation to men since the colonial era.

(B) Women of the colonial era were not as likely to be concerned with their status as were women in the nineteenth century.

(C) The colonial era was not as favorable for women as some historians have believed.

(D) Women had more economic autonomy in the colonial era than in the nineteenth century.

(E) Women's occupations were generally more respected in the colonial era than in the nineteenth century.

Inference

This question requires understanding what the passage implies. The approach that Buel and Buel's work takes is specifically described in lines 3–6 and again in lines 28–34. In lines 29–32, the passage states that Buel and Buel's work *provides ample raw material for questioning the myth . . . of a colonial golden age in the eighteenth century*, referring to a myth about women's status. In describing this golden age as a myth fostered by some historians, the passage suggests that this era was not as favorable to women as these historians suggest.

A The passage describes Lebsock's work as providing such evidence, not

Buel and Buel's work.

B The passage does not pertain to the level of concern women had for their status.

C Correct. The final paragraph of the passage describes Buel and Buel's work as providing material that calls into question claims that the eighteenth century was especially favorable to women.

D The passage refers to the economic autonomy of women in relation to Lebsock's work, not Buel and Buel's work.

E The passage does not refer to whether any particular occupations held by women were more respected at one time or another.

The correct answer is C.

Questions 78–86 refer to the passage on page 398.

78. Which of the following titles best summarizes the contents of the passage?

(A) Neurotransmitters: Their Crucial Function in Cellular Communication

(B) Diet and Survival: An Old Relationship Reexamined

(C) The Blood Supply and the Brain: A Reciprocal Dependence

(D) Amino Acids and Neurotransmitters: The Connection between Serotonin Levels and Tyrosine

(E) The Effects of Food Intake on the Production and Release of Serotonin: Some Recent Findings

Main idea

Finding a title that best summarizes a passage requires examining the passage as a whole. This task is made easier by the fact that the second sentence of the first paragraph provides a topic sentence stating the main idea: *In recent studies, however, we have discovered that the production and release in brain neurons of the neurotransmitter serotonin . . . depend directly on the food that the body processes.* In the second paragraph, the authors cite the results of several studies relating neurotransmitter levels to eating meals and to injections of insulin. In the final paragraph, the authors discuss a study of the effect of a proteinrich meal on serotonin level. Thus, the correct title must show the relationship between food eaten and serotonin produced.

A The function of neurotransmitters is only briefly mentioned.

B The passage does not discuss the relation between diet and survival.

C There is no discussion of blood supply and the brain.

D While tyrosine is briefly mentioned, this was not a main focus of the studies.

E Correct. This title offers a summary of the article's contents.

The correct answer is E.

79. According to the passage, the speed with which tryptophan is provided to the brain cells of a rat varies with the
- (A) amount of protein present in a meal
 - (B) concentration of serotonin in the brain before a meal
 - (C) concentration of leucine in the blood rather than with the concentration of tyrosine in the blood after a meal
 - (D) concentration of tryptophan in the brain before a meal
 - (E) number of serotonin-containing neurons

Supporting ideas

The phrase *according to the passage* suggests that the answer is likely stated in the passage. Look at the third paragraph, which discusses variations in the speed with which tryptophan is provided to the brain. Lines 41–44 state *the more protein is in a meal . . . the more slowly is tryptophan provided to the brain*.

A Correct. The greater the amount of protein, the more slowly tryptophan is provided.

B The relationship is not discussed in the passage, although the concentration of serotonin *after* a meal is measured.

C While leucine and tyrosine are mentioned, their concentrations in the blood are not compared.

D This relationship is not discussed in the passage, although the concentration of tryptophan *after* a meal is measured.

E The researchers do not consider the number of neurons.

The correct answer is A.

80. According to the passage, when the authors began their first studies, they were aware that
- (A) they would eventually need to design experiments that involved feeding rats high concentrations of protein
 - (B) tryptophan levels in the blood were difficult to monitor with accuracy
 - (C) serotonin levels increased after rats were fed meals rich in tryptophan
 - (D) there were many neurotransmitters whose production was dependent on metabolic processes elsewhere in the body
 - (E) serotonin levels increased after rats were injected with a large amount of

tryptophan

Supporting ideas

The phrase *according to the passage* suggests that the answer is likely stated in the passage. Look at the first sentence of the second paragraph where the focus of the authors' *first studies* is explained. The investigators wanted to see if an increase in serotonin levels would be observed after rats ate meals that changed tryptophan levels in the blood. Earlier research had already established that injecting tryptophan increased serotonin levels.

A The authors' decision to add protein came later in their studies, after they had seen the effects of eating in general.

B The passage does not identify any problems with monitoring tryptophan levels in the blood.

C This was the hypothesis of the first experiment, so the authors could not have known it beforehand.

D This point is irrelevant to the authors' work; only one neurotransmitter, serotonin, is discussed.

E Correct. Lines 9–12 show that this increase had already been observed.

The correct answer is E.

81. According to the passage, one reason that the authors gave rats carbohydrates was to

(A) depress the rats' tryptophan levels

(B) prevent the rats from contracting diseases

(C) cause the rats to produce insulin

(D) demonstrate that insulin is the most important substance secreted by the body

(E) compare the effect of carbohydrates with the effect of proteins

Supporting ideas

The phrase *according to the passage* suggests that the answer is likely stated in the passage. Look at lines 22–26, which say *We then decided to see whether the secretion of the animal's own insulin similarly affected serotonin production. We gave the rats a carbohydrate-containing meal that we knew would elicit insulin secretion.* These sentences together show that the authors gave carbohydrates to the rats to cause the rats to secrete insulin.

A Lines 26–29 show that the carbohydrate increased the blood tryptophan level.

B Preventing disease was not part of the study.

C Correct. The authors had already tried injecting insulin; they then gave the rats carbohydrates to stimulate insulin production.

D The authors make no such claim about insulin.

E The study involving protein came later, so this could not have been the reason for giving the rats carbohydrates.

The correct answer is C.

82. According to the passage, the more protein a rat consumes, the lower will be the

(A) ratio of the rat's blood-tryptophan concentration to the amount of serotonin produced and released in the rat's brain

(B) ratio of the rat's blood-tryptophan concentration to the concentration in its blood of the other amino acids contained in the protein

(C) ratio of the rat's blood-tyrosine concentration to its blood-leucine concentration

(D) number of neurotransmitters of any kind that the rat will produce and release

(E) number of amino acids the rat's blood will contain

Supporting ideas

The phrase *according to the passage* suggests that the answer is likely stated in the passage. In lines 41–43, the authors state: *The more protein is in a meal, the lower is the ratio of the resulting bloodtryptophan concentration to the concentration of competing amino acids. . . .*

A While lower levels of blood-tryptophan lead to lower serotonin levels, the relationship is not discussed in terms of a ratio.

B Correct. Lines 41–43 show this to be the correct answer choice.

C This relationship is not demonstrated in the passage.

D This point is not made in the passage.

E Lines 38–40 explain that *consumption of protein increases blood concentration of the other amino acids much more. . . .* Since proteins are made up of amino acids, eating protein would logically increase the number of amino acids.

The correct answer is B.

83. The authors' discussion of the "mechanism that provides blood tryptophan to the brain cells" (lines 34–35) is meant to

(A) stimulate further research studies

(B) summarize an area of scientific investigation

- (C) help explain why a particular research finding was obtained
- (D) provide supporting evidence for a controversial scientific theory
- (E) refute the conclusions of a previously mentioned research study

Logical structure

To find the purpose of this discussion, look at the context in which this reference occurs. At the beginning of the third paragraph, the authors note that, *surprisingly*, adding protein led to lower brain tryptophan and serotonin levels. The question is why were the levels lowered? *The answer lies* in the mechanism cited in lines 34–35. Therefore, the discussion of the mechanism is meant to explain a surprising research finding.

- A No further studies are mentioned.
- B There are summaries of several studies, but there is no summary of an entire area of scientific investigation.
- C Correct.** The mechanism helps explain the surprising finding about lower brain tryptophan and serotonin levels.
- D No theory is advanced, nor is any evidence about it provided.
- E There is no attempt to refute any other study.

The correct answer is C.

84. According to the passage, an injection of insulin was most similar in its effect on rats to an injection of
- (A) tyrosine
 - (B) leucine
 - (C) blood
 - (D) tryptophan
 - (E) protein

Supporting ideas

Since the question refers to information given in the passage, the answer can be found by careful reading. In order to find an injection with a similar effect, look first at the effect of injecting insulin. In lines 19–22, the authors state that *injecting insulin . . . caused parallel elevations in blood and brain tryptophan levels and in serotonin levels*. The only other reference to injection occurs earlier in lines 10–13 where rats injected with tryptophan had increased serotonin levels; injecting tryptophan would obviously cause tryptophan levels to increase. Thus, the effects of injecting insulin were similar to the effects of injecting tryptophan.

- A No evidence suggests that tyrosine injection would have similar effects.

B The studies did not involve injecting leucine.

C The studies did not involve injecting blood.

D Correct. According to the passage, injecting tryptophan raises serotonin and tryptophan levels just as injecting insulin does.

E The studies involved eating protein, not injecting it; eating protein did not raise serotonin levels.

The correct answer is D.

85. It can be inferred from the passage that which of the following would be LEAST likely to be a potential source of aid to a patient who was not adequately producing and releasing serotonin?

(A) Meals consisting almost exclusively of protein

(B) Meals consisting almost exclusively of carbohydrates

(C) Meals that would elicit insulin secretion

(D) Meals that had very low concentrations of tyrosine

(E) Meals that had very low concentrations of leucine

Inference

Since this question asks for an inference, the answer is not directly stated in the passage; it must instead be derived from the information given. What kind of meals would NOT help a patient with low serotonin levels? Meals that increased serotonin would help the patient; meals that lowered serotonin would not.

According to the last sentence in the passage, *the more protein in a meal, the less serotonin subsequently produced and released*. Therefore, high-protein meals would be LEAST likely to help the patient.

A Correct. Meals with very high levels of protein would tend to lower serotonin and thus to be less beneficial for the patient with inadequate serotonin levels.

B When rats ate a carbohydrate-containing meal, serotonin increased (lines 25–29). Therefore, these meals would tend to raise serotonin levels and so help the patient.

C In the study, meals that elicited insulin secretion raised serotonin levels.

D Since tyrosine is an amino acid found in protein, meals low in tyrosine would be low in protein and so would tend to raise serotonin levels and help the patient.

E Since leucine is an amino acid found in protein, meals low in leucine would be low in protein and so would tend to raise serotonin levels and help the patient.

The correct answer is A.

86. It can be inferred from the passage that the authors initially held which of the following hypotheses about what would happen when they fed large amounts of protein to rats?
- (A) The rats' brain serotonin levels would not decrease.
 - (B) The rats' brain tryptophan levels would decrease.
 - (C) The rats' tyrosine levels would increase less quickly than would their leucine levels.
 - (D) The rats would produce more insulin.
 - (E) The rats would produce neurotransmitters other than serotonin.

Inference

When the authors discuss the results of adding protein to meals, they begin with the word *surprisingly* (line 30). The use of this word indicates that the results differed from the authors' initial hypotheses. The results showed lowered serotonin. It is reasonable to conclude that the researchers initially hypothesized that serotonin levels would not decrease.

A Correct. The use of the word *surprisingly* in line 30 suggests that researchers thought serotonin levels would not decrease.

B The researchers had expected that tryptophan levels would not decrease, *since protein contains tryptophan* (lines 32–34).

C Since there is no discussion of the comparative levels of tyrosine and leucine, there was probably no hypothesis about these levels.

D In the passage insulin is explicitly discussed in relation to carbohydrates, and plays no role at all in the discussion of protein; this very strongly suggests that insulin production played no role in the authors' decision to feed the rats large amounts of protein.

E Serotonin is the only neurotransmitter discussed in the research, so it is unlikely that the researchers had an initial hypothesis involving other neurotransmitters.

The correct answer is A.

Questions 87–89 refer to the passage on page 400.

87. The passage suggests that WIDC differed from WTUL in which of the following ways?
- (A) WIDC believed that the existing safety regulations were adequate to protect women's health, whereas WTUL believed that such regulations needed to be strengthened.

(B) WIDC believed that unions could not succeed in pressuring employers to comply with such regulations, whereas WTUL believed that unions could succeed in doing so.

(C) WIDC believed that lead poisoning in white lead factories could be avoided by controlling conditions there, whereas WTUL believed that lead poisoning in such factories could not be avoided no matter how stringently safety regulations were enforced.

(D) At the time that the legislation concerning white lead factories was proposed, WIDC was primarily concerned with addressing health conditions in white lead factories, whereas WTUL was concerned with improving working conditions in all types of factories.

(E) At the time that WIDC was opposing legislative attempts to restrict women's labor, WTUL had already ceased to do so.

Inference

To answer this question you need to understand the differences between WIDC and WTUL as they are described in the passage. The only information about WTUL in the passage is that it had stopped opposing restrictions on women's labor in the late 1880s, and that, because existing safety regulations were not being enforced, it supported the proposal to prohibit women from working in white lead factories. WIDC, on the other hand, was formed in 1892 specifically to oppose restrictions on women's labor, and it opposed the proposal.

A According to the passage, WIDC did believe that existing safety regulations, if enforced, could prevent lead poisoning. WTUL may or may not have believed that the safety regulations needed to be strengthened; all the passage states is that WTUL did not believe that the safety regulations were likely to be enforced.

B The passage states that WTUL believed that because there were no unions to pressure employers, the employers would not comply with safety regulations. The passage does not present any information on which to base a conclusion about WIDC's beliefs regarding union pressure on employers.

C Based on information in the passage, both WIDC and SPEW believed that enforcing safety regulations could protect women against lead poisoning. WIDC supported SPEW's position on the matter. WTUL believed that safety regulations were unlikely to be enforced because of the lack of unions.

D The passage states that WIDC viewed the proposal to restrict women's employment in white lead factories as an instance of legislation designed to limit women's work opportunities—precisely the legislation that WIDC was formed to oppose. Thus, WIDC was not primarily concerned with the factories' health conditions.

E Correct. WIDC began opposing legislative attempts to restrict women's labor in 1892 and continued to do so through at least 1895, when the Home Secretary proposed prohibiting women from working in white lead factories. WTUL stopped opposing restrictions on women's labor in the late 1880s, before WIDC was even founded. Thus, the passage suggests that WTUL had stopped opposing restrictions on women's labor well before WIDC worked to oppose such legislation.

The correct answer is E.

88. Which of the following, if true, would most clearly support the contention attributed to SPEW in lines 17–20?

(A) Those white lead factories that most strongly enforced regulations concerning worker safety and hygiene had the lowest incidences of lead poisoning among employees.

(B) The incidence of lead poisoning was much higher among women who worked in white lead factories than among women who worked in other types of factories.

(C) There were many household sources of lead that could have contributed to the incidence of lead poisoning among women who also worked outside the home in the late nineteenth century.

(D) White lead factories were more stringent than were certain other types of factories in their enforcement of workplace safety regulations.

(E) Even brief exposure to the conditions typically found in white lead factories could cause lead poisoning among factory workers.

Evaluation

This question requires the reader to find a statement that would provide additional support for the contention made in the following statement: *SPEW contended, and WIDC concurred, that controllable conditions in such factories were responsible for the development of lead poisoning.* Information suggesting that when conditions were controlled, lead poisoning was less likely to develop would provide support for SPEW's contention.

A Correct. If incidences of lead poisoning were low in those factories that enforced hygiene and safety regulations, that would suggest that lead poisoning was not an inevitable result of working in a white lead factory—but rather that lead poisoning was the result of poor hygiene and safety practices.

B It would not be particularly surprising for the incidence of lead poisoning to be higher among women working in white lead factories than among women working in other kinds of factories—but such a finding would say

nothing about whether controllable conditions had any effect on the development of lead poisoning.

C The existence of household sources of lead that might contribute to lead poisoning would weaken, not support, SPEW's contention that controllable factory conditions were responsible for the development of lead poisoning.

D If white lead factories enforced workplace safety regulations more stringently than did some other types of factories, it might be the case that SPEW's contention was incorrect: that even controlled conditions could not prevent a high incidence of lead poisoning.

E If the conditions typically found in white lead factories were particularly bad with regard to safety and hygiene, it could conceivably be the case that SPEW's contention was true—that is, that the conditions that caused lead poisoning were controllable. But it might also be the case that an uncontrollable aspect of those conditions caused lead poisoning. Thus, this neither supports nor undermines SPEW's contention clearly.

The correct answer is A.

89. The passage is primarily concerned with

(A) presenting various groups' views of the motives of those proposing certain legislation

(B) contrasting the reasoning of various groups concerning their positions on certain proposed legislation

(C) tracing the process whereby certain proposed legislation was eventually enacted

(D) assessing the success of tactics adopted by various groups with respect to certain proposed legislation

(E) evaluating the arguments of various groups concerning certain proposed legislation

Main idea

Answering this question depends on identifying the overall point of the passage. The passage is mainly concerned with explaining the reasons behind the positions taken by WIDC and SPEW, which opposed the proposal to enact legislation prohibiting women from holding most white lead factory jobs, and the reasoning of WTUL, which supported the proposal.

A The passage explains how WIDC viewed the proposal, but it does not indicate what any of the groups believed about the motivations of the Home Secretary, who made the proposal.

B Correct. The passage contrasts the reasoning of the WIDC and SPEW,

both of which believed that enforcing safety regulations would make the proposed legislation unnecessary, with the reasoning of WTUL, which thought that safety regulations were unlikely to be enforced and thus supported the proposal.

C The passage simply states that the proposal was eventually enacted; it does not trace the process by which this occurred.

D The passage implies that WIDC and SPEW were unsuccessful in their opposition to the proposed legislation, but it identifies only one tactic used in opposition to it: SPEW's attempt to challenge it by investigating the causes of lead poisoning.

E The passage does not evaluate the groups' arguments concerning the proposed legislation; rather, it presents those arguments without comment on their quality or value.

The correct answer is B.

Questions 90–95 refer to the passage on page 402.

90. The primary purpose of the passage is to

- (A) evaluate a research study
- (B) summarize the history of a research area
- (C) report new research findings
- (D) reinterpret old research findings
- (E) reconcile conflicting research findings

Main idea

Determining the primary purpose comes from examining what the author does in the entire passage. In the first paragraph, the author explains Duverger's work on women's electoral participation. In the second paragraph the author points out both the successes and failures of that work. The purpose of this passage, then, is to evaluate Duverger's study.

A Correct. The author evaluates Duverger's study of women's electoral activities.

B This passage examines only one research study, not an entire research area.

C Duverger's work was published in 1955; its findings are not new.

D The author explains and evaluates Duverger's findings but does not reinterpret them.

E The author's discussion of Duverger's work does not reveal or attempt to reconcile conflicting findings.

The correct answer is A.

91. According to the passage, Duverger's study was unique in 1955 in that it
- (A) included both election data and survey data
 - (B) gathered data from sources never before used in political studies
 - (C) included an analysis of historical processes
 - (D) examined the influence on voting behavior of the relationships between women and men
 - (E) analyzed not only voting and political candidacy but also other political activities

Supporting ideas

This question is based on information specifically stated in the first sentence of the passage. The author introduces Duverger's work by calling it the first study of *women's electoral participation ever to use election data and survey data together* (lines 3–5).

A Correct. Duverger's work was unique because it used election data and survey data together.

B The two data types had never before been used together in such a study; they may well have been used separately in many earlier political studies.

C The second paragraph states that Duverger placed his findings in the context of historical processes, but not that he was unique in doing so (lines 15–17).

D Duverger compared the frequency and direction of voting between men and women, not the effect that their relationships had on voting (line 27).

E Duverger's work analyzed political activism, but the author does not claim that it was unique in doing so (lines 5–6).

The correct answer is A.

92. Which of the following characteristics of a country is most clearly an example of a factor that Duverger, as described in the passage, failed to consider in his study?
- (A) A large population
 - (B) A predominantly Protestant population
 - (C) A predominantly urban population
 - (D) A one-party government
 - (E) Location in the heart of Europe

Inference

In the second paragraph, the author notes Duverger's *failure to consider . . . the influence of political regimes, the effects of economic factors, and the ramifications of political and social relations between women and men* (lines 22–27). This question requires checking this list from the passage against the possible answers; the only point of convergence is the system of government. A system of government in which there is only one political party is a type of political regime.

A The author does not say that Duverger failed to consider the size of the population.

B No evidence shows that Duverger failed to consider the predominance of a religion.

C The author does not say that Duverger failed to consider the location of the population.

D Correct. According to the author of the passage, Duverger failed to consider the *influence of political regimes*.

E Duverger is not faulted for failing to consider the location of the countries that he studied.

The correct answer is D.

93. The author implies that Duverger's actual findings are

(A) limited because they focus on only four countries

(B) inaccurate in their description of the four countries in the early 1950s

(C) out-of-date in that they are inapplicable in the four countries today

(D) flawed because they are based on unsound data

(E) biased by Duverger's political beliefs

Inference

Since the question uses the word *implies*, the answer involves making an inference based on the information in the text. The second paragraph evaluates Duverger's work. The author notes that Duverger *placed his findings in the context of many of the historical processes*. Because these contexts have changed since 1955, the author holds that *Duverger's approach has proved more durable than his actual findings*. The actual findings, then, are out-of-date and irrelevant to the countries today.

A The limitations the author brings up in the second paragraph have no connection to the number of countries studied.

B The limitations the author brings up in the second paragraph do not suggest that the findings were inaccurate; rather, they were, in the author's view, significantly incomplete.

C Correct. The actual findings, unlike the research method, are out-of-date and inapplicable today.

D The limitations the author brings up in the second paragraph do not suggest that Duverger's data were unsound; rather, in the author's view, they were incomplete and have become dated.

E The limitations the author brings up in the second paragraph do not suggest that Duverger's findings were politically biased; rather, in the author's view, they did not take full enough account of politics.

The correct answer is C.

94. The passage implies that, in comparing four European countries, Duverger found that the voting rates of women and men were most different in the country in which women
- (A) were most politically active
 - (B) ran for office most often
 - (C) held the most conservative political views
 - (D) had the most egalitarian relations with men
 - (E) had possessed the right to vote for the shortest time

Inference

The comparison of voting rates is discussed at the end of the first paragraph and forms the basis for the required inference. Duverger found that *women voted somewhat less frequently than men* but that this difference narrowed *the longer the women had the vote* (lines 9–11). That is, there was an ongoing process of convergence in voting rates for women and men, as the time period for which women had the vote lengthened. This suggests that at one end, when women had been voting for the shortest time, voting rates were most dissimilar, and at the other end, when women had been voting for the longest time, the rates were most similar.

- A Women's political activism is not suggested as a reason for the difference.
- B Women's political candidacy is not suggested as a reason for the difference.
- C Women's political views are not suggested as a reason for the difference.
- D Women's egalitarian relations with men are not suggested as a reason for the difference.

E Correct. Duverger's finding is of (apparently steady, ongoing) convergence in voting frequency rates between women and men over time. This supports the inference that the shorter the time period, the less

convergence—i.e., the more divergence—there is in voting-frequency rates.

The correct answer is E.

95. The author implies that some behaviorist research involving the multinational study of women's political participation that followed Duverger's study did which of the following?
- (A) Ignored Duverger's approach
 - (B) Suffered from faults similar to those in Duverger's study
 - (C) Focused on political activism
 - (D) Focused on the influences of political regimes
 - (E) Focused on the political and social relations between women and men

Inference

The final sentence of the passage links Duverger's study to behaviorist work in general. After noting Duverger's failure to consider several important elements, the author observes, *Duverger's study foreshadowed the enduring limitations of the behaviorist approach to the multinational study of women's political participation* (lines 27–30). Thus, it is reasonable to infer that the author is of the opinion that the behaviorist research that followed Duverger's study suffered from the same limitations.

A The author does not imply that other behaviorists ignored Duverger's approach.

B Correct. The author says that Duverger's work revealed the *enduring limitations* also found in later behaviorist research.

C This is not obviously a limitation at all, let alone one that Duverger's study suffered from.

D This is not obviously a limitation at all, let alone one that Duverger's study suffered from.

E This is not obviously a limitation at all, let alone one that Duverger's study suffered from.

The correct answer is B.

Questions 96–101 refer to the passage on page 404.

96. The author of the passage refers to Robert Filmer (see line 9) primarily in order to
- (A) show that Royalist ideology was somewhat more radical than most historians appear to realize
 - (B) qualify the claim that patriarchalism formed the basis of Royalist ideology

- (C) question the view that most early feminists were associated with the Royalist faction
- (D) highlight an apparent tension between Royalist ideology and the ideas of early feminists
- (E) argue that Royalists held conflicting opinions on issues of family organization and women's political rights

Evaluation

This question asks about the role of Filmer in the passage. The author states that Filmer's radical patriarchalism is associated with Royalist ideology and then goes on to define radical patriarchalism as an ideology that asserts the power of the king and the male head of the household. Early feminists, however, questioned the subordination of women in marriage. Thus, there seems to be a conflict between these two sets of ideas.

A Although the passage refers to Filmer's view as *radical patriarchalism*, it provides no evidence regarding any differences in the degrees to which historians consider that view, or Royalism in general, to be radical.

B Filmer's work supports the claim that patriarchalism was the basis of Royalist ideology; it does not qualify such a claim.

C That Filmer's approach was one of radical patriarchalism makes it surprising that early feminists were associated with the Royalist faction, but it does not provide any grounds for questioning whether they were so associated.

D Correct. There is apparent tension between Filmer's radical patriarchalism, if that is indeed essential to Royalist ideology, and the ideas of early feminists, who questioned such patriarchalism.

E The author refers to Filmer in order to suggest, initially, a uniformity among Royalists regarding family and women; it is only later in the passage that this view becomes more complicated.

The correct answer is D.

97. The passage suggests which of the following about the seventeenth-century English women mentioned in line 2?

- (A) Their status as forerunners of modern feminism is not entirely justified.
- (B) They did not openly challenge the radical patriarchalism of Royalist Filmerian ideology.
- (C) Cavendish was the first among these women to criticize women's subordination in marriage and assert women's equality with men.
- (D) Their views on family organization and women's political rights were

diametrically opposed to those of both Royalist and Parliamentary ideology.

(E) Historians would be less puzzled if more of them were identified with the Parliamentary side in the English Civil Wars.

Inference

The first sentence of the passage refers to women who are both regarded as forerunners of modern feminism and identified as Royalists. The passage goes on to suggest that, given Royalist ideology's association with Filmer's radical patriarchalism (equating absolute power of the king with absolute power of the male head of household), it is surprising that feminism would find any footing within such an ideology.

A Nothing in the passage disputes the idea that the seventeenth-century English women in question should be considered the forerunners of modern feminism.

B Gallagher provides the example of Margaret Cavendish as a writer who did openly challenge radical patriarchalism—albeit only in her writings.

C The passage states that Cavendish had successors among early feminists, but it does not indicate whether she herself was the first seventeenth-century English woman to assert women's equality.

D The passage does not indicate what the Parliamentary view of family organization and women's political rights was, so there is no way to determine whether the Royalist forerunners of modern feminism were opposed to that view.

E Correct. The basic puzzle the passage sets out to solve is why the forerunners of modern feminism would have been associated with the Royalist side, which seems to have been based on radical patriarchalism. Historians would most likely have been less surprised if these women had been identified with the Parliamentary side, which presumably did not embrace radical patriarchalism.

The correct answer is E.

98. The passage suggests that Margaret Cavendish's decision to become an author was motivated, at least in part, by a desire to

(A) justify her support for the Royalist cause

(B) encourage her readers to work toward eradicating Filmerian patriarchalism

(C) persuade other women to break free from their political and social isolation

- (D) analyze the causes for women's exclusion from the pursuit of power
- (E) create a world over which she could exercise total control

Inference

This question asks about Margaret Cavendish's reasons for becoming an author. The second paragraph describes her as someone who *insisted that she was a self-sufficient being*; she understood that, given the real-world strictures in place, she could achieve this self-sufficiency in her own mind and on paper as a writer. So her decision to become a writer can be inferred to be motivated by her desire to exercise power and control.

A The passage states that Cavendish justified her being the center of her own universe by invoking the Royalist figure of the absolute monarch; there is no suggestion in the passage that Cavendish felt the need to justify any support for the actual Royalist cause.

B The passage gives no direct indication that Cavendish was even aware of Filmerian patriarchalism.

C The second paragraph states that Cavendish's idea of absolute singularity carried with it the idea of social and political isolation; Cavendish was most likely not motivated by a desire to persuade other women to break free from such isolation.

D Cavendish took the exclusion of women from the pursuit of power for granted; the passage does not suggest that she was concerned with its causes.

E Correct. According to the passage, Cavendish considered herself a self-sufficient being who was at the center of her own universe; in her writing, she wanted to create a world in which this was also true.

The correct answer is E.

99. The phrase *a satellite orbiting a dominant male planet* (lines 41–42) refers most directly to
- (A) Cavendish's concept that each woman is a sovereign self
 - (B) the complete political and social isolation of absolute singularity
 - (C) the immaterial world that a writer can create on paper
 - (D) the absolute subordination of women in a patriarchal society
 - (E) the metaphorical figure of the absolute monarch

Evaluation

The phrase in question is *a satellite orbiting a dominant male planet*. The passage states that this was the idea that Cavendish was reacting against; she preferred

instead the idea that she was the center of her own universe, her own sovereign, subject to no one.

A The idea of a satellite orbiting a dominant male planet refers not to Cavendish's idea that each woman is a sovereign self, but rather to the idea directly opposed to that: each woman must submit to a dominant male.

B A *satellite orbiting a dominant male planet* is by definition not isolated, nor is it singular.

C According to the passage, Cavendish wished to create her own world as a writer so that she did not have to be a *satellite*.

D Correct. The phrase refers to the idea that in a patriarchal society, women are as satellites to men, who are the dominant planets.

E While radical patriarchy does equate the monarch with the male head of the household, the highlighted phrase is most directly about the relationship, under patriarchy, between women and men.

The correct answer is D.

100. The primary purpose of the passage is to

(A) trace the historical roots of a modern sociopolitical movement

(B) present one scholar's explanation for a puzzling historical phenomenon

(C) contrast two interpretations of the ideological origins of a political conflict

(D) establish a link between the ideology of an influential political theorist and that of a notoriously eccentric writer

(E) call attention to some points of agreement between opposing sides in an ideological debate

Main idea

This question asks about the passage as a whole. The passage is mainly concerned with outlining Catherine Gallagher's attempt to explain why, given Royalist ideology's apparent association with radical patriarchalism, Royalist women offered feminist critiques of women's subordination in marriage and asserted their equality with men.

A The passage makes no connection between early feminism and its modern form.

B Correct. The passage presents a puzzling historical phenomenon, that Royalist women critiqued patriarchalism, in the first paragraph, and then presents Catherine Gallagher's explanation for that phenomenon in the second paragraph.

C While the passage discusses the political conflict between the Royalists and Parliamentarians in the English Civil Wars in the first paragraph, neither this conflict, nor its ideological origins are the focus of the passage. Furthermore, the passage does not offer any interpretations of the origins of the conflict.

D The passage attempts to unlink the ideology of political theorist Robert Filmer and the eccentric author Margaret Cavendish by suggesting that Filmer's radical patriarchalism was not the only way of understanding Royalist ideology. Cavendish provided a different understanding entirely.

E While both sides of the ideological debate did agree on the absolute monarchy, the passage as a whole does not focus on this agreement, but rather on the disagreement about where, theoretically, the idea of absolute monarchy leads.

The correct answer is B.

101. Which of the following, if true, would most clearly undermine Gallagher's explanation of the link between Royalism and feminism?

(A) Because of their privileged backgrounds, Royalist women were generally better educated than were their Parliamentary counterparts.

(B) Filmer himself had read some of Cavendish's early writings and was highly critical of her ideas.

(C) Cavendish's views were highly individual and were not shared by the other Royalist women who wrote early feminist works.

(D) The Royalist and Parliamentary ideologies were largely in agreement on issues of family organization and women's political rights.

(E) The Royalist side included a sizable minority faction that was opposed to the more radical tendencies of Filmerian patriarchalism.

Inference

This question asks about how to undermine the way in which Gallagher connects Royalism and feminism. According to Gallagher, Cavendish's work exemplifies the connection between these ideas, because Cavendish took the idea of absolute monarchy and extended that to the idea of absolute self, an idea that should, Cavendish believed, apply to women as well as men.

A Gallagher's explanation of the link between Royalism and feminism does not depend on the education level of Royalist women relative to Parliamentary women.

B Filmer most likely would have been critical of Cavendish's ideas, had he encountered them, but the passage does not indicate that Gallagher's argument had anything to do with whether Filmer read Cavendish's

writings.

C Correct. Gallagher uses Cavendish's work to explain how Royalism gave rise to feminism, but if Cavendish's views were completely atypical of other Royalist women, then those views cannot explain the link as Gallagher suggests they do.

D The passage states in the first paragraph that if the Royalists and Parliamentarians were in agreement *on issues of family organization and women's political rights*, then feminists should have been divided between the two sides—but they were not. So this idea, if true, would undermine that statement, but not Gallagher's argument about the link between Royalists and feminists.

E If more Royalists were opposed to Filmer's radical patriarchalism, then Cavendish's writings would seem to be more representative of tendencies in Royalist ideology, thus making Gallagher's case stronger, not weaker.

The correct answer is C.

Questions 102–106 refer to the passage on page 406.

102. The passage is primarily concerned with

- (A) identifying two practices in medical research that may affect the accuracy of clinical trials
- (B) describing aspects of medical research that tend to drive up costs
- (C) evaluating an analysis of certain shortcomings of current medical research practices
- (D) describing proposed changes to the ways in which clinical trials are conducted
- (E) explaining how medical researchers have traditionally conducted clinical trials and how such trials are likely to change

Main idea

This question requires an understanding of what the passage as a whole is doing. The passage introduces Frazier and Mosteller as proposing changes to the ways clinical trials in medical research are currently conducted. The rest of the passage then describes these proposed changes together with the support Frazier and Mosteller provide for adopting these changes.

A The passage identifies practices in medical research to help illustrate the basis for Frazier and Mosteller's proposed changes.

B The passage mentions medical research costs as one example within the larger description of Frazier and Mosteller's proposed changes.

C The passage is not concerned with evaluating Frazier and Mosteller's proposed changes.

D Correct. The passage describes the changes proposed by Frazier and Mosteller to the way clinical trials are conducted.

E The passage is not concerned with establishing the likelihood of any changes to the way medical research is conducted.

The correct answer is D.

103. Which of the following can be inferred from the passage about a study of the category of patients referred to in lines 20–22?

(A) Its findings might have limited applicability.

(B) It would be prohibitively expensive in its attempt to create ideal conditions.

(C) It would be the best way to sample the total population of potential patients.

(D) It would allow researchers to limit information collection without increasing the risk that important variables could be overlooked.

(E) Its findings would be more accurate if it concerned treatments for a progressive disease than if it concerned treatments for a nonprogressive disease.

Inference

This question requires drawing an inference from information given in the passage. In describing the proposals put forth by Frazier and Mosteller, the passage states in lines 15–20 that they propose using more patients in clinical trials than are currently being used, and that the trials would thereby obtain *a more representative sample of the total population with the disease under study*. The passage then states that researchers often *restrict* (lines 20–22) their trials to certain types of patients, therefore limiting the applicability of their findings.

A Correct. The passage states that the researchers preferred to restrict the types of patients used in their studies, thereby using a less representative sample than if they used a more inclusive group of patients.

B The passage mentions the added expense of clinical trials only in relation to data storage, collection, and analysis.

C The passage describes the category of patients referred to as restricted and therefore unrepresentative of the total population.

D While the passage does mention the amount of data collected about an individual patient, that topic is not connected to the category of patients referred to in lines 20–22.

E The passage does not suggest that a study using the category of patients referred to would be more effective in investigating progressive diseases.

The correct answer is A.

104. It can be inferred from the passage that a study limited to patients like those mentioned in lines 20–22 would have which of the following advantages over the kind of study proposed by Frazier and Mosteller?

- (A) It would yield more data and its findings would be more accurate.
- (B) It would cost less in the long term, though it would be more expensive in its initial stages.
- (C) It would limit the number of variables researchers would need to consider when evaluating the treatment under study.
- (D) It would help researchers to identify subgroups of patients with secondary conditions that might also be treatable.
- (E) It would enable researchers to assess the value of an experimental treatment for the average patient.

Inference

This question requires understanding what the information in the passage implies. The passage explains that Frazier and Mosteller’s proposal involves enrolling more patients in clinical trials (lines 18–19) than is the case with the category of patients referred to. The passage then explains that broadening the range of trial participants would allow an evaluation of particular treatments *under various conditions and for different patient subgroups* (line 29). This strongly suggests that limiting the patients used to those described in the referred text would limit the number of variables researchers would need to consider.

A The passage suggests that not limiting the patients used in clinical trials will yield more data than restricting them will.

B The passage refers to the costs of clinical trials only as it concerns the collection, storage, and analysis of data collected from participants.

C Correct. By limiting the patients used to those having the ailment under study, the passage suggests that researchers need to consider fewer variables in their assessment of a treatment.

D The passage suggests that **not** limiting the types of patients used in clinical trials will better allow researchers to evaluate subgroups.

E The passage suggests that limiting the types of patients available for clinical trials results in data for specific, rather than average, populations.

The correct answer is C.

105. The author mentions patients' ages (line 32) primarily in order to
- (A) identify the most critical variable differentiating subgroups of patients
 - (B) cast doubt on the advisability of implementing Frazier and Mosteller's proposals about medical research
 - (C) indicate why progressive diseases may require different treatments at different stages
 - (D) illustrate a point about the value of enrolling a wide range of patients in clinical trials
 - (E) substantiate an argument about the problems inherent in enrolling large numbers of patients in clinical trials

Evaluation

Answering this question requires understanding how a particular piece of information functions in the passage as a whole. The passage is concerned with describing the proposals of Frazier and Mosteller. One of these proposals, described in the second paragraph, involves broadening the range of participants used in clinical trials. The passage states that in following this proposal, Frazier and Mosteller suggest that the effectiveness of treatments can be assessed for different patient subgroups. To affirm the value of broadening the range of participants, the passage then cites two examples of criteria by which relevant subgroups might be identified: disease stages and patients' ages.

- A The passage makes no judgment as to the value of the subgroups it refers to in relation to broadened participation in clinical trials.
- B The passage does not call into question the potential effectiveness of Frazier and Mosteller's proposals.
- C The passage's example of patients' ages is not intended to be causally connected to its previous example regarding progressive diseases.
- D Correct.** Patients' ages are referred to in the passage to identify subgroups that could be evaluated if the range of participants in clinical trials were broadened.
- E The passage refers to patients' ages in support of Frazier and Mosteller's proposal that more patients be used in clinical trials.

The correct answer is D.

106. According to the passage, which of the following describes a result of the way in which researchers generally conduct clinical trials?
- (A) They expend resources on the storage of information likely to be irrelevant to the study they are conducting.

(B) They sometimes compromise the accuracy of their findings by collecting and analyzing more information than is strictly required for their trials.

(C) They avoid the risk of overlooking variables that might affect their findings, even though doing so raises their research costs.

(D) Because they attempt to analyze too much information, they overlook facts that could emerge as relevant to their studies.

(E) In order to approximate the conditions typical of medical treatment, they base their methods of information collection on those used by hospitals.

Supporting ideas

This question asks for an identification of specific information given in the passage. The passage describes the proposals of Frazier and Mosteller as attempting to improve the way clinical trials have generally been conducted. In describing how current trials are generally conducted, the passage states that researchers *collect far more background information on patients than is strictly required for their trials* (lines 4–6) and that they therefore escalate the costs of the trials.

A Correct. The passage states that researchers generally collect more information than they need to perform their clinical trials, which drives up the costs of the trials.

B The passage makes no judgment about the accuracy of the information collected by researchers who currently hold clinical trials.

C The passage states that the risk of overlooking relevant information in clinical trials is *never entirely eliminable* (line 11).

D The passage states that researchers generally collect more information than is relevant, not that they overlook relevant information.

E The passage states that, in general, researchers currently collect more information than hospitals do (line 6).

The correct answer is A.

Questions 107–112 refer to the passage on page 408.

107. The primary purpose of the passage is to

(A) assess the validity of a certain view

(B) distinguish between two phenomena

(C) identify the causes of a problem

(D) describe a disturbing trend

(E) allay concern about a particular phenomenon

Main idea

This question requires understanding, in general terms, the purpose of the passage as a whole. The first paragraph identifies an area of concern: declines in amphibian populations may constitute a crisis, one that indicates humans' catastrophic effects on the environment. The rest of the passage then goes on to evaluate, as the second paragraph states, whether claims of crisis-level extinctions as a result of human activity are valid. In making this evaluation, the passage discusses the possible causes of extinctions, biologists' prioritization of population declines over extinctions, and the fact that we lack extensive long-term data on amphibian populations.

A Correct. The passage's main purpose is to assess whether the view that humans are causing crisis-level declines in amphibian populations is valid.

B The passage takes care, particularly in the third paragraph, to distinguish between population declines and extinctions, but this is not its primary purpose.

C The passage makes clear that it is difficult to identify the real extent of the problem facing amphibian populations, much less identify its causes.

D The first paragraph notes what may seem to be a disturbing trend—the decline in amphibian populations—but the rest of the passage is concerned not with describing that trend in greater detail, but rather with determining whether it is in fact occurring.

E While the passage provides possible grounds for concluding that concern about declining amphibian populations is overblown, it concludes by suggesting that we might, because we lack data, doom species and ecosystems to extinction. Thus, the overall purpose is not to allay concern.

The correct answer is A.

108. It can be inferred from the passage that the author believes which of the following to be true of the environmentalists mentioned in lines 5–6?

(A) They have wrongly chosen to focus on anecdotal reports rather than on the long-term data that are currently available concerning amphibians.

(B) Their recommendations are flawed because their research focuses too narrowly on a single category of animal species.

(C) Their certainty that population declines in general are caused by environmental degradation is not warranted.

(D) They have drawn premature conclusions concerning a crisis in amphibian populations from recent reports of declines.

(E) They have overestimated the effects of chance events on trends in amphibian populations.

Inference

This question asks about the author's view of the environmentalists mentioned in the first paragraph. These environmentalists have claimed, based on amphibian population declines, that the situation is a crisis and that immediate action must be taken. The author, however, states that the declines are only *apparently* drastic and questions whether they are real, thus suggesting that the environmentalists are drawing conclusions in the absence of a complete consideration of the situation.

A The passage indicates that anecdotal reports are insufficient, but so too are other resources. The fourth paragraph of the passage makes clear that there is not enough long-term data available on which to base conclusions about amphibian populations.

B The passage does not indicate that the environmentalists under discussion have conducted research on any animal species.

C The passage does not indicate that the environmentalists in question hold, with certainty, any particular view regarding population declines in general.

D Correct. The author argues that the recent declines may have several different causes, and that environmentalists have jumped to a conclusion about the cause of the declines as well as their significance.

E The environmentalists, in attributing population declines to intentional human activity, have more likely underestimated than overestimated the effects of chance events on amphibian populations.

The correct answer is D.

109. It can be inferred from the passage that the author believes which of the following to be true of the amphibian extinctions that have recently been reported?

(A) They have resulted primarily from human activities causing environmental degradation.

(B) They could probably have been prevented if timely action had been taken to protect the habitats of amphibian species.

(C) They should not come as a surprise, because amphibian populations generally have been declining for a number of years.

(D) They have probably been caused by a combination of chance events.

(E) They do not clearly constitute evidence of general environmental degradation.

Inference

The author suggests throughout the passage that recently reported amphibian extinctions may have several different causes: they may be due to any number of

chance events, for example, or may simply be the result of a small population that finds itself unable to continue under difficult conditions, whatever causes those conditions.

A The author states in the second paragraph that extinctions may occur without a proximate cause in human activities and does not make a commitment to any particular explanation of the amphibian extinctions.

B That chance events can cause extinctions suggests that even if habitats had been protected, extinctions still might have occurred.

C In the second paragraph, the author says that extinctions *should come as no great surprise*, but this option is imprecise. The amphibian populations have not generally *been declining for a number of years*. The author says in the third paragraph that amphibian populations show strong fluctuations; further, in the fourth paragraph, the author says that there is insufficient long-term data to conclude that amphibian populations have been, or are, in decline.

D The author suggests that the extinctions may have been caused by chance events, but there is not enough data to know whether or not this is probable.

E Correct. The reported extinctions could have resulted from several different causes; thus, they are not clear evidence of general environmental degradation.

The correct answer is E.

110. According to the passage, each of the following is true of endangered amphibian species EXCEPT:

(A) They are among the rarest kinds of amphibians.

(B) They generally have populations that are small in size.

(C) They are in constant danger of extinction.

(D) Those with decreasing populations are the most likely candidates for immediate extinction.

(E) They are in danger of extinction due to events that sometimes have nothing to do with human activities.

Application

This question asks what the passage does not say is true of endangered amphibian species. The second paragraph discusses endangered species, stating that they are *always rare, almost always small, and, by definition, under constant threat of extinction*, which may be caused by chance events. The possibility of their extinction, the passage states, depends only on the population size, and not whether that population is increasing or decreasing.

A The second paragraph mentions rarity as a characteristic of endangered amphibian species.

B According to the second paragraph, endangered amphibian species are generally those of small populations.

C The second paragraph states that an endangered population is under constant threat of extinction.

D Correct. The last sentence of the second paragraph states that the probability of extinction due to chance events is independent of how a population changes in size. Immediate extinction would more likely come from such events, whereas population decline is gradual, even if fairly rapid.

E Endangered species, according to the second paragraph, may become extinct due to chance events—that is, events that have nothing to do with human activities.

The correct answer is D.

111. Which of the following most accurately describes the organization of the passage?

(A) A question is raised, a distinction regarding it is made, and the question is answered.

(B) An interpretation is presented, its soundness is examined, and a warning is given.

(C) A situation is described, its consequences are analyzed, and a prediction is made.

(D) Two interpretations of a phenomenon are described, and one of them is rejected as invalid.

(E) Two methods for analyzing a phenomenon are compared, and further study of the phenomenon is recommended.

Evaluation

This question asks about the organization of the passage as a whole. In the first paragraph, the author tells about a situation that has been interpreted in a particular way by environmentalists. The passage then proceeds to consider whether that interpretation is valid, and while it does not come to a definitive conclusion on that point, the final paragraph warns about the possible consequences of not taking the action recommended by the environmentalists.

A The passage does initially raise a question regarding whether the environmentalists' interpretation of events is valid, but it does not answer that question, for the appropriate long-term data are not available.

B Correct. The passage presents environmentalists' interpretation of recent news regarding amphibians, then examines the soundness of that

interpretation. Finally, the author warns that postponing environmental action may have disastrous consequences.

C The first paragraph describes a situation of possibly drastic declines in amphibian populations but does not follow this description with an analysis of its consequences.

D The passage suggests that apparent declines in amphibian populations may or may not constitute a crisis, but it does not reject either idea.

E While the passage does imply, in its final paragraph, that long-term data on amphibian populations should be collected, the passage does not compare two methods for analyzing amphibian populations or population declines in those populations.

The correct answer is B.

112. Which of the following best describes the function of the sentence in lines 33–38?

(A) To give an example of a particular kind of study

(B) To cast doubt on an assertion made in the previous sentence

(C) To raise an objection to a view presented in the first paragraph

(D) To provide support for a view presented in the first paragraph

(E) To introduce an idea that will be countered in the following paragraph

Evaluation

The sentence in question discusses the way in which anecdotal reports of population decreases cannot help biologists determine whether those decreases are normal fluctuations, take populations to lower levels that are not actually worrisome, or actually threaten extinctions. This indicates that the view mentioned in the first paragraph—reports of declines indicate a catastrophic crisis—may be mistaken.

A The sentence does not address a particular kind of study; it objects to the use of anecdotal reports in place of actual study.

B The previous sentence describes the possibilities referred to in the sentence in question. The sentence does not cast doubt on any of those possibilities.

C Correct. The view that reports of amphibian population declines indicate a crisis, as presented in the first paragraph, is countered by the objection here that there are several possible causes for population declines, and anecdotal reports cannot distinguish among those possibilities.

D The first paragraph is concerned with articulating the view that amphibian population declines constitute a crisis. This sentence does not support that

view; instead, it offers reason to question it.

E The sentence introduces the idea that amphibian populations have fluctuated in the past, and the following paragraph supports this idea by stating that several amphibian species that appeared almost extinct in the 1950s and 1960s have recovered. Thus, the paragraph does not counter the sentence.

The correct answer is C.

Questions 113–116 refer to the passage on page 410.

113. The passage mentions which of the following as a factor that affects the role of *P. ochraceus* as a keystone species within different habitats?
- (A) The degree to which the habitat is sheltered from waves
 - (B) The degree to which other animals within a habitat prey on mussels
 - (C) The fact that mussel populations are often not dominant within some habitats occupied by *P. ochraceus*
 - (D) The size of the *P. ochraceus* population within the habitat
 - (E) The fact that there is great species diversity within some habitats occupied by *P. ochraceus*

Supporting idea

This question depends on recognizing what the passage states about the factors affecting *P. ochraceus*'s role as a keystone species, which is different in different habitats. According to the passage, *P. ochraceus* consumes and suppresses mussel populations in some habitats—specifically, those that are wave-exposed—making it a keystone predator in those habitats. But in wave-sheltered habitats, *P. ochraceus* does not play the same role in suppressing mussel populations.

A Correct. The passage clearly states that *P. ochraceus*'s role in wave-exposed habitats differs from its role in wave-sheltered habitats.

B The passage says that the impact of *P. ochraceus* predation on mussels is not strong in wave-sheltered habitats, but this is not—at least not at all sites—because other animals are preying on the mussels; rather, at least at some sites, it is because mussels are controlled by sand burial.

C The passage does not suggest that mussel populations are dominant in any habitats occupied by *P. ochraceus*.

D The size of the *P. ochraceus* population affects the size of the mussel population within wave-exposed habitats, but the passage does not suggest that *P. ochraceus*'s role as a keystone species depends on the size of its population within those habitats.

E The only other species the passage mentions in conjunction with *P. ochraceus* habitats is the mussel; the passage does not address species diversity in these habitats.

The correct answer is A.

114. Which of the following hypothetical experiments most clearly exemplifies the method of identifying species' roles that the author considers problematic?

(A) A population of seals in an Arctic habitat is counted in order to determine whether it is the dominant species in that ecosystem.

(B) A species of fish that is a keystone species in one marine ecosystem is introduced into another marine ecosystem to see whether the species will come to occupy a keystone role.

(C) In order to determine whether a species of monkey is a keystone species within a particular ecosystem, the monkeys are removed from that ecosystem and the ecosystem is then studied.

(D) Different mountain ecosystems are compared to determine how geography affects a particular species' ability to dominate its ecosystem.

(E) In a grassland experiencing a changing climate, patterns of species extinction are traced in order to evaluate the effect of climate changes on keystone species in that grassland.

Application

Answering this question depends on recognizing what the author says about identifying species' roles in habitats and then extending that to another situation. The author considers a particular method of studying keystone species problematic: removing a suspected keystone species from its habitat and observing what happens to the ecosystem. The author finds this problematic because interactions among species are complex.

A The author does not discuss counting the members of a population as a problematic way of determining whether that population is a dominant species.

B The method that the author finds problematic has to do with observing what happens to an ecosystem when a keystone species is removed from it, not with observing what happens to a different ecosystem when the species is introduced into it.

C Correct. The author states explicitly that removing a species from a habitat in order to determine its keystone status is problematic. Removing the monkeys from their habitat is a clear example of this problematic practice.

D Comparison of habitats in order to determine geography's effect on a

particular species' dominance would most likely find favor with the author, for this is the approach the author seems to advocate in investigating *P. ochraceus*'s keystone status.

E The author does not discuss tracing patterns of extinction or changing climates in the passage.

The correct answer is C.

115. Which of the following, if true, would most clearly support the argument about keystone status advanced in the last sentence of the passage (lines 24–31)?

(A) A species of bat is primarily responsible for keeping insect populations within an ecosystem low, and the size of the insect population in turn affects bird species within that ecosystem.

(B) A species of iguana occupies a keystone role on certain tropical islands, but does not play that role on adjacent tropical islands that are inhabited by a greater number of animal species.

(C) Close observation of a savannah ecosystem reveals that more species occupy keystone roles within that ecosystem than biologists had previously believed.

(D) As a keystone species of bee becomes more abundant, it has a larger effect on the ecosystem it inhabits.

(E) A species of moth that occupies a keystone role in a prairie habitat develops coloration patterns that camouflage it from potential predators.

Evaluation

To answer this question, focus on the argument advanced in the last sentence of the passage and identify what information would support that argument. In the last sentence of the passage, the author claims that keystone status depends on context. The author then offers three contextual factors that may affect a species' keystone status: geography, community diversity (i.e., the number of species in a given habitat), and length of species interaction. Evidence supporting this argument would show that context is important to a species' keystone status.

A This scenario does not indicate anything about keystone status; this is simply a description of how species populations in a single ecosystem affect one another.

B Correct. That the iguana is a keystone species in a location that has limited species diversity but not a keystone species in a location that has greater species diversity suggests that keystone status does indeed depend on context. Thus, this example supports the author's argument in the last sentence of the passage.

C That biologists were mistaken about keystone species in a particular

ecosystem does not have a bearing on whether keystone status is context dependent.

D It is not surprising that an increase in a species' population would lead to that species having a larger effect on its ecosystem—but this does not speak directly to the question of whether keystone status itself depends on context.

E A keystone species enhancing its ability to survive in a single ecosystem does not lend any support to the idea that keystone status depends on context. The moth's keystone status would have to undergo some change for this to have a bearing on the question of context.

The correct answer is B.

116. The passage suggests which of the following about the identification of a species as a keystone species?

(A) Such an identification depends primarily on the species' relationship to the dominant species.

(B) Such an identification can best be made by removing the species from a particular ecosystem and observing changes that occur in the ecosystem.

(C) Such an identification is likely to be less reliable as an ecosystem becomes less diverse.

(D) Such an identification seems to depend on various factors within the ecosystem.

(E) Such an identification can best be made by observing predation behavior.

Inference

Answering this question requires identifying how the passage suggests that keystone species should be identified. The passage identifies a particular way in which keystone status should *not* be determined: removing a species and observing what happens to the ecosystem. The passage also argues that keystone status depends strongly on context: that is, an ecosystem's characteristics, including its geography and inhabitants, determine its keystone species.

A While the passage uses an example of a keystone species, *P. ochraceus*, which preys on a species that would, in the keystone species' absence, be dominant, there is nothing to suggest that a keystone species *must* have a particular relationship with the dominant, or potentially dominant, species in an ecosystem.

B The passage explicitly states that this method of identification would be problematic.

C A reduction in an ecosystem's diversity might alter which species occupy keystone roles in that ecosystem, the passage suggests, but there is no indication that identifying such species would become more difficult.

D Correct. If, as the passage suggests, keystone status for any given species depends on the context of the ecosystem in which it lives, then it is likely that identifying keystone species depends strongly on understanding what factors of the ecosystem contribute to creating keystone status. The passage lists such factors as geography, community diversity, and species interaction.

E While the passage uses a predator, *P. ochraceus*, as its example of a keystone species, there is no indication that predation is an essential component of the actual definition of keystone species (*one whose effects are much larger than would be predicted from its abundance*).

The correct answer is D.

Questions 117–121 refer to the passage on page 412.

117. The passage is primarily concerned with
- (A) defending a controversial approach
 - (B) criticizing an accepted view
 - (C) summarizing research findings
 - (D) contrasting competing theories
 - (E) describing an innovative technique

Main idea

Figuring out the authors' primary concern depends on a careful review of the passage as a whole. The first paragraph identifies the larger question that is the context for the authors' investigation. The second paragraph presents the part of the question the authors researched, concluding with their unexpected results. The third paragraph explains the importance of these findings in relation to the larger question of the universe's possible "*close*." The authors' primary purpose in this passage is to summarize the findings of their research.

A The authors do not discuss approaches to the question they research.

B The authors mention that their findings do not conform to Kepler's law, but the passage's primary focus is on summarizing research findings and not on criticizing any particular view.

C Correct. This passage presents a summation of the findings of the authors' research.

D The authors do not contrast different theories in this passage.

E The authors do not discuss new techniques in this passage.

The correct answer is C.

118. The authors' study indicates that, in comparison with the outermost regions of a typical spiral galaxy, the region just outside the nucleus can be characterized as having

- (A) higher rotational velocity and higher luminosity
- (B) lower rotational velocity and higher luminosity
- (C) lower rotational velocity and lower luminosity
- (D) similar rotational velocity and higher luminosity
- (E) similar rotational velocity and similar luminosity

Inference

In the second paragraph, the authors observe that *outside the bright nucleus of a typical spiral galaxy luminosity falls off rapidly* (lines 20–21); the region just outside the nucleus may thus be characterized as having higher luminosity than the outermost regions of a spiral galaxy. Their research finds that *the rotational velocity in spiral galaxies either remains constant with increasing distance from the center or increases slightly* (lines 27–30). The region just outside the nucleus may thus be characterized as sharing with the outermost regions of a spiral galaxy a similar rotational velocity.

A This region was expected to have higher rotational velocity, but the research findings did not corroborate this hypothesis; it is correct that the region has higher luminosity.

B The region does have higher luminosity, but not lower rotational velocity.

C The region has neither lower luminosity nor lower rotational velocity.

D Correct. The region has similar rotational velocity and higher luminosity.

E The region has similar rotational velocity but higher luminosity.

The correct answer is D.

119. The authors' suggestion that "as much as 90 percent of the mass of the universe is not radiating at any wavelength with enough intensity to be detected on the Earth" (lines 34–37) would be most weakened if which of the following were discovered to be true?

(A) Spiral galaxies are less common than types of galaxies that contain little nonluminous matter.

(B) Luminous and nonluminous matter are composed of the same basic elements.

(C) The bright nucleus of a typical spiral galaxy also contains some nonluminous matter.

(D) The density of the observable universe is greater than most previous estimates have suggested.

(E) Some galaxies do not rotate or rotate too slowly for their rotational velocity to be measured.

Application

The authors' conclusion about nonluminous matter is based on their study of the rotational velocity of spiral galaxies. If spiral galaxies were found to be atypical of galaxies, then it would be possible that, in those other galaxies, nonluminous matter does not increase as luminous matter decreases. If this were the case, the authors' conclusion would be based on a sample of galaxies not representative of the whole, and their argument would be seriously weakened.

A Correct. The authors' conclusion assumes that spiral galaxies are typical of all galaxies; information calling that assumption into question weakens the argument.

B The relation rather than the composition of luminous and nonluminous mass is relevant to the conclusion.

C Nonluminous mass increases as luminous mass decreases: This finding does not rule out that the nucleus contains some nonluminous mass; the argument is not affected.

D The density of the observable universe is only a *fraction* of the density needed to “close” the universe, so even if this density were greater, it is not likely to exceed the density of nonluminous matter.

E The authors are concerned only with measurable rotational velocity.

The correct answer is A.

120. It can be inferred from information presented in the passage that if the density of the universe were equivalent to significantly less than three hydrogen atoms per cubic meter, which of the following would be true as a consequence?

(A) Luminosity would be a true indicator of mass.

(B) Different regions in spiral galaxies would rotate at the same velocity.

(C) The universe would continue to expand indefinitely.

(D) The density of the invisible matter in the universe would have to be more than 70 times the density of the luminous matter.

(E) More of the invisible matter in spiral galaxies would have to be located in their nuclei than in their outer regions.

Inference

An inference is drawn from stated information. This question refers to the first paragraph, where the authors explain that *the critical density of matter needed to brake the expansion and “close” the universe is equivalent to three hydrogen atoms per cubic meter* (lines 6–9). If the density is significantly less, then the universe will not “close” but continue to expand indefinitely.

A The authors’ finding that luminosity is not a true indicator of mass is not derived from the conclusion that the density is less than three hydrogen atoms per cubic meter.

B The authors’ finding that different regions rotate at similar velocities does not come from the hypothesis about the density of the universe.

C Correct. If the critical density needed to “close” the universe is equivalent to three hydrogen atoms per cubic meter, then a density of significantly less than this amount means that the universe will continue its expansion.

D This statement would be true of the hypothetical “close” of the universe, but if the density is less than three hydrogen atoms per cubic meter, the universe will continue its expansion.

E This statement cannot be inferred from the hypothesis about the density of the universe.

The correct answer is C.

121. The authors propose all of the following as possibly contributing to the “missing matter” in spiral galaxies EXCEPT

(A) massive black holes

(B) small black holes

(C) small, dim stars

(D) massive stars

(E) large planets

Supporting ideas

This question asks the reader to find the list of possible explanations for the “missing” or dark matter that the authors give in the passage and to check that list against the possible answers. Using the process of elimination will show which answer is not included on the authors’ list. In the final paragraph, the authors write, *Such dark matter could be in the form of extremely dim stars of low mass, of large planets like Jupiter, or of black holes, either small or massive* (lines 37–40).

A The authors include massive black holes.

B The authors include small black holes.

C The authors include small, dim stars.

D Correct. The authors do not include massive stars in their list of possible explanations for “*missing matter*.”

E The authors include large planets.

The correct answer is D.

122. The primary purpose of the passage is to

- (A) advocate a more positive attitude toward technological change
- (B) discuss the implications for employees of the modernization of a telephone exchange
- (C) consider a successful challenge to the constructivist view of technological change
- (D) challenge the position of advocates of technological determinism
- (E) suggest that the social causes of technological change should be studied in real situations

Main idea

This question asks for an assessment of what the passage as a whole is doing. The passage introduces Clark's study as a *solid contribution* (line 3) to the debate between technological determinists and social constructivists. In the second paragraph, Braverman is introduced as holding a position of social constructivism, a position that Clark takes issue with. In the final paragraph, the passage holds that *Clark refutes the extremes of the constructivists* (line 31), and Clark's arguments challenging social constructivism are then described.

- A The passage takes no position on the merits of technological change but is concerned only with the role of such change in society.
- B The passage mentions telephone exchange workers as an example that helps illustrate the more central debate between determinists and constructivists.
- C Correct.** The passage is mainly concerned with portraying Clark's view as a successful challenge to constructivism.
- D The passage describes Clark's view as a successful challenge to social constructivism, not technological determinism.
- E The passage is concerned with describing a challenge to social constructivism and not with suggesting the context in which technological change ought to be studied.

The correct answer is C.

123. Which of the following statements about the modernization of the telephone exchange is supported by information in the passage?

- (A) The new technology reduced the role of managers in labor negotiations.
- (B) The modernization was implemented without the consent of the employees directly affected by it.
- (C) The modernization had an impact that went significantly beyond

maintenance routines.

(D) Some of the maintenance workers felt victimized by the new technology.

(E) The modernization gave credence to the view of advocates of social constructivism.

Supporting ideas

This question requires recognizing information contained in the passage. The passage states in the first paragraph that Clark's study focused on the modernization of a telephone exchange and the effect this had on maintenance work and workers. After describing Braverman's analysis in the second paragraph as being at odds with Clark's views, the passage discusses Clark's views in more detail in the final paragraph. As part of this discussion, the passage notes that Clark shows how a change from *maintenance-intensive electromechanical switches to semielectronic switching systems* at the telephone exchange *altered work tasks, skills, training opportunities, administration, and organization of workers* (lines 42–44). Thus, the passage shows that the modernization of the telephone exchange affected much more than maintenance routines.

A The passage does not discuss whether new technology reduces the role of managers in labor negotiations.

B The passage does not discuss the role of employee consent in the modernization of the telephone exchange.

C Correct. The passage states that the modernization of the telephone exchange affected tasks, skills, training, administration, and the organization of workers.

D The passage does not suggest that maintenance workers felt victimized by the modernization of the telephone exchange.

E The passage describes modernization as a fact viewable from a perspective of social constructivism or technological determinism, but that does not in itself support either view.

The correct answer is C.

124. Which of the following most accurately describes Clark's opinion of Braverman's position?

(A) He respects its wide-ranging popularity.

(B) He disapproves of its misplaced emphasis on the influence of managers.

(C) He admires the consideration it gives to the attitudes of the workers affected.

(D) He is concerned about its potential to impede the implementation of new technologies.

(E) He is sympathetic to its concern about the impact of modern technology on workers.

Inference

Answering this question requires inferring what the passage's author likely believes. The passage describes Braverman's position as one of mainstream social constructivism (lines 23–24), a position that Clark takes issue with. Although it describes Braverman's position, the rest of the passage is devoted to showing how Clark's position takes issue with Braverman's. In the second paragraph, the passage describes Clark as holding that *technology can be a primary determinant of social and managerial organization* (lines 9–11), which suggests that managers are sometimes subordinate to technological change. In lines 15–17, however, Braverman is described as holding that *the shape of a technological system is subordinate to the manager's desire to wrest control of the labor process from the workers*, which shows that Clark and Braverman are at odds on this point.

A Since the passage says that Clark believes an important insight *has been obscured by the recent sociological fashion* that Braverman's views exemplify (lines 11–14), one cannot infer that Clark respects the popularity of Braverman's views.

B Correct. The passage shows that Clark believes managers to have less influence over how technology affects an organization than Braverman claims that they have.

C The passage does not indicate that Clark admires any aspect of Braverman's position.

D The passage does not indicate that Clark considers impediments to modernization.

E The passage does not indicate that Clark is sympathetic to any concerns attributed to Braverman.

The correct answer is B.

125. The information in the passage suggests that which of the following statements from hypothetical sociological studies of change in industry most clearly exemplifies the social constructivists' version of technological determinism?

(A) It is the available technology that determines workers' skills, rather than workers' skills influencing the application of technology.

(B) All progress in industrial technology grows out of a continuing negotiation between technological possibility and human need.

(C) Some organizational change is caused by people; some is caused by computer chips.

(D) Most major technological advances in industry have been generated

through research and development.

(E) Some industrial technology eliminates jobs, but educated workers can create whole new skills areas by the adaptation of the technology.

Application

This question requires understanding different points of view discussed in the passage. In the first paragraph, the passage mentions the debate involving technological determinism and social constructivism. In the second and third paragraphs, the passage uses Braverman's analysis to illustrate the social constructivists' position and in the third paragraph suggests that the constructivists are *misrepresenting technological determinism* (line 24). In lines 29–30, the constructivists are reported to hold that technological determinism views technology as *existing outside society, capable of directly influencing skills and work organization*.

A Correct. This statement is consistent with the constructivists' view that technological determinism sees technology as outside of society, influencing workers' skills.

B The passage states that the constructivists hold that *technological determinists are supposed to believe . . . that machinery imposes appropriate forms of order on society* (lines 25–27), suggesting that no negotiation is present.

C According to the description of them in the passage, constructivists portray technological determinists as believing that technology, not people, drives organizational change.

D The passage does not portray either constructivists or determinists as being concerned with technological research and development.

E The passage does not portray either constructivists or determinists as being concerned with technology-driven job elimination or creation.

The correct answer is A.

126. The information in the passage suggests that Clark believes that which of the following would be true if social constructivism had not gained widespread acceptance?

(A) Businesses would be more likely to modernize without considering the social consequences of their actions.

(B) There would be greater understanding of the role played by technology in producing social change.

(C) Businesses would be less likely to understand the attitudes of employees affected by modernization.

(D) Modernization would have occurred at a slower rate.

(E) Technology would have played a greater part in determining the role of business in society.

Inference

Answering this question involves understanding a point of view as it is described in the passage. The passage aligns Clark's study closely with the technological determinists, summarizing his view in lines 9–11: *technology can be a primary determinant of social and managerial organization*. In the following sentence, the passage states that Clark believes that *this possibility is obscured by the recent sociological fashion, exemplified by Braverman's analysis* (lines 11–13). After illustrating Braverman's analysis, the passage then states that it represents *social constructivism*.

A According to the passage, Clark holds that constructivists obscure how modernization might have social consequences.

B Correct. According to the passage, Clark sees constructivism as obscuring the possibility that technology plays a primary role in social change.

C The passage does not discuss how the attitudes of employees are perceived by their employers.

D The passage describes a debate about the history and sociology of technology; it does not suggest that sociological analyses affect the pace of modernization.

E The passage describes a debate about the history and sociology of technology; it does not suggest that sociological analyses affect the role that technology plays in business.

The correct answer is B.

127. According to the passage, constructivists employed which of the following to promote their argument?

(A) Empirical studies of business situations involving technological change

(B) Citation of managers supportive of their position

(C) Construction of hypothetical situations that support their view

(D) Contrasts of their view with a misstatement of an opposing view

(E) Descriptions of the breadth of impact of technological change

Supporting ideas

Answering this question involves recognizing information given in the passage. The passage indicates that a debate exists between technological determinists and

social constructivists, suggesting that these views are in opposition. The passage goes on to state that *constructivists gain acceptance by misrepresenting technological determinism* (lines 23–24). This misrepresentation is presented as the *alternative to constructivism* (lines 27–28), suggesting that constructivists promoted their own view by contrasting it with a misrepresentation of determinists’ views.

A The passage mentions empirical studies in relation to Clark’s study but not Braverman’s analysis.

B The passage does not mention that managers were supportive of any particular point of view within the sociology of technology.

C The passage does not mention any hypothetical situations as being used by the constructivists in support of their view.

D Correct. The passage indicates that the constructivists have come into fashion by contrasting their own views with a misrepresentation of the views of technological determinists.

E The passage does not describe the constructivists as making determinations regarding the degree of impact that technological change has on social or managerial organization.

The correct answer is D.

128. The author of the passage uses the expression “are supposed to” in line 25 primarily in order to

(A) suggest that a contention made by constructivists regarding determinists is inaccurate

(B) define the generally accepted position of determinists regarding the implementation of technology

(C) engage in speculation about the motivation of determinists

(D) lend support to a comment critical of the position of determinists

(E) contrast the historical position of determinists with their position regarding the exchange modernization

Evaluation

This question requires understanding how a particular phrase functions in the passage as a whole. In the third paragraph the passage states that *constructivists gain acceptance by misrepresenting technological determinism* (lines 23–24) and follows this claim with an example of this misrepresentation, stating that *technological determinists are supposed to believe, for example* (lines 25–26). This line implies that the constructivist view of the determinists is inaccurate.

A Correct. The passage uses the expression in part to provide an example

of the constructivists' misrepresentation of the determinists.

B The passage indicates that the view attributed to the determinists is a misrepresentation, not one that is generally accepted by determinists.

C The expression in the passage is part of a discussion about the motivation of constructivists, not determinists.

D The expression in the passage is part of a discussion that is critical of the constructivists, not the determinists.

E The passage does not describe either the historical position of determinists or their position on the exchange modernization.

The correct answer is A.

129. Which of the following statements about Clark's study of the telephone exchange can be inferred from information in the passage?

(A) Clark's reason for undertaking the study was to undermine Braverman's analysis of the function of technology.

(B) Clark's study suggests that the implementation of technology should be discussed in the context of conflict between labor and management.

(C) Clark examined the impact of changes in the technology of switching at the exchange in terms of overall operations and organization.

(D) Clark concluded that the implementation of new switching technology was equally beneficial to management and labor.

(E) Clark's analysis of the change in switching systems applies only narrowly to the situation at the particular exchange that he studied.

Inference

This question requires understanding what the passage implies in its discussion of a point of view. The details of Clark's views are discussed primarily in the final paragraph. The passage states that on an empirical level, Clark demonstrates that technological change regarding switches at the telephone exchange *altered work tasks, skills, training opportunities, administration, and organization of workers* (lines 42–44). The passage goes on to state Clark's contention that these changes even influenced negotiations between management and labor unions.

A The passage indicates that Clark's study addressed the extremes of both technological determinism and social constructivism. It cites Braverman as a proponent of social constructivism but provides no evidence that Clark's motivation in beginning his study was specifically to target an analysis offered by Braverman.

B The passage indicates that Clark attributed some organizational change to the way labor and management negotiated the introduction of technology

but does not mention conflict between them.

C Correct. According to the passage, Clark concludes that changes to the technology of switches had an influence on several aspects of the overall operations and organization of the telephone exchange.

D The passage does not indicate that Clark assesses the benefits of technological change to either labor or management.

E The passage indicates that Clark believes the change in switching technology influenced many aspects of the overall operations of the telephone exchange.

The correct answer is C.

Questions 130–136 refer to the passage on page 416.

130. The author of the passage discusses Krontiris primarily to provide an example of a writer who

(A) is highly critical of the writings of certain Renaissance women

(B) supports Kelly's view of women's status during the Renaissance

(C) has misinterpreted the works of certain Renaissance women

(D) has rejected the views of both Burckhardt and Kelly

(E) has studied Renaissance women in a wide variety of social and religious contexts

Evaluation

This question focuses on the author's reason for mentioning Krontiris's work. The passage states that Krontiris, in her discussion of six Renaissance women writers, is an example of scholars who are optimistic about women's achievements but also suggest that these women faced significant obstacles. She is a writer who, in other words, agrees with neither Kelly's negative views nor Burckhardt's positive approach.

A The passage indicates that Krontiris uses the Renaissance women writers' works as historical evidence, not that she offered any criticism of the works themselves.

B Krontiris's work, according to the author, is cautiously optimistic about women's achievements during the Renaissance. This contradicts Kelly's view that the status of women declined during this time.

C The author suggests that Krontiris may have erred in taking her six subjects as representative of all women during the Renaissance, not that she made any misinterpretations of their actual writing.

D Correct. The author uses Krontiris as an example of those feminist

scholars who have rejected the overgeneralized approaches of both Kelly and Burckhardt.

E The author makes clear that Krontiris's study focuses on literate Renaissance women, who constituted a small minority.

The correct answer is D.

131. According to the passage, Krontiris's work differs from that of the scholars mentioned in line 12 in which of the following ways?
- (A) Krontiris's work stresses the achievements of Renaissance women rather than the obstacles to their success.
 - (B) Krontiris's work is based on a reinterpretation of the work of earlier scholars.
 - (C) Krontiris's views are at odds with those of both Kelly and Burkhardt.
 - (D) Krontiris's work focuses on the place of women in Renaissance society.
 - (E) Krontiris's views are based exclusively on the study of a privileged group of women.

Supporting idea

This question asks what the passage directly states about the difference between Krontiris's work and the feminist scholars mentioned in the first paragraph. The feminist scholars mentioned in the first paragraph explore differences among Renaissance women, particularly their social status and religion, and thus complicate Burckhardt's and Kelly's generalizations. Krontiris's work, on the other hand, focuses on Renaissance women writers, who are a distinctly privileged and small social group.

A The second paragraph makes clear that Krontiris addresses the obstacles faced by Renaissance women.

B The passage does not suggest that Krontiris is reinterpreting or drawing on reinterpretations of the work of earlier scholars.

C The second paragraph shows that Krontiris's work does complicate both Burckhardt's and Kelly's views, but in this, she is in agreement with the feminist scholars mentioned in the first paragraph.

D Both Krontiris and the feminist scholars mentioned in the first paragraph are concerned with the place of women in Renaissance society.

E Correct. The feminist scholars mentioned in the first paragraph are concerned with women of different social classes and religions, whereas Krontiris's work focuses on a limited social group.

The correct answer is E.

132. According to the passage, feminist scholars cite Burckhardt's view of Renaissance women primarily for which of the following reasons?

- (A) Burckhardt's view forms the basis for most arguments refuting Kelly's point of view.
- (B) Burckhardt's view has been discredited by Kelly.
- (C) Burckhardt's view is one that many feminist scholars wish to refute.
- (D) Burckhardt's work provides rich historical evidence of inequality between Renaissance women and men.
- (E) Burckhardt's work includes historical research supporting the arguments of the feminist scholars.

Supporting idea

This question asks what the passage says explicitly about why feminist scholars reference Burckhardt's view of Renaissance women. The first paragraph states that Burckhardt's view is that Renaissance women enjoyed *perfect equality* with men, and then follows that by noting how feminist scholars have *repeatedly cited* this view to contrast it with extensive evidence of women's inequality during the Renaissance.

A The passage does not indicate that any feminist scholars cite Burckhardt to refute Kelly's view. It uses Krontiris as an example of scholars who refute Kelly's point of view to a certain degree, but Krontiris does not use Burckhardt's view as her basis for doing so; Krontiris argues against Burckhardt as well.

B According to the first paragraph, Kelly's work was in certain ways inconsistent with Burckhardt's view, but that is not a reason why Burckhardt's view is cited by feminist scholars. Rather, according to the passage, they cite it in order to argue against it.

C Correct. Many feminist scholars wish to refute Burckhardt's view that Renaissance women and men were equal.

D As the first paragraph makes clear, Burckhardt's work emphasizes equality, not inequality, between Renaissance women and men.

E The passage does not discuss the historical research on which Burckhardt based his work.

The correct answer is C.

133. It can be inferred that both Burckhardt and Kelly have been criticized by the scholars mentioned in line 12 for which of the following?

- (A) Assuming that women writers of the Renaissance are representative of Renaissance women in general

- (B) Drawing conclusions that are based on the study of an atypical group of women
- (C) Failing to describe clearly the relationship between social status and literacy among Renaissance women
- (D) Failing to acknowledge the role played by Renaissance women in opposing cultural stereotypes
- (E) Failing to acknowledge the ways in which social status affected the creative activities of Renaissance women

Inference

The highlighted text refers to feminist scholars who have rejected both Kelly's and Burckhardt's views of the status of Renaissance women. The next sentence states that the feminist scholars use class and religious differences among Renaissance women to argue against Kelly's and Burckhardt's generalizations, which were based on upper-class Italian women.

A The second paragraph suggests that Krontiris at times conflates Renaissance women writers and women in general, but the passage does not indicate that the feminist scholars believe this of Kelly or Burckhardt.

B Correct. The feminist scholars mentioned study different types of Renaissance women and so reject Kelly's and Burckhardt's conclusions that were based on a group that was not in fact typical.

C Krontiris, not Kelly and Burckhardt, is the scholar who, according to the passage, fails to address the relationship between literacy and social status.

D The passage provides no grounds for determining whether Kelly, Burckhardt, or the feminist scholars mentioned in the first paragraph dealt with Renaissance women's opposition to cultural stereotypes; Krontiris's work is concerned with this question.

E The first paragraph suggests that feminist scholars criticized Kelly and Burckhardt for failing to acknowledge the ways in which social status complicates any generalizations that can be made about Renaissance women's lives, not their creative activities specifically.

The correct answer is B.

134. The author of the passage suggests that Krontiris incorrectly assumes that
- (A) social differences among Renaissance women are less important than the fact that they were women
 - (B) literacy among Renaissance women was more prevalent than most scholars today acknowledge
 - (C) during the Renaissance, women were able to successfully oppose

cultural stereotypes relating to gender

(D) Renaissance women did not face many difficult social obstacles relating to their gender

(E) in order to attain power, Renaissance women attacked basic assumptions in the ideologies that oppressed them

Inference

The first statement the author makes about Krontiris, in the second paragraph, concerns what the author characterizes as a problem with Krontiris's work.

Krontiris takes the Renaissance women writers she studies as representative of all Renaissance women; the author says that designating *women* as the most important grouping fails to consider whether other social differences might make for differences in experience.

A Correct. The author indicates that Krontiris's error lies in assuming that women's identity as women trumps social and other differences.

B The author does not suggest that Krontiris assumes inappropriate literacy levels among Renaissance women, but rather that Krontiris does not give sufficient consideration to the idea that women who could read and write most likely led lives very different from those of women who could not read and write.

C The author says that Krontiris suggests that there were many cultural stereotypes that women were not able to oppose effectively.

D Krontiris, according to the author, acknowledges the many social obstacles faced by women on the basis of their gender.

E According to the author, Krontiris's concluding remarks suggest that Renaissance women *seldom attacked the basic assumptions in the ideologies that oppressed them*.

The correct answer is A.

135. The last sentence in the passage serves primarily to

(A) suggest that Krontiris's work is not representative of recent trends among feminist scholars

(B) undermine the argument that literate women of the Renaissance sought to oppose social constraints imposed on them

(C) show a way in which Krontiris's work illustrates a "cautiously optimistic" assessment of Renaissance women's achievements

(D) summarize Krontiris's view of the effect of literacy on the lives of upper- and middle-class Renaissance women

(E) illustrate the way in which Krontiris's study differs from the studies done by Burckhardt and Kelly

Evaluation

The function of the final sentence of the passage is to indicate how Krontiris's work takes neither a completely positive nor completely negative view of Renaissance women's experiences—i.e., how her work is representative of those authors who are cautiously optimistic about the achievements of Renaissance women.

A The passage discusses Krontiris's work as an example of the trend described in the latter part of the first paragraph and mentioned in the first line of the second paragraph. The last sentence in the passage shows that Krontiris's work is in fact representative of recent trends among feminist scholars.

B The last sentence in the passage states that Renaissance women's opposition to cultural stereotypes was circumscribed, but it also suggests that these women did gain some power for themselves. Thus, the sentence does not serve primarily to undermine the argument that the women sought to oppose social constraints.

C Correct. Krontiris's work illustrates the "cautiously optimistic" view by embracing both the idea that Renaissance women could gain a certain amount of power and the idea that the extent of their opposition was limited.

D The last sentence in the passage summarizes Krontiris's view, but that view does not, according to the passage, take into account the effect of literacy on the members of a particular social class.

E The main function of the final sentence of the passage is to take up the idea of the *cautiously optimistic* assessment offered in the penultimate sentence. This does mark a significant departure from both Burckhardt and Kelly, but the distinction between their work and that of other feminist scholars is marked more clearly earlier in the passage.

The correct answer is C.

139. The author of the passage implies that the women studied by Krontiris are unusual in which of the following ways?

(A) They faced obstacles less formidable than those faced by other Renaissance women.

(B) They have been seen by historians as more interesting than other Renaissance women.

(C) They were more concerned about recording history accurately than were

other Renaissance women.

(D) Their perceptions are more likely to be accessible to historians than are those of most other Renaissance women.

(E) Their concerns are likely to be of greater interest to feminist scholars than are the ideas of most other Renaissance women.

Inference

The women Krontiris studied are unusual, the author suggests, because they were literate, thus putting them among the minority of Renaissance women. That they could write, however, means that their written reflections are part of the historical record, whereas the direct impressions of experiences had by Renaissance women who could not write about their lives are lost to history.

A The author implies that the obstacles faced by Krontiris's subjects may have been different from those faced by other women, not that they were less formidable.

B The author does not imply that the women studied by Krontiris are seen as more interesting; rather, the author indicates that their work is that which is available for study.

C The women Krontiris studies were able to record their own history because they, unlike most other Renaissance women, were literate. This does not imply that they were more concerned with recording history accurately.

D Correct. Because Krontiris's subjects were literate, they were able to write down, and thus preserve for historians, their perceptions in a way that most other Renaissance women were not.

E The author does not suggest that feminist scholars in general are more interested in the concerns of middle- and upper-class literate women than they are with women of other classes.

The correct answer is D.

Questions 137–139 refer to the passage on page 418.

137. The author of the passage mentions calculations about tunneling time and barrier thickness in order to

(A) suggest that tunneling time is unrelated to barrier thickness

(B) explain the evidence by which Wigner and Eisenbud discovered the phenomenon of tunneling

(C) describe data recently challenged by Raymond Chiao and colleagues

(D) question why particles engaged in quantum tunneling rarely achieve

extremely high speeds

(E) explain the basis for Wigner and Eisenbud's hypothesis

Evaluation

This question asks why the author discusses calculations about tunneling time and barrier thickness. According to the passage, these calculations provided the grounds for Wigner and Eisenbud's hypothesis that tunneling particles may travel faster than light.

A The passage states that tunneling time is related to barrier thickness, up to the point at which tunneling time reaches a maximum.

B The passage indicates that the phenomenon of tunneling was noted at least as early as 1932. It provides no evidence that Wigner and Eisenbud discovered it.

C The passage uses Chiao's work to support the idea that tunneling particles may move faster than light, not challenge it.

D The author describes calculations about tunneling time and barrier thickness in order to explain that particles engaged in quantum tunneling may in fact achieve extremely high speeds, not to explain the rarity of the phenomenon.

E Correct. The calculations about tunneling time and barrier thickness supported Wigner and Eisenbud's hypothesis that quantum tunneling could occur at speeds faster than that of light.

The correct answer is E.

138. The passage implies that if tunneling time reached no maximum in increasing with barrier thickness, then

(A) tunneling speed would increase with barrier thickness

(B) tunneling speed would decline with barrier thickness

(C) tunneling speed would vary with barrier thickness

(D) tunneling speed would not be expected to increase without limit

(E) successful tunneling would occur even less frequently than it does

Inference

The passage states that because tunneling time reaches a maximum, then tunneling speed must increase as barrier thickness increases. But if tunneling time did not reach such a maximum, then speed need not increase without limit; the particle could have as low a speed in thicker barriers as in thinner ones and take longer to tunnel through a barrier.

A If tunneling time could not reach a maximum, then speed might increase,

decrease, or remain the same as barrier thickness increases.

B If tunneling time could not reach a maximum, then speed might increase, decrease, or remain the same as barrier thickness increases.

C Tunneling speed could vary with barrier thickness if tunneling time could not reach a maximum, but there is no basis in the passage on which to conclude that this is definitely so.

D Correct. The tunneling particle could have as lower a speed in thicker barriers as in thinner ones and simply take longer to make its way through a thicker barrier.

E The passage states that the probability of successful tunneling declines as the thickness of the barrier increases. However, it does not address the issue of whether the differences in probability of successful tunneling are due to the greater time required to go through thicker barriers.

The correct answer is D.

139. Which of the following statements about the earliest scientific investigators of quantum tunneling can be inferred from the passage?

(A) They found it difficult to increase barrier thickness continually.

(B) They anticipated the later results of Chiao and his colleagues.

(C) They did not suppose that tunneling particles could travel faster than light.

(D) They were unable to observe instances of successful tunneling.

(E) They made use of photons to study the phenomenon of tunneling.

Inference

This question asks about the earliest investigators of quantum tunneling. The passage notes that quantum tunneling's *extreme rapidity* was observed in 1932; thus, the earliest investigators of this phenomenon knew of its existence at that time. Not until 1955 did Wigner and Eisenbud hypothesize that the particles traveled faster than light. Thus, it is logical to infer that the earliest investigators did not imagine such a speed.

A There is nothing in the passage to suggest that the earliest investigators of quantum tunneling had difficulty manipulating barrier thickness.

B The passage states that Chiao and his colleagues measured photons moving at 1.7 times the speed of light—but the passage does not provide evidence that the earliest investigators anticipated such speeds.

C Correct. The passage suggests that prior to 1955, investigators of quantum tunneling had not hypothesized that the particles could travel

faster than the speed of light.

D The passage indicates that by 1932, investigators had noted the rapidity of quantum tunneling; although this does not entail that they observed the phenomenon, it is consistent with their having been able to do so.

E The passage indicates that Chiao's work involves photons, but it does not indicate the type of particles used or observed by the earliest investigators of the phenomenon.

The correct answer is C.

3.4 Sample Questions

Each of the **reading comprehension** questions is based on the content of a passage. After reading the passage answer all questions pertaining to it on the basis of what is **stated** or **implied** in the passage. For each question, select the best answer of the choices given.

Line The Gross Domestic Product (GDP), which
measures the dollar value of finished goods and
services produced by an economy during a given
period, serves as the chief indicator of the
(5) economic well-being of the United States. The GDP
assumes that the economic significance of goods
and services lies solely in their price, and that these
goods and services add to the national well-being,
(10) not because of any intrinsic value they may
possess, but simply because they were produced
and bought. Additionally, only those goods and
services involved in monetary transactions are
included in the GDP. Thus, the GDP ignores the
(15) economic utility of such things as a clean
environment and cohesive families and
communities. It is therefore not merely coincidental,
since national policies in capitalist and noncapitalist
countries alike are dependent on indicators such as
(20) the GDP, that both the environment and the social
structure have been eroded in recent decades. Not
only does the GDP mask this erosion, it can actually
portray it as an economic gain: an oil spill off a
coastal region “adds” to the GDP because it
(25) generates commercial activity. In short, the nation’s
central measure of economic well-being works like a
calculating machine that adds but cannot subtract.

Questions 1–6 refer to the passage above.

1. The primary purpose of the passage is to
 - (A) identify ways in which the GDP could be modified so that it would serve as a more accurate indicator of the economic well-being of the United States
 - (B) suggest that the GDP, in spite of certain shortcomings, is still the most reliable indicator of the economic well-being of the United States
 - (C) examine crucial shortcomings of the GDP as an indicator of the economic well-being of the United States
 - (D) argue that the growth of the United States economy in recent decades has diminished the effectiveness of the GDP as an indicator of the nation’s economic well-being
 - (E) discuss how the GDP came to be used as the primary indicator of the economic well-being of the United States
2. Which of the following best describes the function of the second sentence of the passage in the context of the passage as a whole?
 - (A) It describes an assumption about the GDP that is defended in the course of the passage.
 - (B) It contributes to a discussion of the origins of the GDP.
 - (C) It clarifies a common misconception about the use of the GDP.
 - (D) It identifies a major flaw in the GDP.
 - (E) It suggests a revision to the method of calculating the GDP.

3. It can be inferred that the author of the passage would agree with which of the following about the “economic significance” of those goods and services that are included in the GDP?
- (A) It is a comprehensive indicator of a nation’s economic well-being.
 - (B) It is not accurately captured by the price of those goods and services.
 - (C) It is usually less than the intrinsic value of those goods and services.
 - (D) It is more difficult to calculate than the economic significance of those goods and services that are not included in the GDP.
 - (E) It is calculated differently in capitalist countries than in noncapitalist countries.
4. The comparison of the GDP to a calculating machine serves to do which of the following?
- (A) Refute an assertion that the calculations involved in the GDP are relatively complex in nature
 - (B) Indicate that the GDP is better suited to record certain types of monetary transactions than others
 - (C) Suggest that it is likely that the GDP will be supplanted by other, more sophisticated economic indicators
 - (D) Illustrate the point that the GDP has no way of measuring the destructive impact of such things as oil spills on the nation’s economic well-being
 - (E) Exemplify an assertion that the GDP tends to exaggerate the amount of commercial activity generated by such things as oil spills
5. The passage implies that national policies that rely heavily on economic indicators such as the GDP tend to
- (A) become increasingly capitalistic in nature
 - (B) disregard the economic importance of environmental and social factors that do not involve monetary transactions
 - (C) overestimate the amount of commercial activity generated by environmental disasters
 - (D) overestimate the economic significance of cohesive families and communities
 - (E) assume that the economic significance of goods and services does not lie solely in the price of those goods and services
6. It can be inferred that the author of the passage would agree with which of the following assessments of the GDP as an indicator of the economic well-being of the United States?
- (A) It masks social and environmental erosion more fully than the chief economic indicators of other nations.
 - (B) It is based on inaccurate estimations of the prices of many goods and services.
 - (C) It overestimates the amount of commercial activity that is generated in the United States.
 - (D) It is conducive to error because it conflates distinct types of economic activity.
 - (E) It does not take into account the economic utility of certain environmental and social conditions.

- Line Coral reefs are one of the most fragile, biologically complex, and diverse marine ecosystems on Earth. This ecosystem is one of the fascinating paradoxes of the biosphere: how do clear, and thus nutrient-poor, waters support such prolific and productive communities? Part of the answer lies within the tissues of the corals themselves. Symbiotic cells of algae known as zooxanthellae carry out photosynthesis using the metabolic wastes of the corals, thereby producing food for themselves, for their coral hosts, and even for other members of the reef community. This symbiotic process allows organisms in the reef community to use sparse nutrient resources efficiently.
- (15) Unfortunately for coral reefs, however, a variety of human activities are causing worldwide degradation of shallow marine habitats by adding nutrients to the water. Agriculture, slash-and-burn land clearing, sewage disposal, and manufacturing
- (20) that creates waste by-products all increase nutrient loads in these waters. Typical symptoms of reef decline are destabilized herbivore populations and an increasing abundance of algae and filter-feeding animals. Declines in reef communities are
- (25) consistent with observations that nutrient input is increasing in direct proportion to growing human populations, thereby threatening reef communities sensitive to subtle changes in nutrient input to their waters.

Questions 7–11 refer to the passage above.

7. The passage is primarily concerned with
- (A) describing the effects of human activities on algae in coral reefs
 - (B) explaining how human activities are posing a threat to coral reef communities
 - (C) discussing the process by which coral reefs deteriorate in nutrient-poor waters
 - (D) explaining how coral reefs produce food for themselves
 - (E) describing the abundance of algae and filter-feeding animals in coral reef areas
8. The passage suggests which of the following about coral reef communities?
- (A) Coral reef communities may actually be more likely to thrive in waters that are relatively low in nutrients.
 - (B) The nutrients on which coral reef communities thrive are only found in shallow waters.
 - (C) Human population growth has led to changing ocean temperatures, which threatens coral reef communities.
 - (D) The growth of coral reef communities tends to destabilize underwater herbivore populations.
 - (E) Coral reef communities are more complex and diverse than most ecosystems located on dry land.
9. The author refers to “filter-feeding animals” (lines 23–24) in order to
- (A) provide an example of a characteristic sign of reef deterioration
 - (B) explain how reef communities acquire sustenance for survival
 - (C) identify a factor that helps herbivore populations thrive
 - (D) indicate a cause of decreasing nutrient input in waters that reefs inhabit
 - (E) identify members of coral reef communities that rely on coral reefs for nutrients

10. According to the passage, which of the following is a factor that is threatening the survival of coral reef communities?
- (A) The waters they inhabit contain few nutrient resources.
 - (B) A decline in nutrient input is disrupting their symbiotic relationship with zooxanthellae.
 - (C) The degraded waters of their marine habitats have reduced their ability to carry out photosynthesis.
 - (D) They are too biologically complex to survive in habitats with minimal nutrient input.
 - (E) Waste by-products result in an increase in nutrient input to reef communities.
11. It can be inferred from the passage that the author describes coral reef communities as paradoxical most likely for which of the following reasons?
- (A) They are thriving even though human activities have depleted the nutrients in their environment.
 - (B) They are able to survive in spite of an overabundance of algae inhabiting their waters.
 - (C) They are able to survive in an environment with limited food resources.
 - (D) Their metabolic wastes contribute to the degradation of the waters that they inhabit.
 - (E) They are declining even when the water surrounding them remains clear.

Line Although genetic mutations in bacteria and viruses
can lead to epidemics, some epidemics are caused
by bacteria and viruses that have undergone no
significant genetic change. In analyzing the latter,
(5) scientists have discovered the importance of social
and ecological factors to epidemics. Poliomyelitis,
for example, emerged as an epidemic in the United
States in the twentieth century; by then, modern
sanitation was able to delay exposure to polio until
(10) adolescence or adulthood, at which time polio
infection produced paralysis. Previously, infection
had occurred during infancy, when it typically
provided lifelong immunity without paralysis. Thus,
the hygiene that helped prevent typhoid epidemics
(15) indirectly fostered a paralytic polio epidemic.
Another example is Lyme disease, which is caused
by bacteria that are transmitted by deer ticks. It
occurred only sporadically during the late
nineteenth century but has recently become
(20) prevalent in parts of the United States, largely due
to an increase in the deer population that occurred
simultaneously with the growth of the suburbs and
increased outdoor recreational activities in the
deer's habitat. Similarly, an outbreak of dengue
(25) hemorrhagic fever became an epidemic in Asia in
the 1950s because of ecological changes that
caused *Aedes aegypti*, the mosquito that transmits
the dengue virus, to proliferate. The stage is now
set in the United States for a dengue epidemic
(30) because of the inadvertent introduction and wide
dissemination of another mosquito, *Aedes
albopictus*.

Questions 12–17 refer to the passage above.

12. The passage suggests that a lack of modern sanitation would make which of the following most likely to occur?
 - (A) An outbreak of Lyme disease
 - (B) An outbreak of dengue hemorrhagic fever
 - (C) An epidemic of typhoid
 - (D) An epidemic of paralytic polio among infants
 - (E) An epidemic of paralytic polio among adolescents and adults
13. According to the passage, the outbreak of dengue hemorrhagic fever in the 1950s occurred for which of the following reasons?
 - (A) The mosquito *Aedes aegypti* was newly introduced into Asia.
 - (B) The mosquito *Aedes aegypti* became more numerous.
 - (C) The mosquito *Aedes albopictus* became infected with the dengue virus.
 - (D) Individuals who would normally acquire immunity to the dengue virus as infants were not infected until later in life.
 - (E) More people began to visit and inhabit areas in which mosquitoes live and breed.
14. It can be inferred from the passage that Lyme disease has become prevalent in parts of the United States because of which of the following?
 - (A) The inadvertent introduction of Lyme disease bacteria to the United States
 - (B) The inability of modern sanitation methods to eradicate Lyme disease bacteria
 - (C) A genetic mutation in Lyme disease bacteria that makes them more virulent
 - (D) The spread of Lyme disease bacteria from infected humans to noninfected humans
 - (E) An increase in the number of humans who encounter deer ticks

15. Which of the following can most reasonably be concluded about the mosquito *Aedes albopictus* on the basis of information given in the passage?
- (A) It is native to the United States.
 - (B) It can proliferate only in Asia.
 - (C) It transmits the dengue virus.
 - (D) It caused an epidemic of dengue hemorrhagic fever in the 1950s.
 - (E) It replaced *Aedes aegypti* in Asia when ecological changes altered *Aedes aegypti*'s habitat.
16. Which of the following best describes the organization of the passage?
- (A) A paradox is stated, discussed, and left unresolved.
 - (B) Two opposing explanations are presented, argued, and reconciled.
 - (C) A theory is proposed and is then followed by descriptions of three experiments that support the theory.
 - (D) A generalization is stated and is then followed by three instances that support the generalization.
 - (E) An argument is described and is then followed by three counterexamples that refute the argument.
17. Which of the following, if true, would most strengthen the author's assertion about the cause of the Lyme disease outbreak in the United States?
- (A) The deer population was smaller in the late nineteenth century than in the mid twentieth century.
 - (B) Interest in outdoor recreation began to grow in the late nineteenth century.
 - (C) In recent years the suburbs have stopped growing.
 - (D) Outdoor recreation enthusiasts routinely take measures to protect themselves against Lyme disease.
 - (E) Scientists have not yet developed a vaccine that can prevent Lyme disease.

- Line In 1994, a team of scientists led by David McKay began studying the meteorite ALH84001, which had been discovered in Antarctica in 1984. Two years later, the McKay team announced that ALH84001,
- (5) which scientists generally agree originated on Mars, contained compelling evidence that life once existed on Mars. This evidence includes the discovery of organic molecules in ALH84001, the first ever found in Martian rock. Organic
- (10) molecules—complex, carbon-based compounds—form the basis for terrestrial life. The organic molecules found in ALH84001 are polycyclic aromatic hydrocarbons, or PAHs. When microbes die, their organic material often decays into PAHs.
- (15) Skepticism about the McKay team's claim remains, however. For example, ALH84001 has been on Earth for 13,000 years, suggesting to some scientists that its PAHs might have resulted from terrestrial contamination. However, McKay's
- (20) team has demonstrated that the concentration of PAHs increases as one looks deeper into ALH84001, contrary to what one would expect from terrestrial contamination. The skeptics' strongest argument, however, is that processes unrelated to
- (25) organic life can easily produce all the evidence found by McKay's team, including PAHs. For example, star formation produces PAHs. Moreover, PAHs frequently appear in other meteorites, and no one attributes their presence to life processes. Yet
- (30) McKay's team notes that the particular combination of PAHs in ALH84001 is more similar to the combinations produced by decaying organisms than to those originating from nonbiological processes.

Questions 18–23 refer to the passage above.

18. The primary purpose of the passage is to
- (A) describe new ways of studying the possibility that life once existed on Mars
 - (B) revise a theory regarding the existence of life on Mars in light of new evidence
 - (C) reconcile conflicting viewpoints regarding the possibility that life once existed on Mars
 - (D) evaluate a recently proposed argument concerning the origin of ALH84001
 - (E) describe a controversy concerning the significance of evidence from ALH84001
19. The passage asserts which of the following about the claim that ALH84001 originated on Mars?
- (A) It was initially proposed by the McKay team of scientists.
 - (B) It is not a matter of widespread scientific dispute.
 - (C) It has been questioned by some skeptics of the McKay team's work.
 - (D) It has been undermined by recent work on PAHs.
 - (E) It is incompatible with the fact that ALH84001 has been on Earth for 13,000 years.
20. The passage suggests that the fact that ALH84001 has been on Earth for 13,000 years has been used by some scientists to support which of the following claims about ALH84001?
- (A) ALH84001 may not have originated on Mars.
 - (B) ALH84001 contains PAHs that are the result of nonbiological processes.
 - (C) ALH84001 may not have contained PAHs when it landed on Earth.
 - (D) The organic molecules found in ALH84001 are not PAHs.
 - (E) The organic molecules found in ALH84001 could not be the result of terrestrial contamination.

21. The passage suggests that if a meteorite contained PAHs that were the result of terrestrial contamination, then one would expect which of the following to be true?
- (A) The meteorite would have been on Earth for more than 13,000 years.
 - (B) The meteorite would have originated from a source other than Mars.
 - (C) The PAHs contained in the meteorite would have originated from nonbiological processes.
 - (D) The meteorite would contain fewer PAHs than most other meteorites contain.
 - (E) The PAHs contained in the meteorite would be concentrated toward the meteorite's surface.
22. Which of the following best describes the function of the last sentence of the first paragraph?
- (A) It identifies a possible organic source for the PAHs found in ALH84001.
 - (B) It describes a feature of PAHs that is not shared by other types of organic molecules.
 - (C) It explains how a characteristic common to most meteorites originates.
 - (D) It suggests how the terrestrial contamination of ALH84001 might have taken place.
 - (E) It presents evidence that undermines the claim that life once existed on Mars.
23. The passage suggests that McKay's team would agree with which of the following regarding the PAHs produced by nonorganic processes?
- (A) These PAHs are not likely to be found in any meteorite that has been on Earth for 13,000 years or more.
 - (B) These PAHs are not likely to be found in any meteorite that originated from Mars.
 - (C) These PAHs are not likely to be produced by star formation.
 - (D) These PAHs are likely to be found in combinations that distinguish them from the PAHs produced by organic processes.
 - (E) These PAHs are likely to be found in fewer meteorites than the PAHs produced by organic processes.

- Line Homeostasis, an animal's maintenance of certain internal variables within an acceptable range, particularly in extreme physical environments, has long interested biologists. The desert rat and the
- (5) camel in the most water-deprived environments, and marine vertebrates in an all-water environment, encounter the same regulatory problem: maintaining adequate internal fluid balance.
- For desert rats and camels, the problem is
- (10) conservation of water in an environment where standing water is nonexistent, temperature is high, and humidity is low. Despite these handicaps, desert rats are able to maintain the osmotic pressure of their blood, as well as their total body-
- (15) water content, at approximately the same levels as other rats. One countermeasure is behavioral: these rats stay in burrows during the hot part of the day, thus avoiding loss of fluid through panting or sweating, which are regulatory mechanisms for
- (20) maintaining internal body temperature by evaporative cooling. Also, desert rats' kidneys can excrete a urine having twice as high a salt content as seawater.
- Camels, on the other hand, rely more on simple
- (25) endurance. They cannot store water, and their reliance on an entirely unexceptional kidney results in a rate of water loss through renal function significantly higher than that of desert rats. As a result, camels must tolerate losses in body water of
- (30) up to 30 percent of their body weight. Nevertheless, camels do rely on a special mechanism to keep water loss within a tolerable range: by sweating and panting only when their body temperature exceeds that which would kill a
- (35) human, they conserve internal water.
- Marine vertebrates experience difficulty with their water balance because though there is no shortage of seawater to drink, they must drink a lot of it to maintain their internal fluid balance. But the
- (40) excess salts from the seawater must be discharged somehow, and the kidneys of most marine vertebrates are unable to excrete a urine in which the salts are more concentrated than in seawater. Most of these animals have special salt-secreting
- (45) organs outside the kidney that enable them to eliminate excess salt.

Questions 24–26 refer to the passage above.

24. Which of the following most accurately states the purpose of the passage?
- (A) To compare two different approaches to the study of homeostasis
- (B) To summarize the findings of several studies regarding organisms' maintenance of internal variables in extreme environments
- (C) To argue for a particular hypothesis regarding various organisms' conservation of water in desert environments
- (D) To cite examples of how homeostasis is achieved by various organisms
- (E) To defend a new theory regarding the maintenance of adequate fluid balance
25. It can be inferred from the passage that some mechanisms that regulate internal body temperature, like sweating and panting, can lead to which of the following?
- (A) A rise in the external body temperature
- (B) A drop in the body's internal fluid level
- (C) A decrease in the osmotic pressure of the blood
- (D) A decrease in the amount of renal water loss
- (E) A decrease in the urine's salt content

26. It can be inferred from the passage that the author characterizes the camel's kidney as "entirely unexceptional" (line 26) primarily to emphasize that it
- (A) functions much as the kidney of a rat functions
 - (B) does not aid the camel in coping with the exceptional water loss resulting from the extreme conditions of its environment
 - (C) does not enable the camel to excrete as much salt as do the kidneys of marine vertebrates
 - (D) is similar in structure to the kidneys of most mammals living in water-deprived environments
 - (E) requires the help of other organs in eliminating excess salt

Line The new school of political history that emerged in the 1960s and 1970s sought to go beyond the traditional focus of political historians on leaders and government institutions by examining directly

(5) the political practices of ordinary citizens. Like the old approach, however, this new approach excluded women. The very techniques these historians used to uncover mass political behavior in the nineteenth century United States—quantitative analyses of

(10) election returns, for example—were useless in analyzing the political activities of women, who were denied the vote until 1920.

By redefining “political activity,” historian Paula Baker has developed a political history that includes

(15) women. She concludes that among ordinary citizens, political activism by women in the nineteenth century prefigured trends in twentieth century politics. Defining “politics” as “any action taken to affect the course of behavior of

(20) government or of the community,” Baker concludes that, while voting and holding office were restricted to men, women in the nineteenth century organized themselves into societies committed to social issues such as temperance and poverty. In other

(25) words, Baker contends, women activists were early practitioners of nonpartisan, issue-oriented politics and thus were more interested in enlisting lawmakers, regardless of their party affiliation, on behalf of certain issues than in ensuring that one

(30) party or another won an election. In the twentieth century, more men drew closer to women’s ideas about politics and took up modes of issue-oriented politics that Baker sees women as having pioneered.

Questions 27–32 refer to the passage above.

27. The primary purpose of the passage is to
- (A) enumerate reasons why both traditional scholarly methods and newer scholarly methods have limitations
 - (B) identify a shortcoming in a scholarly approach and describe an alternative approach
 - (C) provide empirical data to support a long-held scholarly assumption
 - (D) compare two scholarly publications on the basis of their authors’ backgrounds
 - (E) attempt to provide a partial answer to a long-standing scholarly dilemma
28. The passage suggests which of the following concerning the techniques used by the new political historians described in the first paragraph of the passage?
- (A) They involved the extensive use of the biographies of political party leaders and political theoreticians.
 - (B) They were conceived by political historians who were reacting against the political climates of the 1960s and 1970s.
 - (C) They were of more use in analyzing the positions of United States political parties in the nineteenth century than in analyzing the positions of those in the twentieth century.
 - (D) They were of more use in analyzing the political behavior of nineteenth-century voters than in analyzing the political activities of those who could not vote during that period.
 - (E) They were devised as a means of tracing the influence of nineteenth-century political trends on twentieth-century political trends.

29. It can be inferred that the author of the passage quotes Baker directly in the second paragraph primarily in order to
- (A) clarify a position before providing an alternative to that position
 - (B) differentiate between a novel definition and traditional definitions
 - (C) provide an example of a point agreed on by different generations of scholars
 - (D) provide an example of the prose style of an important historian
 - (E) amplify a definition given in the first paragraph
30. According to the passage, Paula Baker and the new political historians of the 1960s and 1970s shared which of the following?
- (A) A commitment to interest group politics
 - (B) A disregard for political theory and ideology
 - (C) An interest in the ways in which nineteenth-century politics prefigured contemporary politics
 - (D) A reliance on such quantitative techniques as the analysis of election returns
 - (E) An emphasis on the political involvement of ordinary citizens
31. Which of the following best describes the structure of the first paragraph of the passage?
- (A) Two scholarly approaches are compared, and a shortcoming common to both is identified.
 - (B) Two rival schools of thought are contrasted, and a third is alluded to.
 - (C) An outmoded scholarly approach is described, and a corrective approach is called for.
 - (D) An argument is outlined, and counterarguments are mentioned.
 - (E) A historical era is described in terms of its political trends.
32. The information in the passage suggests that a pre-1960s political historian would have been most likely to undertake which of the following studies?
- (A) An analysis of voting trends among women voters of the 1920s
 - (B) A study of male voters' gradual ideological shift from party politics to issue-oriented politics
 - (C) A biography of an influential nineteenth-century minister of foreign affairs
 - (D) An analysis of narratives written by previously unrecognized women activists
 - (E) A study of voting trends among naturalized immigrant laborers in a nineteenth-century logging camp

Line At the end of the nineteenth century, a rising
 interest in Native American customs and an
 increasing desire to understand Native American
 culture prompted ethnologists to begin recording
 (5) the life stories of Native Americans. Ethnologists
 had a distinct reason for wanting to hear the
 stories: they were after linguistic or anthropological
 data that would supplement their own field
 observations, and they believed that the personal
 (10) stories, even of a single individual, could increase
 their understanding of the cultures that they had
 been observing from without. In addition many
 ethnologists at the turn of the century believed that
 Native American manners and customs were rapidly
 (15) disappearing, and that it was important to preserve
 for posterity as much information as could be
 adequately recorded before the cultures
 disappeared forever.

There were, however, arguments against this
 (20) method as a way of acquiring accurate and
 complete information. Franz Boas, for example,
 described autobiographies as being “of limited
 value, and useful chiefly for the study of the
 perversion of truth by memory,” while Paul Radin
 (25) contended that investigators rarely spent enough
 time with the tribes they were observing, and
 inevitably derived results too tinged by the
 investigator’s own emotional tone to be reliable.

Even more importantly, as these life stories
 (30) moved from the traditional oral mode to recorded
 written form, much was inevitably lost. Editors often
 decided what elements were significant to the field
 research on a given tribe. Native Americans
 recognized that the essence of their lives could not
 (35) be communicated in English and that events that
 they thought significant were often deemed
 unimportant by their interviewers. Indeed, the very
 act of telling their stories could force Native
 American narrators to distort their cultures, as
 (40) taboos had to be broken to speak the names of
 dead relatives crucial to their family stories.

Despite all of this, autobiography remains a
 useful tool for ethnological research: such personal
 reminiscences and impressions, incomplete as they
 (45) may be, are likely to throw more light on the
 working of the mind and emotions than any amount
 of speculation from an ethnologist or ethnological
 theorist from another culture.

Questions 33–38 refer to the passage above.

33. Which of the following best describes the organization of the passage?
- (A) The historical backgrounds of two currently used research methods are chronicled.
 - (B) The validity of the data collected by using two different research methods is compared.
 - (C) The usefulness of a research method is questioned and then a new method is proposed.
 - (D) The use of a research method is described and the limitations of the results obtained are discussed.
 - (E) A research method is evaluated and the changes necessary for its adaptation to other subject areas are discussed.
34. Which of the following is most similar to the actions of nineteenth-century ethnologists in their editing of the life stories of Native Americans?
- (A) A witness in a jury trial invokes the Fifth Amendment in order to avoid relating personally incriminating evidence.
 - (B) A stockbroker refuses to divulge the source of her information on the possible future increase in a stock’s value.
 - (C) A sports announcer describes the action in a team sport with which he is unfamiliar.
 - (D) A chef purposely excludes the special ingredient from the recipe of his prizewinning dessert.
 - (E) A politician fails to mention in a campaign speech the similarities in the positions held by her opponent for political office and by herself.

35. According to the passage, collecting life stories can be a useful methodology because
- (A) life stories provide deeper insights into a culture than the hypothesizing of academics who are not members of that culture
 - (B) life stories can be collected easily and they are not subject to invalid interpretations
 - (C) ethnologists have a limited number of research methods from which to choose
 - (D) life stories make it easy to distinguish between the important and unimportant features of a culture
 - (E) the collection of life stories does not require a culturally knowledgeable investigator
36. Information in the passage suggests that which of the following may be a possible way to eliminate bias in the editing of life stories?
- (A) Basing all inferences made about the culture on an ethnological theory
 - (B) Eliminating all of the emotion laden information reported by the informant
 - (C) Translating the informant's words into the researcher's language
 - (D) Reducing the number of questions and carefully specifying the content of the questions that the investigator can ask the informant
 - (E) Reporting all of the information that the informant provides regardless of the investigator's personal opinion about its intrinsic value
37. The primary purpose of the passage as a whole is to
- (A) question an explanation
 - (B) correct a misconception
 - (C) critique a methodology
 - (D) discredit an idea
 - (E) clarify an ambiguity
38. It can be inferred from the passage that a characteristic of the ethnological research on Native Americans conducted during the nineteenth century was the use of which of the following?
- (A) Investigators familiar with the culture under study
 - (B) A language other than the informant's for recording life stories
 - (C) Life stories as the ethnologist's primary source of information
 - (D) Complete transcriptions of informants' descriptions of tribal beliefs
 - (E) Stringent guidelines for the preservation of cultural data

Line Seeking a competitive advantage, some professional service firms (for example, firms providing advertising, accounting, or health care services) have considered offering unconditional

(5) guarantees of satisfaction. Such guarantees specify what clients can expect and what the firm will do if it fails to fulfill these expectations. Particularly with first-time clients, an unconditional guarantee can be an effective marketing tool if the client is very

(10) cautious, the firm's fees are high, the negative consequences of bad service are grave, or business is difficult to obtain through referrals and word-of-mouth.

However, an unconditional guarantee can

(15) sometimes hinder marketing efforts. With its implication that failure is possible, the guarantee may, paradoxically, cause clients to doubt the service firm's ability to deliver the promised level of service. It may conflict with a firm's desire to

(20) appear sophisticated, or may even suggest that a firm is begging for business. In legal and health care services, it may mislead clients by suggesting that lawsuits or medical procedures will have guaranteed outcomes. Indeed, professional service

(25) firms with outstanding reputations and performance to match have little to gain from offering unconditional guarantees. And any firm that implements an unconditional guarantee without undertaking a commensurate commitment to

(30) quality of service is merely employing a potentially costly marketing gimmick.

Questions 39–44 refer to the passage above.

39. The primary function of the passage as a whole is to
- (A) account for the popularity of a practice
 - (B) evaluate the utility of a practice
 - (C) demonstrate how to institute a practice
 - (D) weigh the ethics of using a strategy
 - (E) explain the reasons for pursuing a strategy
40. All of the following are mentioned in the passage as circumstances in which professional service firms can benefit from offering an unconditional guarantee EXCEPT:
- (A) The firm is having difficulty retaining its clients of long standing.
 - (B) The firm is having difficulty getting business through client recommendations.
 - (C) The firm charges substantial fees for its services.
 - (D) The adverse effects of poor performance by the firm are significant for the client.
 - (E) The client is reluctant to incur risk.
41. Which of the following is cited in the passage as a goal of some professional service firms in offering unconditional guarantees of satisfaction?
- (A) A limit on the firm's liability
 - (B) Successful competition against other firms
 - (C) Ability to justify fee increases
 - (D) Attainment of an outstanding reputation in a field
 - (E) Improvement in the quality of the firm's service

42. The passage's description of the issue raised by unconditional guarantees for health care or legal services most clearly implies that which of the following is true?
- (A) The legal and medical professions have standards of practice that would be violated by attempts to fulfill such unconditional guarantees.
 - (B) The result of a lawsuit or medical procedure cannot necessarily be determined in advance by the professionals handling a client's case.
 - (C) The dignity of the legal and medical professions is undermined by any attempts at marketing of professional services, including unconditional guarantees.
 - (D) Clients whose lawsuits or medical procedures have unsatisfactory outcomes cannot be adequately compensated by financial settlements alone.
 - (E) Predicting the monetary cost of legal or health care services is more difficult than predicting the monetary cost of other types of professional services.
43. Which of the following hypothetical situations best exemplifies the potential problem noted in the second sentence of the second paragraph (lines 15–19)?
- (A) A physician's unconditional guarantee of satisfaction encourages patients to sue for malpractice if they are unhappy with the treatment they receive.
 - (B) A lawyer's unconditional guarantee of satisfaction makes clients suspect that the lawyer needs to find new clients quickly to increase the firm's income.
 - (C) A business consultant's unconditional guarantee of satisfaction is undermined when the consultant fails to provide all of the services that are promised.
 - (D) An architect's unconditional guarantee of satisfaction makes clients wonder how often the architect's buildings fail to please clients.
 - (E) An accountant's unconditional guarantee of satisfaction leads clients to believe that tax returns prepared by the accountant are certain to be accurate.
44. The passage most clearly implies which of the following about the professional service firms mentioned in lines 24–27?
- (A) They are unlikely to have offered unconditional guarantees of satisfaction in the past.
 - (B) They are usually profitable enough to be able to compensate clients according to the terms of an unconditional guarantee.
 - (C) They usually practice in fields in which the outcomes are predictable.
 - (D) Their fees are usually more affordable than those charged by other professional service firms.
 - (E) Their clients are usually already satisfied with the quality of service that is delivered.

- Line In a 1918 editorial, W. E. B. Du Bois advised African Americans to stop agitating for equality and to proclaim their solidarity with White Americans for the duration of the First World War. The editorial
- (5) surprised many African Americans who viewed Du Bois as an uncompromising African American leader and a chief opponent of the accommodationist tactics urged by Booker T. Washington. In fact, however, Du Bois often shifted positions along the
- (10) continuum between Washington and confrontationists such as William Trotter. In 1895, when Washington called on African Americans to concentrate on improving their communities instead of opposing discrimination and agitating for political
- (15) rights, Du Bois praised Washington's speech. In 1903, however, Du Bois aligned himself with Trotter, Washington's militant opponent, less for ideological reasons than because Trotter had described to him Washington's efforts to silence those in the African
- (20) American press who opposed Washington's positions.

- Du Bois's wartime position thus reflected not a change in his long-term goals but rather a pragmatic response in the face of social pressures:
- (25) government officials had threatened African American journalists with censorship if they continued to voice grievances. Furthermore, Du Bois believed that African Americans' contributions to past war efforts had brought them
- (30) some legal and political advances. Du Bois's accommodationism did not last, however. Upon learning of systematic discrimination experienced by African Americans in the military, he called on them to "return fighting" from the war.

Questions 45–49 refer to the passage above.

45. The passage is primarily concerned with
- (A) identifying historical circumstances that led Du Bois to alter his long-term goals
 - (B) defining "accommodationism" and showing how Du Bois used this strategy to achieve certain goals
 - (C) accounting for a particular position adopted by Du Bois during the First World War
 - (D) contesting the view that Du Bois was significantly influenced by either Washington or Trotter
 - (E) assessing the effectiveness of a strategy that Du Bois urged African Americans to adopt
46. The passage indicates which of the following about Du Bois's attitude toward Washington?
- (A) It underwent a shift during the First World War as Du Bois became more sympathetic with Trotter's views.
 - (B) It underwent a shift in 1903 for reasons other than Du Bois's disagreement with Washington's accommodationist views.
 - (C) It underwent a shift as Du Bois made a long-term commitment to the strategy of accommodation.
 - (D) It remained consistently positive even though Du Bois disagreed with Washington's efforts to control the African American press.
 - (E) It was shaped primarily by Du Bois's appreciation of Washington's pragmatic approach to the advancement of the interests of African Americans.

47. The passage suggests which of the following about the contributions of African Americans to the United States war effort during the First World War?
- (A) The contributions were made largely in response to Du Bois's 1918 editorial.
 - (B) The contributions had much the same effect as African Americans' contributions to previous wars.
 - (C) The contributions did not end discrimination against African Americans in the military.
 - (D) The contributions were made in protest against Trotter's confrontationist tactics.
 - (E) The contributions were made primarily by civil rights activists who returned to activism after the war.
48. The author of the passage refers to Washington's call to African Americans in 1895 primarily in order to
- (A) identify Du Bois's characteristic position on the continuum between accommodationism and confrontationism
 - (B) explain why Du Bois was sympathetic with Washington's views in 1895
 - (C) clarify how Trotter's views differed from those of Washington in 1895
 - (D) support an assertion about Du Bois's tendency to shift his political positions
 - (E) dismiss the claim that Du Bois's position in his 1918 editorial was consistent with his previous views
49. According to the passage, which of the following is true of the strategy that Du Bois's 1918 editorial urged African Americans to adopt during the First World War?
- (A) It was a strategy that Du Bois had consistently rejected in the past.
 - (B) It represented a compromise between Du Bois's own views and those of Trotter.
 - (C) It represented a significant redefinition of the long-term goals Du Bois held prior to the war.
 - (D) It was advocated by Du Bois in response to his recognition of the discrimination faced by African Americans during the war.
 - (E) It was advocated by Du Bois in part because of his historical knowledge of gains African Americans had made during past wars.

- Line The fact that superior service can generate a competitive advantage for a company does not mean that every attempt at improving service will create such an advantage. Investments in service, like those in production and distribution, must be balanced against other types of investments on the basis of direct, tangible benefits such as cost reduction and increased revenues. If a company is already effectively on a par with its competitors because it provides service that avoids a damaging reputation and keeps customers from leaving at an unacceptable rate, then investment in higher service levels may be wasted, since service is a deciding factor for customers only in extreme situations.

- (5) This truth was not apparent to managers of one regional bank, which failed to improve its competitive position despite its investment in reducing the time a customer had to wait for a teller. The bank managers did not recognize the level of customer inertia in the consumer banking industry that arises from the inconvenience of switching banks. Nor did they analyze their service improvement to determine whether it would attract new customers by producing a new standard of service that would excite customers or by proving difficult for competitors to copy. The only merit of the improvement was that it could easily be described to customers.

Questions 50–55 refer to the passage above.

50. The primary purpose of the passage is to
- (A) contrast possible outcomes of a type of business investment
 - (B) suggest more careful evaluation of a type of business investment
 - (C) illustrate various ways in which a type of business investment could fail to enhance revenues
 - (D) trace the general problems of a company to a certain type of business investment
 - (E) criticize the way in which managers tend to analyze the costs and benefits of business investments
51. According to the passage, investments in service are comparable to investments in production and distribution in terms of the
- (A) tangibility of the benefits that they tend to confer
 - (B) increased revenues that they ultimately produce
 - (C) basis on which they need to be weighed
 - (D) insufficient analysis that managers devote to them
 - (E) degree of competitive advantage that they are likely to provide
52. The passage suggests which of the following about service provided by the regional bank prior to its investment in enhancing that service?
- (A) It enabled the bank to retain customers at an acceptable rate.
 - (B) It threatened to weaken the bank's competitive position with respect to other regional banks.
 - (C) It had already been improved after having caused damage to the bank's reputation in the past.
 - (D) It was slightly superior to that of the bank's regional competitors.
 - (E) It needed to be improved to attain parity with the service provided by competing banks.

53. The passage suggests that bank managers failed to consider whether or not the service improvement mentioned in lines 18–20
- (A) was too complicated to be easily described to prospective customers
 - (B) made a measurable change in the experiences of customers in the bank's offices
 - (C) could be sustained if the number of customers increased significantly
 - (D) was an innovation that competing banks could have imitated
 - (E) was adequate to bring the bank's general level of service to a level that was comparable with that of its competitors
54. The discussion of the regional bank in the second paragraph serves which of the following functions within the passage as a whole?
- (A) It describes an exceptional case in which investment in service actually failed to produce a competitive advantage.
 - (B) It illustrates the pitfalls of choosing to invest in service at a time when investment is needed more urgently in another area.
 - (C) It demonstrates the kind of analysis that managers apply when they choose one kind of service investment over another.
 - (D) It supports the argument that investments in certain aspects of service are more advantageous than investments in other aspects of service.
 - (E) It provides an example of the point about investment in service made in the first paragraph.
55. The author uses the word “only” in line 27 most likely in order to
- (A) highlight the oddity of the service improvement
 - (B) emphasize the relatively low value of the investment in service improvement
 - (C) distinguish the primary attribute of the service improvement from secondary attributes
 - (D) single out a certain merit of the service improvement from other merits
 - (E) point out the limited duration of the actual service improvement

- Line In an attempt to improve the overall performance of clerical workers, many companies have introduced computerized performance monitoring and control systems (CPMCS) that record and report a worker's
- (5) computer-driven activities. However, at least one study has shown that such monitoring may not be having the desired effect. In the study, researchers asked monitored clerical workers and their supervisors how assessments of productivity
- (10) affected supervisors' ratings of workers' performance. In contrast to unmonitored workers doing the same work, who without exception identified the most important element in their jobs as customer service, the monitored workers and
- (15) their supervisors all responded that productivity was the critical factor in assigning ratings. This finding suggested that there should have been a strong correlation between a monitored worker's productivity and the overall rating the worker
- (20) received. However, measures of the relationship between overall rating and individual elements of performance clearly supported the conclusion that supervisors gave considerable weight to criteria such as attendance, accuracy, and indications of
- (25) customer satisfaction.
- It is possible that productivity may be a "hygiene factor"; that is, if it is too low, it will hurt the overall rating. But the evidence suggests that beyond the point at which productivity becomes
- (30) "good enough," higher productivity per se is unlikely to improve a rating.

Questions 56–60 refer to the passage above.

56. According to the passage, before the final results of the study were known, which of the following seemed likely?
- (A) That workers with the highest productivity would also be the most accurate
- (B) That workers who initially achieved high productivity ratings would continue to do so consistently
- (C) That the highest performance ratings would be achieved by workers with the highest productivity
- (D) That the most productive workers would be those whose supervisors claimed to value productivity
- (E) That supervisors who claimed to value productivity would place equal value on customer satisfaction
57. It can be inferred that the author of the passage discusses "unmonitored workers" (line 11) primarily in order to
- (A) compare the ratings of these workers with the ratings of monitored workers
- (B) provide an example of a case in which monitoring might be effective
- (C) provide evidence of an inappropriate use of CPMCS
- (D) emphasize the effect that CPMCS may have on workers' perceptions of their jobs
- (E) illustrate the effect that CPMCS may have on workers' ratings

58. Which of the following, if true, would most clearly have supported the conclusion referred to in lines 22–25?
- (A) Ratings of productivity correlated highly with ratings of both accuracy and attendance.
 - (B) Electronic monitoring greatly increased productivity.
 - (C) Most supervisors based overall ratings of performance on measures of productivity alone.
 - (D) Overall ratings of performance correlated more highly with measures of productivity than the researchers expected.
 - (E) Overall ratings of performance correlated more highly with measures of accuracy than with measures of productivity.
59. According to the passage, a “hygiene factor” (line 27) is an aspect of a worker’s performance that
- (A) has no effect on the rating of a worker’s performance
 - (B) is so basic to performance that it is assumed to be adequate for all workers
 - (C) is given less importance than it deserves in rating a worker’s performance
 - (D) is not likely to affect a worker’s rating unless it is judged to be inadequate
 - (E) is important primarily because of the effect it has on a worker’s rating
60. The primary purpose of the passage is to
- (A) explain the need for the introduction of an innovative strategy
 - (B) discuss a study of the use of a particular method
 - (C) recommend a course of action
 - (D) resolve a difference of opinion
 - (E) suggest an alternative approach

Line Neotropical coastal mangrove forests are usually
 “zonal,” with certain mangrove species found
 predominantly in the seaward portion of the habitat
 and other mangrove species on the more landward
 (5) portions of the coast. The earliest research on
 mangrove forests produced descriptions of species
 distribution from shore to land, without exploring
 the causes of the distributions.

The idea that zonation is caused by plant
 (10) succession was first expressed by J. H. Davis in a
 study of Florida mangrove forests. According to
 Davis’ scheme, the shoreline is being extended in a
 seaward direction because of the “land-building” role
 of mangroves, which, by trapping sediments over
 (15) time, extend the shore. As a habitat gradually
 becomes more inland as the shore extends, the
 “land-building” species are replaced. This continuous
 process of accretion and succession would be
 interrupted only by hurricanes or storm flushings.

(20) Recently the universal application of Davis’
 succession paradigm has been challenged. It
 appears that in areas where weak currents and
 weak tidal energies allow the accumulation of
 sediments, mangroves will follow land formation
 (25) and accelerate the rate of soil accretion;
 succession will proceed according to Davis’
 scheme. But on stable coastlines, the distribution of
 mangrove species results in other patterns of
 zonation; “land building” does not occur.

(30) To find a principle that explains the various
 distribution patterns, several researchers have
 looked to salinity and its effects on mangroves.
 While mangroves can develop in fresh water, they
 can also thrive in salinities as high as 2.5 times that
 (35) of seawater. However, those mangrove species
 found in freshwater habitats do well only in the
 absence of competition, thus suggesting that
 salinity tolerance is a critical factor in competitive
 success among mangrove species. Research
 (40) suggests that mangroves will normally dominate
 highly saline regions, although not because they
 require salt. Rather, they are metabolically efficient
 (and hence grow well) in portions of an environment
 whose high salinity excludes plants adapted to
 (45) lower salinities. Tides create different degrees of
 salinity along a coastline. The characteristic
 mangrove species of each zone should exhibit a
 higher metabolic efficiency at that salinity
 than will any potential invader, including other
 (50) species of mangrove.

Questions 61–63 refer to the passage above.

61. The primary purpose of the passage is to
- (A) refute the idea that the zonation exhibited in mangrove forests is caused by adaptation to salinity
 - (B) describe the pattern of zonation typically found in Florida mangrove forests
 - (C) argue that Davis’ succession paradigm cannot be successfully applied to Florida mangrove forests
 - (D) discuss hypotheses that attempt to explain the zonation of coastal mangrove forests
 - (E) establish that plants that do well in saline forest environments require salt to achieve maximum metabolic efficiency
62. According to the passage, the earliest research on mangrove forests produced which of the following?
- (A) Data that implied random patterns of mangrove species distribution
 - (B) Descriptions of species distributions suggesting zonation
 - (C) Descriptions of the development of mangrove forests over time
 - (D) Reclassification of species formerly thought to be identical
 - (E) Data that confirmed the “land-building” role of mangroves

63. It can be inferred from the passage that Davis' paradigm does NOT apply to which of the following?
- (A) The shoreline of Florida mangrove forests first studied by Davis
 - (B) A shoreline in an area with weak currents
 - (C) A shoreline in an area with weak tidal energy
 - (D) A shoreline extended by "land-building" species of mangroves
 - (E) A shoreline in which few sediments can accumulate

- Line Findings from several studies on corporate mergers and acquisitions during the 1970s and 1980s raise questions about why firms initiate and consummate such transactions. One study showed, for example,
- (5) that acquiring firms were on average unable to maintain acquired firms' pre-merger levels of profitability. A second study concluded that post-acquisition gains to most acquiring firms were not adequate to cover the premiums paid to obtain
- (10) acquired firms. A third demonstrated that, following the announcement of a prospective merger, the stock of the prospective acquiring firm tends to increase in value much less than does that of the firm for which it bids. Yet mergers and acquisitions
- (15) remain common, and bidders continue to assert that their objectives are economic ones. Acquisitions may well have the desirable effect of channeling a nation's resources efficiently from less to more efficient sectors of its economy, but the
- (20) individual acquisitions executives arranging these deals must see them as advancing either their own or their companies' private economic interests. It seems that factors having little to do with corporate economic interests explain acquisitions. These
- (25) factors may include the incentive compensation of executives, lack of monitoring by boards of directors, and managerial error in estimating the value of firms targeted for acquisition. Alternatively, the acquisition acts of bidders may derive from
- (30) modeling: a manager does what other managers do.

Questions 64–70 refer to the passage above.

64. The primary purpose of the passage is to
- (A) review research demonstrating the benefits of corporate mergers and acquisitions and examine some of the drawbacks that acquisition behavior entails
 - (B) contrast the effects of corporate mergers and acquisitions on acquiring firms and on firms that are acquired
 - (C) report findings that raise questions about a reason for corporate mergers and acquisitions and suggest possible alternative reasons
 - (D) explain changes in attitude on the part of acquiring firms toward corporate mergers and acquisitions
 - (E) account for a recent decline in the rate of corporate mergers and acquisitions
65. The findings cited in the passage suggest which of the following about the outcomes of corporate mergers and acquisitions with respect to acquiring firms?
- (A) They include a decrease in value of many acquiring firms' stocks.
 - (B) They tend to be more beneficial for small firms than for large firms.
 - (C) They do not fulfill the professed goals of most acquiring firms.
 - (D) They tend to be beneficial to such firms in the long term even though apparently detrimental in the short term.
 - (E) They discourage many such firms from attempting to make subsequent bids and acquisitions.

66. It can be inferred from the passage that the author would be most likely to agree with which of the following statements about corporate acquisitions?
- (A) Their known benefits to national economies explain their appeal to individual firms during the 1970s and 1980s.
 - (B) Despite their adverse impact on some firms, they are the best way to channel resources from less to more productive sectors of a nation's economy.
 - (C) They are as likely to occur because of poor monitoring by boards of directors as to be caused by incentive compensation for managers.
 - (D) They will be less prevalent in the future, since their actual effects will gain wider recognition.
 - (E) Factors other than economic benefit to the acquiring firm help to explain the frequency with which they occur.
67. The author of the passage mentions the effect of acquisitions on national economies most probably in order to
- (A) provide an explanation for the mergers and acquisitions of the 1970s and 1980s overlooked by the findings discussed in the passage
 - (B) suggest that national economic interests played an important role in the mergers and acquisitions of the 1970s and 1980s
 - (C) support a noneconomic explanation for the mergers and acquisitions of the 1970s and 1980s that was cited earlier in the passage
 - (D) cite and point out the inadequacy of one possible explanation for the prevalence of mergers and acquisitions during the 1970s and 1980s
 - (E) explain how modeling affected the decisions made by managers involved in mergers and acquisitions during the 1970s and 1980s
68. According to the passage, during the 1970s and 1980s bidding firms differed from the firms for which they bid in that bidding firms
- (A) tended to be more profitable before a merger than after a merger
 - (B) were more often concerned about the impact of acquisitions on national economies
 - (C) were run by managers whose actions were modeled on those of other managers
 - (D) anticipated greater economic advantages from prospective mergers
 - (E) experienced less of an increase in stock value when a prospective merger was announced
69. According to the passage, which of the following was true of corporate acquisitions that occurred during the 1970s and 1980s?
- (A) Few of the acquisitions that firms made were subsequently divested.
 - (B) Most such acquisitions produced only small increases in acquired firms' levels of profitability.
 - (C) Most such acquisitions were based on an overestimation of the value of target firms.
 - (D) The gains realized by most acquiring firms did not equal the amounts expended in acquiring target firms.
 - (E) About half of such acquisitions led to long-term increases in the value of acquiring firms' stocks.
70. The author of the passage implies that which of the following is a possible partial explanation for acquisition behavior during the 1970s and 1980s?
- (A) Managers wished to imitate other managers primarily because they saw how financially beneficial other firms' acquisitions were.
 - (B) Managers miscalculated the value of firms that were to be acquired.
 - (C) Lack of consensus within boards of directors resulted in their imposing conflicting goals on managers.
 - (D) Total compensation packages for managers increased during that period.
 - (E) The value of bidding firms' stock increased significantly when prospective mergers were announced.

Line Caffeine, the stimulant in coffee, has been called
 “the most widely used psychoactive substance on
 Earth.” Snyder, Daly, and Bruns have recently
 proposed that caffeine affects behavior by
 (5) countering the activity in the human brain of a
 naturally occurring chemical called adenosine.
 Adenosine normally depresses neuron firing in many
 areas of the brain. It apparently does this by
 inhibiting the release of neurotransmitters,
 (10) chemicals that carry nerve impulses from one
 neuron to the next.

Like many other agents that affect neuron
 firing, adenosine must first bind to specific
 receptors on neuronal membranes. There are at
 (15) least two classes of these receptors, which have
 been designated A_1 and A_2 . Snyder et al. propose
 that caffeine, which is structurally similar to
 adenosine, is able to bind to both types of
 receptors, which prevents adenosine from attaching
 (20) there and allows the neurons to fire more readily
 than they otherwise would.

For many years, caffeine's effects have been
 attributed to its inhibition of the production of
 phosphodiesterase, an enzyme that breaks down
 (25) the chemical called cyclic AMP. A number of
 neurotransmitters exert their effects by first
 increasing cyclic AMP concentrations in target
 neurons. Therefore, prolonged periods at the
 elevated concentrations, as might be brought about
 (30) by a phosphodiesterase inhibitor, could lead to a
 greater amount of neuron firing and, consequently,
 to behavioral stimulation. But Snyder et al. point out
 that the caffeine concentrations needed to inhibit
 the production of phosphodiesterase in the brain
 (35) are much higher than those that produce
 stimulation. Moreover, other compounds that block
 phosphodiesterase's activity are not stimulants.

To buttress their case that caffeine acts
 instead by preventing adenosine binding, Snyder et
 (40) al. compared the stimulatory effects of a series of
 caffeine derivatives with their ability to dislodge
 adenosine from its receptors in the brains of mice.
 “In general,” they reported, “the ability of the
 compounds to compete at the receptors correlates
 (45) with their ability to stimulate locomotion in the
 mouse; i.e., the higher their capacity to bind at the
 receptors, the higher their ability to stimulate
 locomotion.” Theophylline, a close structural relative
 of caffeine and the major stimulant in tea, was one
 (50) of the most effective compounds in both regards.

Line There were some apparent exceptions to the
 general correlation observed between adenosine-
 receptor binding and stimulation. One of these was
 a compound called 3-isobutyl-1-methylxanthine
 (55) (IBMX), which bound very well but actually
 depressed mouse locomotion. Snyder et al. suggest
 that this is not a major stumbling block to their
 hypothesis. The problem is that the compound has
 mixed effects in the brain, a not unusual occurrence
 (60) with psychoactive drugs. Even caffeine, which is
 generally known only for its stimulatory effects,
 displays this property, depressing mouse
 locomotion at very low concentrations and
 stimulating it at higher ones.

Questions 71–76 refer to the passage above.

71. The primary purpose of the passage is to
- (A) discuss a plan for investigation of a phenomenon that is not yet fully understood
 - (B) present two explanations of a phenomenon and reconcile the differences between them
 - (C) summarize two theories and suggest a third theory that overcomes the problems encountered in the first two
 - (D) describe an alternative hypothesis and provide evidence and arguments that support it
 - (E) challenge the validity of a theory by exposing the inconsistencies and contradictions in it
72. According to Snyder et al., caffeine differs from adenosine in that caffeine
- (A) stimulates behavior in the mouse and in humans, whereas adenosine stimulates behavior in humans only
 - (B) has mixed effects in the brain, whereas adenosine has only a stimulatory effect
 - (C) increases cyclic AMP concentrations in target neurons, whereas adenosine decreases such concentrations
 - (D) permits release of neurotransmitters when it is bound to adenosine receptors, whereas adenosine inhibits such release
 - (E) inhibits both neuron firing and the production of phosphodiesterase when there is a sufficient concentration in the brain, whereas adenosine inhibits only neuron firing
73. In response to experimental results concerning IBMX, Snyder et al. contended that it is not uncommon for psychoactive drugs to have
- (A) mixed effects in the brain
 - (B) inhibitory effects on enzymes in the brain
 - (C) close structural relationships with caffeine
 - (D) depressive effects on mouse locomotion
 - (E) the ability to dislodge caffeine from receptors in the brain
74. According to Snyder et al., all of the following compounds can bind to specific receptors in the brain EXCEPT
- (A) IBMX
 - (B) caffeine
 - (C) adenosine
 - (D) theophylline
 - (E) phosphodiesterase
75. Snyder et al. suggest that caffeine's ability to bind to A_1 and A_2 receptors can be at least partially attributed to which of the following?
- (A) The chemical relationship between caffeine and phosphodiesterase
 - (B) The structural relationship between caffeine and adenosine
 - (C) The structural similarity between caffeine and neurotransmitters
 - (D) The ability of caffeine to stimulate behavior
 - (E) The natural occurrence of caffeine and adenosine in the brain
76. The author quotes Snyder et al. in lines 43–48 most probably in order to
- (A) reveal some of the assumptions underlying their theory
 - (B) summarize a major finding of their experiments
 - (C) point out that their experiments were limited to the mouse
 - (D) indicate that their experiments resulted only in general correlations
 - (E) refute the objections made by supporters of the older theory

Line Historians of women's labor in the United States at first largely disregarded the story of female service workers—women earning wages in occupations such as salesclerk, domestic servant, and office secretary. These historians focused instead on factory work, primarily because it seemed so different from traditional, unpaid “women's work” in the home, and because the underlying economic forces of industrialism were presumed to be gender-blind and hence emancipatory in effect. Unfortunately, emancipation has been less profound than expected, for not even industrial wage labor has escaped continued sex segregation in the workplace.

(15) To explain this unfinished revolution in the status of women, historians have recently begun to emphasize the way a prevailing definition of femininity often determines the kinds of work allocated to women, even when such allocation is inappropriate to new conditions. For instance, early textile-mill entrepreneurs, in justifying women's employment in wage labor, made much of the assumption that women were by nature skillful at detailed tasks and patient in carrying out repetitive chores; the mill owners thus imported into the new industrial order hoary stereotypes associated with the homemaking activities they presumed to have been the purview of women. Because women accepted the more unattractive new industrial tasks more readily than did men, such jobs came to be regarded as female jobs. And employers, who assumed that women's “real” aspirations were for marriage and family life, declined to pay women wages commensurate with those of men. Thus many lower-skilled, lower-paid, less secure jobs came to be perceived as “female.”

More remarkable than the original has been the persistence of such sex segregation in twentieth-century industry. Once an occupation came to be perceived as “female,” employers showed surprisingly little interest in changing that perception, even when higher profits beckoned. And despite the urgent need of the United States during the Second World War to mobilize its human resources fully, job segregation by sex characterized even the most important war industries. Moreover, once the war ended, employers quickly returned to men most of the “male” jobs that women had been permitted to master.

Questions 77–84 refer to the passage above.

77. According to the passage, job segregation by sex in the United States was
- (A) greatly diminished by labor mobilization during the Second World War
 - (B) perpetuated by those textile-mill owners who argued in favor of women's employment in wage labor
 - (C) one means by which women achieved greater job security
 - (D) reluctantly challenged by employers except when the economic advantages were obvious
 - (E) a constant source of labor unrest in the young textile industry
78. According to the passage, historians of women's labor focused on factory work as a more promising area of research than service-sector work because factory work
- (A) involved the payment of higher wages
 - (B) required skill in detailed tasks
 - (C) was assumed to be less characterized by sex segregation
 - (D) was more readily accepted by women than by men
 - (E) fit the economic dynamic of industrialism better
79. It can be inferred from the passage that early historians of women's labor in the United States paid little attention to women's employment in the service sector of the economy because
- (A) the extreme variety of these occupations made it very difficult to assemble meaningful statistics about them
 - (B) fewer women found employment in the service sector than in factory work
 - (C) the wages paid to workers in the service sector were much lower than those paid in the industrial sector
 - (D) women's employment in the service sector tended to be much more short-term than in factory work
 - (E) employment in the service sector seemed to have much in common with the unpaid work associated with homemaking

80. The passage supports which of the following statements about the early mill owners mentioned in the second paragraph?
- (A) They hoped that by creating relatively unattractive “female” jobs they would discourage women from losing interest in marriage and family life.
 - (B) They sought to increase the size of the available labor force as a means to keep men’s wages low.
 - (C) They argued that women were inherently suited to do well in particular kinds of factory work.
 - (D) They thought that factory work bettered the condition of women by emancipating them from dependence on income earned by men.
 - (E) They felt guilty about disturbing the traditional division of labor in the family.
81. It can be inferred from the passage that the “unfinished revolution” the author mentions in line 15 refers to the
- (A) entry of women into the industrial labor market
 - (B) recognition that work done by women as homemakers should be compensated at rates comparable to those prevailing in the service sector of the economy
 - (C) development of a new definition of femininity unrelated to the economic forces of industrialism
 - (D) introduction of equal pay for equal work in all professions
 - (E) emancipation of women wage earners from gender-determined job allocation
82. The passage supports which of the following statements about hiring policies in the United States?
- (A) After a crisis many formerly “male” jobs are reclassified as “female” jobs.
 - (B) Industrial employers generally prefer to hire women with previous experience as homemakers.
 - (C) Post–Second World War hiring policies caused women to lose many of their wartime gains in employment opportunity.
 - (D) Even war industries during the Second World War were reluctant to hire women for factory work.
 - (E) The service sector of the economy has proved more nearly gender-blind in its hiring policies than has the manufacturing sector.
83. Which of the following words best expresses the opinion of the author of the passage concerning the notion that women are more skillful than men in carrying out detailed tasks?
- (A) “patient” (line 24)
 - (B) “repetitive” (line 24)
 - (C) “hoary” (line 26)
 - (D) “homemaking” (line 27)
 - (E) “purview” (line 28)
84. Which of the following best describes the relationship of the final paragraph to the passage as a whole?
- (A) The central idea is reinforced by the citation of evidence drawn from twentieth-century history.
 - (B) The central idea is restated in such a way as to form a transition to a new topic for discussion.
 - (C) The central idea is restated and juxtaposed with evidence that might appear to contradict it.
 - (D) A partial exception to the generalizations of the central idea is dismissed as unimportant.
 - (E) Recent history is cited to suggest that the central idea’s validity is gradually diminishing.

Line Two modes of argumentation have been used on
 behalf of women's emancipation in Western
 societies. Arguments in what could be called the
 "relational" feminist tradition maintain the doctrine
 (5) of "equality in difference," or equity as distinct from
 equality. They posit that biological distinctions
 between the sexes result in a necessary sexual
 division of labor in the family and throughout society
 and that women's procreative labor is currently
 (10) undervalued by society, to the disadvantage of
 women. By contrast, the individualist feminist
 tradition emphasizes individual human rights and
 celebrates women's quest for personal autonomy,
 while downplaying the importance of gender roles
 (15) and minimizing discussion of childbearing and its
 attendant responsibilities.

Before the late nineteenth century, these views
 coexisted within the feminist movement, often
 within the writings of the same individual. Between
 (20) 1890 and 1920, however, relational feminism, which
 had been the dominant strain in feminist thought,
 and which still predominates among European and
 non-Western feminists, lost ground in England and
 the United States. Because the concept of individual
 (25) rights was already well established in the Anglo-
 Saxon legal and political tradition, individualist
 feminism came to predominate in English-speaking
 countries. At the same time, the goals of the two
 approaches began to seem increasingly
 (30) irreconcilable. Individualist feminists began to
 advocate a totally gender-blind system with equal
 rights for all. Relational feminists, while agreeing
 that equal educational and economic opportunities
 outside the home should be available for all women,
 (35) continued to emphasize women's special
 contributions to society as homemakers and
 mothers; they demanded special treatment for
 women, including protective legislation for women
 workers, state-sponsored maternity benefits, and
 (40) paid compensation for housework.

Relational arguments have a major pitfall:
 because they underline women's physiological and
 psychological distinctiveness, they are often
 appropriated by political adversaries and used to
 (45) endorse male privilege. But the individualist
 approach, by attacking gender roles, denying the
 significance of physiological difference, and
 condemning existing familial institutions as
 hopelessly patriarchal, has often simply treated as
 (50) irrelevant the family roles important to many

Line women. If the individualist framework, with its claim
 for women's autonomy, could be harmonized with
 the family-oriented concerns of relational feminists,
 a more fruitful model for contemporary feminist
 (55) politics could emerge.

Questions 85–90 refer to the passage above.

85. The author of the passage alludes to the well-established nature of the concept of individual rights in the Anglo-Saxon legal and political tradition in order to
- (A) illustrate the influence of individualist feminist thought on more general intellectual trends in English history
 - (B) argue that feminism was already a part of the larger Anglo-Saxon intellectual tradition, even though this has often gone unnoticed by critics of women's emancipation
 - (C) explain the decline in individualist thinking among feminists in non-English-speaking countries
 - (D) help account for an increasing shift toward individualist feminism among feminists in English-speaking countries
 - (E) account for the philosophical differences between individualist and relational feminists in English-speaking countries

86. The passage suggests that the author of the passage believes which of the following?
- (A) The predominance of individualist feminism in English-speaking countries is a historical phenomenon, the causes of which have not yet been investigated.
 - (B) The individualist and relational feminist views are irreconcilable, given their theoretical differences concerning the foundations of society.
 - (C) A consensus concerning the direction of future feminist politics will probably soon emerge, given the awareness among feminists of the need for cooperation among women.
 - (D) Political adversaries of feminism often misuse arguments predicated on differences between the sexes to argue that the existing social system should be maintained.
 - (E) Relational feminism provides the best theoretical framework for contemporary feminist politics, but individualist feminism could contribute much toward refining and strengthening modern feminist thought.
87. It can be inferred from the passage that the individualist feminist tradition denies the validity of which of the following causal statements?
- (A) A division of labor in a social group can result in increased efficiency with regard to the performance of group tasks.
 - (B) A division of labor in a social group causes inequities in the distribution of opportunities and benefits among group members.
 - (C) A division of labor on the basis of gender in a social group is necessitated by the existence of sex-linked biological differences between male and female members of the group.
 - (D) Culturally determined distinctions based on gender in a social group foster the existence of differing attitudes and opinions among group members.
 - (E) Educational programs aimed at reducing inequalities based on gender among members of a social group can result in a sense of greater well-being for all members of the group.
88. According to the passage, relational feminists and individualist feminists agree that
- (A) individual human rights take precedence over most other social claims
 - (B) the gender-based division of labor in society should be eliminated
 - (C) laws guaranteeing equal treatment for all citizens regardless of gender should be passed
 - (D) a greater degree of social awareness concerning the importance of motherhood would be beneficial to society
 - (E) the same educational and economic opportunities should be available to both sexes
89. According to the author, which of the following was true of feminist thought in Western societies before 1890?
- (A) Individualist feminist arguments were not found in the thought or writing of non-English-speaking feminists.
 - (B) Individualist feminism was a strain in feminist thought, but another strain, relational feminism, predominated.
 - (C) Relational and individualist approaches were equally prevalent in feminist thought and writing.
 - (D) The predominant view among feminists held that the welfare of women was ultimately less important than the welfare of children.
 - (E) The predominant view among feminists held that the sexes should receive equal treatment under the law.
90. The author implies that which of the following was true of most feminist thinkers in England and the United States after 1920?
- (A) They were less concerned with politics than with intellectual issues.
 - (B) They began to reach a broader audience and their programs began to be adopted by mainstream political parties.
 - (C) They called repeatedly for international cooperation among women's groups to achieve their goals.
 - (D) They moderated their initial criticism of the economic systems that characterized their societies.
 - (E) They did not attempt to unite the two different feminist approaches in their thought.

- Line In addition to conventional galaxies, the universe contains very dim galaxies that until recently went unnoticed by astronomers. Possibly as numerous as conventional galaxies, these galaxies have the
- (5) same general shape and even the same approximate number of stars as a common type of conventional galaxy, the spiral, but tend to be much larger. Because these galaxies' mass is spread out over larger areas, they have far fewer stars per unit
- (10) volume than do conventional galaxies. Apparently these low-surface-brightness galaxies, as they are called, take much longer than conventional galaxies to condense their primordial gas and convert it to stars—that is, they evolve much more slowly.
- (15) These galaxies may constitute an answer to the long-standing puzzle of the missing baryonic mass in the universe. Baryons—subatomic particles that are generally protons or neutrons—are the source of stellar, and therefore galactic, luminosity, and so
- (20) their numbers can be estimated based on how luminous galaxies are. However, the amount of helium in the universe, as measured by spectroscopy, suggests that there are far more baryons in the universe than estimates based on
- (25) galactic luminosity indicate. Astronomers have long speculated that the missing baryonic mass might eventually be discovered in intergalactic space or as some large population of galaxies that are difficult to detect.

Questions 91–97 refer to the passage above.

91. According to the passage, conventional spiral galaxies differ from low-surface-brightness galaxies in which of the following ways?
- (A) They have fewer stars than do low-surface-brightness galaxies.
 - (B) They evolve more quickly than low-surface-brightness galaxies.
 - (C) They are more diffuse than low-surface-brightness galaxies.
 - (D) They contain less helium than do low-surface-brightness galaxies.
 - (E) They are larger than low-surface-brightness galaxies.
92. It can be inferred from the passage that which of the following is an accurate physical description of typical low-surface-brightness galaxies?
- (A) They are large spiral galaxies containing fewer stars than do conventional galaxies.
 - (B) They are compact but very dim spiral galaxies.
 - (C) They are diffuse spiral galaxies that occupy a large volume of space.
 - (D) They are small, young spiral galaxies that contain a high proportion of primordial gas.
 - (E) They are large, dense spirals with low luminosity.
93. It can be inferred from the passage that the “long-standing puzzle” refers to which of the following?
- (A) The difference between the rate at which conventional galaxies evolve and the rate at which low-surface-brightness galaxies evolve
 - (B) The discrepancy between estimates of total baryonic mass derived from measuring helium and estimates based on measuring galactic luminosity
 - (C) The inconsistency between the observed amount of helium in the universe and the number of stars in typical low-surface-brightness galaxies
 - (D) Uncertainties regarding what proportion of baryonic mass is contained in intergalactic space and what proportion in conventional galaxies
 - (E) Difficulties involved in detecting very distant galaxies and in investigating their luminosity

94. The author implies that low-surface-brightness galaxies could constitute an answer to the puzzle discussed in the second paragraph primarily because
- (A) they contain baryonic mass that was not taken into account by researchers using galactic luminosity to estimate the number of baryons in the universe
 - (B) they, like conventional galaxies that contain many baryons, have evolved from massive, primordial gas clouds
 - (C) they may contain relatively more helium, and hence more baryons, than do galaxies whose helium content has been studied using spectroscopy
 - (D) they have recently been discovered to contain more baryonic mass than scientists had thought when low-surface-brightness galaxies were first observed
 - (E) they contain stars that are significantly more luminous than would have been predicted on the basis of initial studies of luminosity in low-surface-brightness galaxies
95. The author mentions the fact that baryons are the source of stars' luminosity primarily in order to explain
- (A) how astronomers determine that some galaxies contain fewer stars per unit volume than do others
 - (B) how astronomers are able to calculate the total luminosity of a galaxy
 - (C) why astronomers can use galactic luminosity to estimate baryonic mass
 - (D) why astronomers' estimates of baryonic mass based on galactic luminosity are more reliable than those based on spectroscopic studies of helium
 - (E) how astronomers know bright galaxies contain more baryons than do dim galaxies
96. The author of the passage would be most likely to disagree with which of the following statements?
- (A) Low-surface-brightness galaxies are more difficult to detect than are conventional galaxies.
 - (B) Low-surface-brightness galaxies are often spiral in shape.
 - (C) Astronomers have advanced plausible ideas about where missing baryonic mass might be found.
 - (D) Astronomers have devised a useful way of estimating the total baryonic mass in the universe.
 - (E) Astronomers have discovered a substantial amount of baryonic mass in intergalactic space.
97. The primary purpose of the passage is to
- (A) describe a phenomenon and consider its scientific significance
 - (B) contrast two phenomena and discuss a puzzling difference between them
 - (C) identify a newly discovered phenomenon and explain its origins
 - (D) compare two classes of objects and discuss the physical properties of each
 - (E) discuss a discovery and point out its inconsistency with existing theory

This passage was adapted from an article published in 1992.

Line While there is no blueprint for transforming a largely government-controlled economy into a free one, the experience of the United Kingdom since 1979 clearly shows one approach that works:

- (5) privatization, in which state-owned industries are sold to private companies. By 1979, the total borrowings and losses of state-owned industries were running at about £3 billion a year. By selling many of these industries, the government has
- (10) decreased these borrowings and losses, gained over £34 billion from the sales, and now receives tax revenues from the newly privatized companies. Along with a dramatically improved overall economy, the government has been able to repay
- (15) 12.5 percent of the net national debt over a two-year period.

In fact, privatization has not only rescued individual industries and a whole economy headed for disaster, but has also raised the level of

(20) performance in every area. At British Airways and British Gas, for example, productivity per employee has risen by 20 percent. At Associated British Ports, labor disruptions common in the 1970s and early 1980s have now virtually disappeared. At

(25) British Telecom, there is no longer a waiting list—as there always was before privatization—to have a telephone installed.

Part of this improved productivity has come about because the employees of privatized

(30) industries were given the opportunity to buy shares in their own companies. They responded enthusiastically to the offer of shares: at British Aerospace, 89 percent of the eligible work force bought shares; at Associated British Ports, 90

(35) percent; and at British Telecom, 92 percent. When people have a personal stake in something, they think about it, care about it, work to make it prosper. At the National Freight Consortium, the new employee-owners grew so concerned about

(40) their company's profits that during wage negotiations they actually pressed their union to lower its wage demands.

Some economists have suggested that giving away free shares would provide a needed

(45) acceleration of the privatization process. Yet they

Line miss Thomas Paine's point that "what we obtain too cheap we esteem too lightly." In order for the far-ranging benefits of individual ownership to be achieved by owners, companies, and countries,

(50) employees and other individuals must make their own decisions to buy, and they must commit some of their own resources to the choice.

Questions 98–104 refer to the passage above.

98. According to the passage, all of the following were benefits of privatizing state-owned industries in the United Kingdom EXCEPT:
- (A) Privatized industries paid taxes to the government.
 - (B) The government gained revenue from selling state-owned industries.
 - (C) The government repaid some of its national debt.
 - (D) Profits from industries that were still state-owned increased.
 - (E) Total borrowings and losses of state-owned industries decreased.
99. According to the passage, which of the following resulted in increased productivity in companies that have been privatized?
- (A) A large number of employees chose to purchase shares in their companies.
 - (B) Free shares were widely distributed to individual shareholders.
 - (C) The government ceased to regulate major industries.
 - (D) Unions conducted wage negotiations for employees.
 - (E) Employee-owners agreed to have their wages lowered.
100. It can be inferred from the passage that the author considers labor disruptions to be
- (A) an inevitable problem in a weak national economy
 - (B) a positive sign of employee concern about a company
 - (C) a predictor of employee reactions to a company's offer to sell shares to them
 - (D) a phenomenon found more often in state-owned industries than in private companies
 - (E) a deterrent to high performance levels in an industry
101. The passage supports which of the following statements about employees buying shares in their own companies?
- (A) At three different companies, approximately nine out of ten of the workers were eligible to buy shares in their companies.
 - (B) Approximately 90 percent of the eligible workers at three different companies chose to buy shares in their companies.
 - (C) The opportunity to buy shares was discouraged by at least some labor unions.
 - (D) Companies that demonstrated the highest productivity were the first to allow their employees the opportunity to buy shares.
 - (E) Eligibility to buy shares was contingent on employees' agreeing to increased work loads.
102. Which of the following statements is most consistent with the principle described in lines 35–38?
- (A) A democratic government that decides it is inappropriate to own a particular industry has in no way abdicated its responsibilities as guardian of the public interest.
 - (B) The ideal way for a government to protect employee interests is to force companies to maintain their share of a competitive market without government subsidies.
 - (C) The failure to harness the power of self-interest is an important reason that state-owned industries perform poorly.
 - (D) Governments that want to implement privatization programs must try to eliminate all resistance to the free-market system.
 - (E) The individual shareholder will reap only a minute share of the gains from whatever sacrifices he or she makes to achieve these gains.

103. Which of the following can be inferred from the passage about the privatization process in the United Kingdom?
- (A) It depends to a potentially dangerous degree on individual ownership of shares.
 - (B) It conforms in its most general outlines to Thomas Paine's prescription for business ownership.
 - (C) It was originally conceived to include some giving away of free shares.
 - (D) It has been successful, even though privatization has failed in other countries.
 - (E) It is taking place more slowly than some economists suggest is necessary.
104. The quotation in lines 46–47 is most probably used to
- (A) counter a position that the author of the passage believes is incorrect
 - (B) state a solution to a problem described in the previous sentence
 - (C) show how opponents of the viewpoint of the author of the passage have supported their arguments
 - (D) point out a paradox contained in a controversial viewpoint
 - (E) present a historical maxim to challenge the principle introduced in the third paragraph

3.5 Answer Key

1. C	27. B	53. D	79. E
2. D	28. D	54. E	80. C
3. B	29. B	55. B	81. E
4. D	30. E	56. C	82. C
5. B	31. A	57. D	83. C
6. E	32. C	58. E	84. A
7. B	33. D	59. D	85. D
8. A	34. C	60. B	86. D
9. A	35. A	61. D	87. C
10. E	36. E	62. B	88. E
11. C	37. C	63. E	89. B
12. C	38. B	64. C	90. E
13. B	39. B	65. C	91. B
14. E	40. A	66. E	92. C
15. C	41. B	67. D	93. B
16. D	42. B	68. E	94. A
17. A	43. D	69. D	95. C
18. E	44. E	70. B	96. E
19. B	45. C	71. D	97. A
20. C	46. B	72. D	98. D
21. E	47. C	73. A	99. A
22. A	48. D	74. E	100. E
23. D	49. E	75. B	101. B
24. D	50. B	76. B	102. C
25. B	51. C	77. B	103. E
26. B	52. A	78. C	104. A

3.6 Answer Explanations

The following discussion of reading comprehension is intended to familiarize you with the most efficient and effective approaches to the kinds of problems common to reading comprehension. The particular questions in this chapter are generally representative of the kinds of reading comprehension questions you will encounter on the GMAT. Remember that it is the problem solving strategy that is important, not the specific details of a particular question.

Questions 1–6 refer to the passage on page 22.

1. The primary purpose of the passage is to
 - (A) identify ways in which the GDP could be modified so that it would serve as a more accurate indicator of the economic well-being of the United States
 - (B) suggest that the GDP, in spite of certain shortcomings, is still the most reliable indicator of the economic well-being of the United States
 - (C) examine crucial shortcomings of the GDP as an indicator of the economic well-being of the United States
 - (D) argue that the growth of the United States economy in recent decades has diminished the effectiveness of the GDP as an indicator of the nation's economic well-being
 - (E) discuss how the GDP came to be used as the primary indicator of the economic well-being of the United States

Main idea

This question requires determining the main purpose of the passage as a whole. The passage begins by broadly defining GDP and describing how it is used as an indicator of the economic well-being of the United States. The passage then describes in more detail what is and is not taken into account by the GDP and then draws a causal connection between the limitations of what the GDP measures and disturbing trends within the U.S. in recent decades.

- A There is no discussion in the passage about modifying how the GDP is calculated.
- B The passage makes no judgment about the merits of using the GDP in relation to other economic indicators.
- C **Correct.** The passage portrays the GDP as having limitations that make it a problematic indicator of real economic well-being.
- D The passage does not portray the GDP as being any less useful as an economic indicator than it ever was.
- E There is no discussion in the passage of the history of how the GDP came to be used as an economic indicator.

The correct answer is C.

2. Which of the following best describes the function of the second sentence of the passage in the context of the passage as a whole?
 - (A) It describes an assumption about the GDP that is defended in the course of the passage.
 - (B) It contributes to a discussion of the origins of the GDP.
 - (C) It clarifies a common misconception about the use of the GDP.
 - (D) It identifies a major flaw in the GDP.
 - (E) It suggests a revision to the method of calculating the GDP.

Evaluation

Answering this question requires understanding how a particular part of the passage functions in the passage as a whole. The second sentence describes the GDP as being solely concerned with the prices of goods and services produced in the United States, aside from any other kind of value. The passage then goes on to imply that by ignoring value other than price, the GDP may actually mask problems present in the nation's overall economy.

- A The passage is concerned with calling into question the use of the GDP, not defending it.
- B The passage does not mention how the GDP came to be used as a primary economic indicator.
- C The passage does not describe the function of the GDP as being commonly misunderstood.
- D Correct.** The limitations of the GDP as described in the second sentence are then, in the rest of the passage, tied to problems in the United States.
- E The passage makes no explicit recommendations about revising how the GDP is measured.

The correct answer is D.

3. It can be inferred that the author of the passage would agree with which of the following about the “economic significance” of those goods and services that are included in the GDP?
- (A) It is a comprehensive indicator of a nation's economic well-being.
 - (B) It is not accurately captured by the price of those goods and services.
 - (C) It is usually less than the intrinsic value of those goods and services.
 - (D) It is more difficult to calculate than the economic significance of those goods and services that are not included in the GDP.
 - (E) It is calculated differently in capitalist countries than in noncapitalist countries.

Inference

This question asks what the author implies about a piece of information given in the passage. The passage states that *the GDP assumes that the economic significance of goods and services lies solely in their price* (lines 5–7) and that *the GDP ignores the economic utility* (lines 13–14) of things such as a healthy environment and a cohesive social structure. The passage then implies that the worsening problems with the environment and social structure in recent decades are due to the way the GDP is calculated.

- A In describing the GDP as limited in what it measures, the author would not agree that the GDP is a comprehensive indicator.
- B Correct.** The author implies that because the GDP ignores the economic utility of certain things, it is an inaccurate indicator of economic well-being.
- C The author makes no comparison between the economic value and the intrinsic value of goods and services.
- D The author makes no judgment about the difficulty of measuring the value of goods and services not measured by the GDP.
- E The author does not indicate how noncapitalist countries calculate GDP.

The correct answer is B.

4. The comparison of the GDP to a calculating machine serves to do which of the following?
- (A) Refute an assertion that the calculations involved in the GDP are relatively complex in nature
 - (B) Indicate that the GDP is better suited to record certain types of monetary transactions than others
 - (C) Suggest that it is likely that the GDP will be supplanted by other, more sophisticated economic indicators
 - (D) Illustrate the point that the GDP has no way of measuring the destructive impact of such things as oil spills on the nation's economic well-being
 - (E) Exemplify an assertion that the GDP tends to exaggerate the amount of commercial activity generated by such things as oil spills

Evaluation

This question asks how a certain statement in the passage functions in the passage as a whole. In lines 13–16 and 19–24, respectively, the passage indicates that the GDP not only ignores problems affecting a nation's economy but that it actually can portray these problems as economic gains, and it subsequently uses the example of an oil spill adding to the GDP to illustrate this. The passage then closes by describing the GDP as a calculating machine that can add but not subtract.

- A The passage does not discuss the complexities of calculating the GDP.
- B The passage makes no judgment about the relative successes of the GDP in recording different types of monetary transactions.
- C The passage makes no mention of other economic indicators aside from the GDP.
- D **Correct.** By characterizing the GDP as a calculating machine that cannot subtract, the passage helps illustrate why something like an oil spill is misrepresented by the GDP.
- E While the passage does mention that the GDP measures commercial activity generated by an oil spill, it does not suggest that the GDP exaggerates the amount of that activity.

The correct answer is D.

5. The passage implies that national policies that rely heavily on economic indicators such as the GDP tend to
- (A) become increasingly capitalistic in nature
 - (B) disregard the economic importance of environmental and social factors that do not involve monetary transactions
 - (C) overestimate the amount of commercial activity generated by environmental disasters
 - (D) overestimate the economic significance of cohesive families and communities
 - (E) assume that the economic significance of goods and services does not lie solely in the price of those goods and services

Inference

This question requires understanding what the passage implies about the main issue it discusses. In lines 13–14, the passage states that *the GDP ignores the economic utility* of things such as a clean environment and social cohesiveness. It then indicates that in countries that are dependent on economic indicators such as the GDP, *the environment and the social structure have been eroded in recent decades* (lines 19–20).

- A The passage does not mention how or if the GDP affects the capitalist nature of national policies.
- B **Correct.** In indicating that the GDP ignores environmental and social factors, the passage implies that policies dependent on the GDP will also ignore these issues.
- C The passage indicates that the GDP takes into account the commercial activity generated by environmental disasters but does not suggest that the amount of that activity is overestimated.
- D The passage indicates that the GDP ignores the value of social cohesion.
- E The passage indicates that *the GDP assumes that the economic significance of goods and services lies solely in their price* (lines 5–7).

The correct answer is B.

6. It can be inferred that the author of the passage would agree with which of the following assessments of the GDP as an indicator of the economic well-being of the United States?
- (A) It masks social and environmental erosion more fully than the chief economic indicators of other nations.
 - (B) It is based on inaccurate estimations of the prices of many goods and services.
 - (C) It overestimates the amount of commercial activity that is generated in the United States.
 - (D) It is conducive to error because it conflates distinct types of economic activity.
 - (E) It does not take into account the economic utility of certain environmental and social conditions.

Inference

This question requires understanding what the author implies about information in the passage. The passage states that the GDP is *the chief indicator of the economic well-being of the United States* (lines 4–5). It also states that *the GDP ignores the economic utility* (lines 13–16) of things such as a clean environment and social cohesiveness. Therefore, the GDP does not take into account the economic utility of certain environmental and social conditions.

- A The passage makes no comparisons among different nations' economic indicators.
- B The passage does not describe the GDP as being inaccurate in its estimates of the prices of goods and services.
- C The passage does not describe the GDP as overestimating amounts of commercial activity.
- D The passage does not describe the GDP as confusing different types of economic activity.
- E **Correct.** The passage states that the GDP ignores the economic utility of a clean environment and social cohesiveness.

The correct answer is E.

Questions 7–11 refer to the passage on page 24.

7. The passage is primarily concerned with
- (A) describing the effects of human activities on algae in coral reefs
 - (B) explaining how human activities are posing a threat to coral reef communities
 - (C) discussing the process by which coral reefs deteriorate in nutrient-poor waters
 - (D) explaining how coral reefs produce food for themselves
 - (E) describing the abundance of algae and filter-feeding animals in coral reef areas

Main idea

This question concerns the author's main point, the focus of the passage as a whole. The first paragraph describes the symbiotic process of coral reefs so that readers will understand how human activities are degrading this fragile ecosystem, as explained in the second paragraph. The author focuses on how harmful these human activities are to coral reefs.

- A The increased abundance of algae (line 23) is a detail supporting the main point.
- B **Correct.** Human activities are threatening complex coral reef communities.
- C The first paragraph explains how coral reefs thrive in nutrient-poor waters.
- D The zooxanthellae cells of algae feed the coral reefs (lines 7–12); this point is a detail that supports the main idea.
- E This abundance is a detail supporting the main idea, not the main idea itself.

The correct answer is B.

8. The passage suggests which of the following about coral reef communities?
- (A) Coral reef communities may actually be more likely to thrive in waters that are relatively low in nutrients.
 - (B) The nutrients on which coral reef communities thrive are only found in shallow waters.
 - (C) Human population growth has led to changing ocean temperatures, which threatens coral reef communities.
 - (D) The growth of coral reef communities tends to destabilize underwater herbivore populations.
 - (E) Coral reef communities are more complex and diverse than most ecosystems located on dry land.

Inference

The word *suggests* in the question indicates that the answer will be an inference based on what the passage says about coral reef communities. The beginning of the passage states that *nutrient-poor* waters (lines 4–5) sustain the thriving life of a coral reef. Lines 25–27 show that *nutrient input is increasing* because of human activities, with

consequent *declines in reef communities* (line 24). Given this information, it is reasonable to conclude that coral reefs thrive in nutrient-poor, rather than nutrient-rich, waters.

- A **Correct.** Coral reefs flourish in clear, nutrient-poor waters.
- B Shallow waters are mentioned only in the context of deteriorating marine habitats (line 17), not as a source of nutrients; the passage does not indicate that the nutrients are unique to shallow waters.
- C Ocean temperatures are not mentioned in the passage.
- D Reef decline, not reef growth, leads to destabilized herbivore populations (lines 21–22).
- E No comparisons are made between ecosystems in water and on land.

The correct answer is A.

9. The author refers to “filter-feeding animals” (lines 23–24) in order to
- (A) provide an example of a characteristic sign of reef deterioration
 - (B) explain how reef communities acquire sustenance for survival
 - (C) identify a factor that helps herbivore populations thrive
 - (D) indicate a cause of decreasing nutrient input in waters that reefs inhabit
 - (E) identify members of coral reef communities that rely on coral reefs for nutrients

Logical structure

This question concerns why the author has included a particular detail. Look at the context for the phrase *filter-feeding animals*. The complete sentence (lines 21–24) shows that a higher population of filter-feeding animals is a symptom of reef decline.

- A **Correct.** An *increasing abundance* of these animals is a *typical* sign of reef decline.
- B Zooxanthellae cells of algae, not filter-feeding animals, provide sustenance for reef communities (lines 7–12).

- C An increase in filter-feeding animals is associated with *destabilized*, not thriving, herbivore populations.
- D An increase in nutrients, rather than a decrease, causes reef decline, when the population of filter-feeding animals then grows.
- E The author includes filter-feeding animals in the context of the decline of coral reefs, not the symbiotic process of coral reefs.

The correct answer is A.

10. According to the passage, which of the following is a factor that is threatening the survival of coral reef communities?
- (A) The waters they inhabit contain few nutrient resources.
 - (B) A decline in nutrient input is disrupting their symbiotic relationship with zooxanthellae.
 - (C) The degraded waters of their marine habitats have reduced their ability to carry out photosynthesis.
 - (D) They are too biologically complex to survive in habitats with minimal nutrient input.
 - (E) Waste by-products result in an increase in nutrient input to reef communities.

Supporting ideas

The phrase *according to the passage* indicates that the necessary information is explicitly stated in the passage. Look at the threats to coral reefs listed in lines 18–21 and match them against the possible answers. Waste by-products increase nutrients in the water, and reefs decline as nutrients grow more plentiful (lines 21–24).

- A Coral reefs thrive in nutrient-poor waters, as the first paragraph explains.
- B Nutrient input is increasing, not decreasing (lines 20–21).
- C The passage does not say that the degraded waters inhibit photosynthesis.
- D The complex ecosystem of coral reefs thrives in nutrient-poor waters.
- E **Correct.** Waste by-products contribute to increased nutrient input, which causes reef decline.

The correct answer is E.

11. It can be inferred from the passage that the author describes coral reef communities as paradoxical most likely for which of the following reasons?
- (A) They are thriving even though human activities have depleted the nutrients in their environment.
 - (B) They are able to survive in spite of an overabundance of algae inhabiting their waters.
 - (C) They are able to survive in an environment with limited food resources.
 - (D) Their metabolic wastes contribute to the degradation of the waters that they inhabit.
 - (E) They are declining even when the water surrounding them remains clear.

Inference

A paradox is a puzzling statement that seems to contradict itself. To answer this question, look for information that appears puzzling. The author calls coral reefs *one of the fascinating paradoxes of the biosphere* because the reefs are *prolific and productive* despite inhabiting clear waters with few nutrients. The paradox is that the reefs seem to flourish with little food.

- A Human activities have harmed coral reefs by increasing nutrient input (lines 24–29).
- B An increase in algae is a sign of reef decline, not reef survival (lines 21–23).
- C **Correct.** Coral reefs thrive in waters that provide little food.
- D Algae cells use the metabolic wastes of the corals to carry out photosynthesis; the result is sustenance for the reef community, not a degradation of waters (lines 9–12).
- E Coral reefs thrive in clear, nutrient-poor water and decline in nutrient-rich water.

The correct answer is C.

Questions 12–17 refer to the passage on page 26.

12. The passage suggests that a lack of modern sanitation would make which of the following most likely to occur?
- (A) An outbreak of Lyme disease
 - (B) An outbreak of dengue hemorrhagic fever
 - (C) An epidemic of typhoid
 - (D) An epidemic of paralytic polio among infants
 - (E) An epidemic of paralytic polio among adolescents and adults

Inference

Since the question asks for an inference about a lack of modern sanitation, begin by examining what the passage says about the presence of modern sanitation. Lines 8–11 explain the role of modern sanitation in delaying the onset of polio. Lines 14–15 state that *the hygiene that helped prevent typhoid epidemics indirectly fostered a paralytic polio epidemic*. It is reasonable to infer from this statement that a lack of modern sanitation could lead to a typhoid epidemic.

- A Lyme disease is caused by the bacteria carried by deer ticks, not by a lack of sanitation.
- B The dengue virus is transmitted by a mosquito, not by a lack of sanitation.
- C **Correct.** Lines 14–15 show that typhoid epidemics were prevented by modern sanitation; therefore, typhoid might break out in the absence of modern sanitation.
- D Lines 11–13 show that infants did not typically suffer paralysis with polio.
- E When modern sanitation is not present, the polio infection occurs in infancy and typically provides *lifelong immunity without paralysis* (lines 12–13); adolescents and adults then were not affected.

The correct answer is C.

13. According to the passage, the outbreak of dengue hemorrhagic fever in the 1950s occurred for which of the following reasons?
- (A) The mosquito *Aedes aegypti* was newly introduced into Asia.
 - (B) The mosquito *Aedes aegypti* became more numerous.
 - (C) The mosquito *Aedes albopictus* became infected with the dengue virus.
 - (D) Individuals who would normally acquire immunity to the dengue virus as infants were not infected until later in life.
 - (E) More people began to visit and inhabit areas in which mosquitoes live and breed.

Supporting ideas

The question asks for information explicitly stated in the passage, although in slightly different language. Look at lines 24–28, where the 1950s outbreak of dengue hemorrhagic fever is discussed. The outbreak became an epidemic in Asia *because of ecological changes that caused Aedes aegypti, the mosquito that transmits the dengue virus, to proliferate.*

- A The passage does not say that the mosquito was newly introduced into Asia.
- B Correct.** Ecological conditions in Asia at that time allowed the mosquito *Aedes aegypti* to proliferate, that is, to grow numerous.
- C *Aedes albopictus* is another mosquito (lines 28–32) more recently connected with a potential epidemic; the passage does not suggest this mosquito was connected to the 1950s Asian epidemic.
- D Immunity to polio is acquired in infancy (lines 12–13), but no mention is made of a similar immunity to the dengue virus.
- E Population shifts may explain the prevalence of Lyme disease in parts of the United States (lines 18–24), but they are not cited as the cause of the Asian epidemic.

The correct answer is B.

14. It can be inferred from the passage that Lyme disease has become prevalent in parts of the United States because of which of the following?
- (A) The inadvertent introduction of Lyme disease bacteria to the United States
 - (B) The inability of modern sanitation methods to eradicate Lyme disease bacteria
 - (C) A genetic mutation in Lyme disease bacteria that makes them more virulent
 - (D) The spread of Lyme disease bacteria from infected humans to noninfected humans
 - (E) An increase in the number of humans who encounter deer ticks

Inference

To make an inference about Lyme disease, examine the discussion of Lyme disease in lines 16–24. The disease is caused by bacteria carried by deer ticks. It has become prevalent in parts of the United States as the deer population has grown. This population growth has occurred at the same time that the suburbs have expanded and outdoor activities in the deer’s habitat have increased. What can be inferred about the growing prevalence of Lyme disease? It is logical to infer that more people are encountering the deer ticks that carry the disease.

- A No inadvertent introduction of the bacteria is mentioned in the passage.
- B Modern sanitation plays a role in typhoid and polio epidemics, but it is not linked to Lyme disease.
- C No genetic mutation of bacteria is discussed in the context of Lyme disease.
- D Transmission by deer ticks is discussed, but not human-to-human transmission.
- E Correct.** As the deer population grows and as humans encroach on the deer habitat, more people encounter deer ticks and become infected with the disease.

The correct answer is E.

15. Which of the following can most reasonably be concluded about the mosquito *Aedes albopictus* on the basis of information given in the passage?

(A) It is native to the United States.
 (B) It can proliferate only in Asia.
 (C) It transmits the dengue virus.
 (D) It caused an epidemic of dengue hemorrhagic fever in the 1950s.
 (E) It replaced *Aedes aegypti* in Asia when ecological changes altered *Aedes aegypti*'s habitat.

Inference

An inference is drawn from stated information rather than explicitly stated. Begin by finding the information given about this mosquito. The mosquito *Aedes albopictus* is mentioned in the final sentence of the passage, which says that this mosquito was inadvertently introduced into the United States and has spread widely. Because of this, the author states that *the stage is now set in the United States for a dengue epidemic*. It is reasonable to infer that this mosquito can transmit the dengue virus.

- A It has been inadvertently introduced into the United States.
 B The mosquito that proliferated in Asia during the 1950s was *Aedes aegypti*.
 C **Correct.** The mosquito *Aedes albopictus* transmits the dengue virus.
 D The mosquito *Aedes aegypti* caused the epidemic in the 1950s, not *Aedes albopictus*.
 E No information in the passage supports this statement.

The correct answer is C.

16. Which of the following best describes the organization of the passage?

(A) A paradox is stated, discussed, and left unresolved.
 (B) Two opposing explanations are presented, argued, and reconciled.
 (C) A theory is proposed and is then followed by descriptions of three experiments that support the theory.
 (D) A generalization is stated and is then followed by three instances that support the generalization.
 (E) An argument is described and is then followed by three counterexamples that refute the argument.

Logical structure

Analyze the structure of the passage in order to answer a question about how the passage is organized. The passage begins by explaining that some epidemics are not caused by genetic mutations in bacteria and viruses, but rather by social and ecological changes in an environment. Three specific examples—polio, Lyme disease, and dengue hemorrhagic fever—are then used to support this general statement.

- A The passage opens by showing that epidemics may be caused by different means; this is not a paradox.
 B Only one explanation, having three supporting examples, is given.
 C The three examples of epidemics are not experiments conducted to support a theory; they are documented cases of disease.
 D **Correct.** A generalization is stated: *scientists have discovered the importance of social and ecological factors to epidemics* (lines 5–6). Three examples—polio, Lyme disease, and dengue hemorrhagic fever—support the generalization.
 E The examples in the passage support the author's generalization or argument; no counterexamples refuting the argument are included.

The correct answer is D.

17. Which of the following, if true, would most strengthen the author's assertion about the cause of the Lyme disease outbreak in the United States?
- (A) The deer population was smaller in the late nineteenth century than in the mid twentieth century.
 - (B) Interest in outdoor recreation began to grow in the late nineteenth century.
 - (C) In recent years the suburbs have stopped growing.
 - (D) Outdoor recreation enthusiasts routinely take measures to protect themselves against Lyme disease.
 - (E) Scientists have not yet developed a vaccine that can prevent Lyme disease.

Logical structure

Examine the author's argument about the cause of Lyme disease. The author blames the recent prevalence of Lyme disease on the rise in the deer population and the growth of the suburbs, with people spending more time outside in the deer's habitat. The disease had appeared *only sporadically* during the late nineteenth century.

- A **Correct.** If the deer population was smaller when the disease occurred *only sporadically*, then the author's claim that the mid-century rise in deer population is one of the causes of Lyme disease is strengthened.
- B An *interest* in outdoor recreation, such as an interest in hiking, may be an appreciation for that activity without being an engagement in that activity; even if *interest* here did mean engagement, an increased interest in outdoor recreation does not entail that people engaged in outdoor activities in the deer's habitat; the assertion is not strengthened.
- C The lack of growth of the suburbs weakens, rather than strengthens, the author's assertion.
- D Protective measures against the disease are not relevant to an assertion about what causes the disease.
- E The lack of a vaccine is irrelevant to an assertion about what causes the disease.

The correct answer is A.

Questions 18–23 refer to the passage on page 28.

18. The primary purpose of the passage is to
- (A) describe new ways of studying the possibility that life once existed on Mars
 - (B) revise a theory regarding the existence of life on Mars in light of new evidence
 - (C) reconcile conflicting viewpoints regarding the possibility that life once existed on Mars
 - (D) evaluate a recently proposed argument concerning the origin of ALH84001
 - (E) describe a controversy concerning the significance of evidence from ALH84001

Main idea

Answering this question requires determining the purpose of the passage as a whole. In the first paragraph, the passage indicates that a research team found that a Martian meteorite in Antarctica contains compelling evidence that life existed on Mars. The rest of the passage then describes arguments by skeptics against the research team's conclusion together with the research team's rebuttals to the skeptics' arguments.

- A While the passage discusses one type of evidence that life might have existed on Mars, it does not describe multiple ways of studying the possibility of Martian life, nor characterize any method of study as *new*.
- B The passage merely reports and does not make any attempt at revising existing theories.
- C The passage describes but does not try to reconcile conflicting viewpoints concerning life on Mars.
- D The origin of ALH84001 is generally agreed upon (line 5), not a recently proposed hypothesis evaluated by the passage.
- E **Correct.** The passage describes opposing arguments about whether ALH84001 suggests life ever existed on Mars.

The correct answer is E.

19. The passage asserts which of the following about the claim that ALH84001 originated on Mars?
- (A) It was initially proposed by the McKay team of scientists.
 - (B) It is not a matter of widespread scientific dispute.
 - (C) It has been questioned by some skeptics of the McKay team's work.
 - (D) It has been undermined by recent work on PAHs.
 - (E) It is incompatible with the fact that ALH84001 has been on Earth for 13,000 years.

Supporting ideas

This question requires recognizing what the passage indicates about a piece of information it offers. The passage states that *scientists generally agree* (line 5) that ALH84001 originated on Mars, which strongly suggests that there is not much dispute about it.

- A While it is possible that McKay's team initially made the proposal, the passage does not say so.
- B Correct.** In stating that scientists generally agree ALH84001 originated on Mars, the passage indicates there is no real controversy on this matter.
- C The skeptics mentioned in the passage are not described as calling into question that ALH84001 originated on Mars.
- D The passage does not tie the existence of PAHs in ALH84001 to questions about its Martian origins.
- E The passage makes no connection between the time ALH84001 has been on the Earth and questions as to its Martian origins.

The correct answer is B.

20. The passage suggests that the fact that ALH84001 has been on Earth for 13,000 years has been used by some scientists to support which of the following claims about ALH84001?
- (A) ALH84001 may not have originated on Mars.
 - (B) ALH84001 contains PAHs that are the result of nonbiological processes.
 - (C) ALH84001 may not have contained PAHs when it landed on Earth.
 - (D) The organic molecules found in ALH84001 are not PAHs.
 - (E) The organic molecules found in ALH84001 could not be the result of terrestrial contamination.

Supporting ideas

This question requires recognizing how a particular fact is used to support a particular point of view reported in the passage. In the second paragraph, the passage presents various skeptics' arguments about whether the PAHs in ALH84001 originated on Mars. In lines 15–19, the passage indicates that some scientists see the fact that ALH84001 has been on Earth for 13,000 years as raising the possibility that the PAHs in ALH84001 *resulted from terrestrial contamination* or in other words that it did not contain PAHs when it landed on Earth.

- A The passage indicates only that most scientists believe that ALH84001 originated on Mars.
- B Although the passage indicates that skeptics have pointed out that PAHs can be formed by nonbiological processes, their point is not related to the length of time ALH84001 has been on Earth.
- C Correct.** The passage indicates that some scientists believe that the PAHs in ALH84001 may have been transferred to it during its 13,000 years on Earth.
- D The passage does not indicate that any scientists doubt the presence of PAHs in ALH84001.
- E The passage indicates that the fact that ALH84001 has been on Earth for 13,000 years is used by some scientists to support the idea of terrestrial contamination.

The correct answer is C.

21. The passage suggests that if a meteorite contained PAHs that were the result of terrestrial contamination, then one would expect which of the following to be true?

- (A) The meteorite would have been on Earth for more than 13,000 years.
- (B) The meteorite would have originated from a source other than Mars.
- (C) The PAHs contained in the meteorite would have originated from nonbiological processes.
- (D) The meteorite would contain fewer PAHs than most other meteorites contain.
- (E) The PAHs contained in the meteorite would be concentrated toward the meteorite's surface.

Application

Answering this question involves applying information contained in the passage to a situation that is not described in the passage. According to the passage, some scientists believe that because ALH84001 has been on Earth for as long as 13,000 years, any PAHs contained in it may have been transferred from the Earth, a process the passage describes as *terrestrial contamination* (line 19). The passage also indicates that if terrestrial contamination occurred with ALH84001, then, contrary to the findings of McKay's team that showed PAH concentrations increasing *as one looks deeper into ALH84001* (lines 21–22), the PAHs would be expected to be concentrated more toward the outer parts, or surface, of ALH84001.

- A The passage indicates that scientists believe that 13,000 years is sufficient time for terrestrial contamination to happen.
- B The passage does not suggest that the origin of a meteorite affects its ability to become contaminated with terrestrial PAHs.
- C The passage does not indicate whether PAHs resulting from terrestrial contamination would be nonbiological or not.
- D The passage does not mention that different meteorites may contain different amounts of PAHs.
- E **Correct.** The passage suggests that if ALH84001 experienced terrestrial contamination, then the PAHs would be more concentrated toward the outer surface of the meteorite.

The correct answer is E.

22. Which of the following best describes the function of the last sentence of the first paragraph?

- (A) It identifies a possible organic source for the PAHs found in ALH84001.
- (B) It describes a feature of PAHs that is not shared by other types of organic molecules.
- (C) It explains how a characteristic common to most meteorites originates.
- (D) It suggests how the terrestrial contamination of ALH84001 might have taken place.
- (E) It presents evidence that undermines the claim that life once existed on Mars.

Evaluation

This question requires understanding how a part of the passage functions within the passage as a whole. The first paragraph begins by establishing that McKay's team believes that the PAHs found in ALH84001 provide compelling evidence that life existed on Mars. To explain this, the passage indicates that PAHs are a type of organic molecules, which form the basis for life. Furthermore, to connect PAHs to possible life on Mars, the final sentence of the first paragraph indicates that one source of PAHs is the decay of dead microbes.

- A **Correct.** Without evidence of an organic source for the PAHs in ALH84001, the team's argument would not make sense.
- B The passage indicates that PAHs can be formed by the decay of organic material from microbes but does not imply that other organic molecules cannot be formed this way.
- C The sentence referred to explains one possible origin of a molecule found in ALH84001 but does not imply that most meteorites contain that molecule.
- D The sentence referred to does not involve the process of terrestrial contamination.
- E The sentence referred to provides information necessary to the team's argument that life may have existed on Mars.

The correct answer is A.

23. The passage suggests that McKay's team would agree with which of the following regarding the PAHs produced by nonorganic processes?
- (A) These PAHs are not likely to be found in any meteorite that has been on Earth for 13,000 years or more.
 - (B) These PAHs are not likely to be found in any meteorite that originated from Mars.
 - (C) These PAHs are not likely to be produced by star formation.
 - (D) These PAHs are likely to be found in combinations that distinguish them from the PAHs produced by organic processes.
 - (E) These PAHs are likely to be found in fewer meteorites than the PAHs produced by organic processes.

Inference

This question involves understanding a particular point of view presented in the passage. The passage indicates in lines 11–13 that the organic molecules found in ALH84001 are PAHs. In lines 23–27, skeptics of McKay's team's findings point out that processes unrelated to organic life, including star formation, can produce PAHs. In the final sentence of the passage, McKay's team notes that the type of PAHs found in ALH84001 are more similar to those produced by organic processes than to those produced by nonorganic processes.

- A McKay's team does not tie the presence of nonorganic PAHs in meteorites to the length of time the meteorites have been on Earth.
- B McKay's team does not deny the possibility that at least some of the PAHs found in Martian meteorites are nonorganic in origin.
- C McKay's team does not deny that PAHs can be produced by the formation of stars.
- D **Correct.** McKay's team notes in lines 29–34 that the PAH combinations produced by organic processes can be distinguished from those produced by nonorganic processes.
- E McKay's team does not address the probability of nonorganic PAHs being found in meteorites.

The correct answer is D.

Questions 24–26 refer to the passage on page 30.

24. Which of the following most accurately states the purpose of the passage?
- (A) To compare two different approaches to the study of homeostasis
 - (B) To summarize the findings of several studies regarding organisms' maintenance of internal variables in extreme environments
 - (C) To argue for a particular hypothesis regarding various organisms' conservation of water in desert environments
 - (D) To cite examples of how homeostasis is achieved by various organisms
 - (E) To defend a new theory regarding the maintenance of adequate fluid balance

Main idea

To answer this question, look at the passage as a whole. The first paragraph defines homeostasis and names three animals that must maintain internal fluid balance in difficult circumstances. The topic of the second paragraph is how desert rats maintain fluid balance. The third paragraph discusses how camels maintain fluid balance, while the final paragraph describes maintenance of water balance in marine vertebrates. Thus, the overall purpose is to give three examples of how homeostasis is achieved.

- A Examples of homeostasis are given, but different approaches to studying it are not discussed.
- B The passage describes examples, but it does not summarize studies.
- C While the passage does discuss two desert animals, it does not present any argument for a particular hypothesis.
- D **Correct.** The passage discusses the examples of desert rats, camels, and marine vertebrates to show how these organisms are able to achieve homeostasis.
- E The passage describes how three organisms maintain water balance, but it presents no theory about it.

The correct answer is D.

25. It can be inferred from the passage that some mechanisms that regulate internal body temperature, like sweating and panting, can lead to which of the following?

(A) A rise in the external body temperature
 (B) A drop in the body's internal fluid level
 (C) A decrease in the osmotic pressure of the blood
 (D) A decrease in the amount of renal water loss
 (E) A decrease in the urine's salt content

Inference

An inference is drawn from stated information. To answer this question, look at the information about sweating and panting in lines 18–21 and 33–35. The passage states that desert rats avoid *loss of fluid through panting or sweating, which are regulatory mechanisms for maintaining internal body temperature by evaporative cooling*. These mechanisms reduce internal body temperatures. Additionally, camels *conserve internal water* (line 35) when they avoid sweating and panting, except at very high body temperatures. Therefore, they must lose internal water when they do sweat and pant.

- A The passage does not discuss *external body temperature*; sweating and panting lower internal body temperature, and there is no reason to infer external body temperatures might rise.
- B Correct.** Sweating and panting lead to *loss of fluid*. Desert rats avoid sweating and panting by staying in burrows, and camels do not employ these mechanisms except at very high body temperatures (lines 33–35) and thus *conserve internal water*.
- C The passage states that *desert rats are able to maintain the osmotic pressure of their blood, as well as their total body-water content* (lines 13–15) and does not connect changes in osmotic pressure to temperature-regulating mechanisms such as sweating and panting.
- D While the passage does discuss renal water loss, it does not relate this to temperature-regulating mechanisms like sweating and panting.
- E The passage does not relate body temperature regulators like sweating and panting to changes in the urine's salt content.

The correct answer is B.

26. It can be inferred from the passage that the author characterizes the camel's kidney as "entirely unexceptional" (line 26) primarily to emphasize that it

(A) functions much as the kidney of a rat functions
 (B) does not aid the camel in coping with the exceptional water loss resulting from the extreme conditions of its environment
 (C) does not enable the camel to excrete as much salt as do the kidneys of marine vertebrates
 (D) is similar in structure to the kidneys of most mammals living in water-deprived environments
 (E) requires the help of other organs in eliminating excess salt

Inference

To answer this question, look at the phrase *entirely unexceptional* in the context of the passage. Desert rats and camels share the problem of conserving water in an environment where water is lacking, *temperature is high, and humidity is low* (lines 10–12). Desert rats have as part of their coping mechanisms exceptional kidneys that produce urine with a high salt content. The author compares camels' kidneys to those of desert rats and shows that the camels have ordinary kidneys that do not help the camels conserve water.

- A Since a contrast is drawn between the kidneys of camels and those of desert rats, the two must function differently; the passage makes no reference to the kidneys of other rats.
- B Correct.** The camel's kidney does nothing special to help the camel cope with its difficult environment.
- C No comparison between the kidneys of camels and the kidneys of marine vertebrates is made.
- D There is no information given about the kidney structure of most mammals in desert environments so this conclusion is not justified.
- E Marine vertebrates have other organs that help eliminate extra salt; camels do not.

The correct answer is B.

Questions 27–32 refer to the passage on page 32.

27. The primary purpose of the passage is to
- (A) enumerate reasons why both traditional scholarly methods and newer scholarly methods have limitations
 - (B) identify a shortcoming in a scholarly approach and describe an alternative approach
 - (C) provide empirical data to support a long-held scholarly assumption
 - (D) compare two scholarly publications on the basis of their authors' backgrounds
 - (E) attempt to provide a partial answer to a long-standing scholarly dilemma

Main idea

To find the primary purpose, look at what the author is doing in the entire passage. In the first paragraph, the author examines two approaches to political history, both of which suffer from the same flaw, the exclusion of women. In the second paragraph, the author reviews an alternative, more inclusive way to understand political history.

- A The first paragraph identifies only one reason that the two approaches are flawed; an alternative approach is discussed in the second paragraph.
- B Correct.** The author points to the flaw in earlier approaches to history and shows an alternative way of thinking about political history.
- C No data are offered to support an assumption.
- D Only one historian is mentioned by name; her background is not mentioned.
- E No long-standing dilemma is discussed.

The correct answer is B.

28. The passage suggests which of the following concerning the techniques used by the new political historians described in the first paragraph of the passage?
- (A) They involved the extensive use of the biographies of political party leaders and political theoreticians.

- (B) They were conceived by political historians who were reacting against the political climates of the 1960s and 1970s.
- (C) They were of more use in analyzing the positions of United States political parties in the nineteenth century than in analyzing the positions of those in the twentieth century.
- (D) They were of more use in analyzing the political behavior of nineteenth-century voters than in analyzing the political activities of those who could not vote during that period.
- (E) They were devised as a means of tracing the influence of nineteenth-century political trends on twentieth-century political trends.

Inference

The question's use of the verb *suggests* is an indication that an inference must be made. Examine the first paragraph, where the *new school of political history* is discussed. These historians used techniques such as *quantitative analyses of election returns* that the author describes as *useless in analyzing the political activities of women, who were denied the vote until 1920* (lines 9–12). It can, however, be assumed that the same techniques did prove useful in understanding the *mass political behavior* of voters.

- A The first sentence explains that these historians *sought to go beyond the traditional focus . . . on leaders and government institutions*.
- B The passage does not indicate that the new historians were reacting against the political climate of their own time.
- C The new historians examined the *political practices of ordinary citizens* (line 5), not the positions of political parties.
- D Correct.** Lines 7–12 explicitly state that the new historians' techniques were *useless* in analyzing the political activities of those not allowed to vote; the same lines imply that the techniques were useful in analyzing the political behavior of voters.
- E No information in the passage supports this explanation.

The correct answer is D.

29. It can be inferred that the author of the passage quotes Baker directly in the second paragraph primarily in order to
- (A) clarify a position before providing an alternative to that position
 - (B) differentiate between a novel definition and traditional definitions
 - (C) provide an example of a point agreed on by different generations of scholars
 - (D) provide an example of the prose style of an important historian
 - (E) amplify a definition given in the first paragraph

Logical structure

To analyze why the author uses a direct quotation, look at the logical structure of the passage in relation to the quotation. The historians discussed in the first paragraph define political activity as voting. Paula Baker, however, has a new definition of political activity, one that includes the activities of those who were not allowed to vote. It is reasonable to infer that the author quotes Baker to draw attention to this new definition, which provides an innovative, alternative way of thinking about political history.

- A Paula Baker's is the alternative position offered; no alternative to hers is discussed.
- B Correct.** Baker is quoted to emphasize that her definition is new and that it differs significantly from the traditional definition used by other historians.
- C The contrasting views expressed in the first and second paragraphs show that different generations of scholars have not agreed.
- D The author does not comment on Baker's prose style.
- E Baker's definition contrasts with, rather than amplifies, the one offered in the first paragraph.

The correct answer is B.

30. According to the passage, Paula Baker and the new political historians of the 1960s and 1970s shared which of the following?
- (A) A commitment to interest group politics
 - (B) A disregard for political theory and ideology
 - (C) An interest in the ways in which nineteenth-century politics prefigured contemporary politics
 - (D) A reliance on such quantitative techniques as the analysis of election returns
 - (E) An emphasis on the political involvement of ordinary citizens

Supporting ideas

Since the question uses the phrase *according to the passage*, the answer is explicitly stated in the passage. Look for a point on which the new political historians and Baker agree. The first sentence of the passage says that these new historians were interested in the political activities of *ordinary citizens* (line 5). Paula Baker is similarly interested in the political activities of *ordinary citizens* (lines 15–16), especially of female citizens, who were not allowed to vote.

- A No mention at all is made of interest group politics, neither in relation to Baker nor in relation to the new historians.
- B The passage does not show that they disregarded political theory and ideology.
- C The passage only discusses Baker's interest in the way women's political activities in the nineteenth century prefigured twentieth-century trends (lines 16–18).
- D The passage explains that new historians relied on such techniques, but that Baker did not.
- E Correct.** Both the new historians and Baker are said to have studied the political activities of *ordinary citizens*.

The correct answer is E.

31. Which of the following best describes the structure of the first paragraph of the passage?
- (A) Two scholarly approaches are compared, and a shortcoming common to both is identified.
 - (B) Two rival schools of thought are contrasted, and a third is alluded to.
 - (C) An outmoded scholarly approach is described, and a corrective approach is called for.
 - (D) An argument is outlined, and counterarguments are mentioned.
 - (E) A historical era is described in terms of its political trends.

Logical structure

To answer this question, analyze the structure of the first paragraph. It compares *the old approach* of studying political history through emphasis on leaders and government institutions with *the new school of political history*, which turned instead to the political practices of ordinary citizens. Both approaches suffered from the same drawback: the failure to include women in their analyses.

- A **Correct.** Two approaches to history are discussed, and a flaw shared by both, the exclusion of women, is identified.
- B The first paragraph does not allude to a third school of thought.
- C A corrective approach is not discussed in the first paragraph.
- D The first paragraph does present an argument, but no counterarguments are made.
- E The political trends of an historical era are not detailed in the first paragraph.

The correct answer is A.

32. The information in the passage suggests that a pre-1960s political historian would have been most likely to undertake which of the following studies?

- (A) An analysis of voting trends among women voters of the 1920s
- (B) A study of male voters' gradual ideological shift from party politics to issue-oriented politics
- (C) A biography of an influential nineteenth-century minister of foreign affairs
- (D) An analysis of narratives written by previously unrecognized women activists
- (E) A study of voting trends among naturalized immigrant laborers in a nineteenth-century logging camp

Inference

In using *suggests*, this question asks the reader to apply information stated in the passage to make an inference about the methods of historians before the 1960s. These methods are discussed in the first paragraph. Lines 3–4 say that the *traditional focus of political historians* (before the advent of the new school of historians in the 1960s and 1970s) was *on leaders and government institutions*. It is reasonable to infer that the pre-1960s historian was likely to focus on a leader or government institution.

- A Traditional historians did not focus on ordinary citizens, but on their leaders.
- B Baker is interested in this group shift, but traditional historians were not.
- C **Correct.** Traditional historians emphasized the work of leaders and government institutions; a biography of a foreign affairs minister fits this focus perfectly.
- D Such an analysis would be of interest to Baker, but not to traditional historians focusing on leaders and government.
- E The new historians would be interested in such a study, but not traditional historians, who did not look at the activities of ordinary citizens.

The correct answer is C.

Questions 33–38 refer to the passage on page 34.

33. Which of the following best describes the organization of the passage?
- (A) The historical backgrounds of two currently used research methods are chronicled.
 - (B) The validity of the data collected by using two different research methods is compared.
 - (C) The usefulness of a research method is questioned and then a new method is proposed.
 - (D) The use of a research method is described and the limitations of the results obtained are discussed.
 - (E) A research method is evaluated and the changes necessary for its adaptation to other subject areas are discussed.

Logical structure

To answer a question about organization, determine the function of each paragraph in order to see the overall structure of the whole passage. The first paragraph introduces a research method, recording life stories. The second and third paragraphs discuss the problems of this method. According to the final paragraph, the method remains useful despite its limitations.

- A Only one research method is discussed in the passage.
- B The validity of data is questioned, but only one research method is discussed.
- C While the usefulness of the method is questioned, no new one is proposed.
- D Correct.** The method of recording life stories is described, its limitations acknowledged, and its usefulness recognized.
- E A research method is evaluated, but no changes are proposed.

The correct answer is D.

34. Which of the following is most similar to the actions of nineteenth-century ethnologists in their editing of the life stories of Native Americans?
- (A) A witness in a jury trial invokes the Fifth Amendment in order to avoid relating personally incriminating evidence.
 - (B) A stockbroker refuses to divulge the source of her information on the possible future increase in a stock's value.
 - (C) A sports announcer describes the action in a team sport with which he is unfamiliar.
 - (D) A chef purposely excludes the special ingredient from the recipe of his prizewinning dessert.
 - (E) A politician fails to mention in a campaign speech the similarities in the positions held by her opponent for political office and by herself.

Application

To answer the question, determine what the author says about the ethnologists and apply the information to the examples given in the answer choices. Ethnologists believed that recording personal stories *could increase their understanding of the cultures that they had been observing from without* (lines 10–12). But they were criticized for not spending enough time in these cultures (lines 25–26) and thus not understanding the cultures well enough. Their position is most like that of the sports announcer, who is also an observer, but who is not familiar with the game (or, in the case of the ethnologists, the culture) being observed.

- A The passage does not suggest that the ethnographers deliberately withheld evidence for personal reasons.
- B The ethnologists were faulted for other reasons, not for withholding evidence.
- C Correct.** As do the ethnologists, the sports announcer observes and reports, but in neither case is the observer adequately familiar with the subject being observed.
- D The ethnologists did not purposely exclude an item from their studies.
- E The passage does not point to any similarities between the ethnologists and the people they studied.

The correct answer is C.

35. According to the passage, collecting life stories can be a useful methodology because
- (A) life stories provide deeper insights into a culture than the hypothesizing of academics who are not members of that culture
 - (B) life stories can be collected easily and they are not subject to invalid interpretations
 - (C) ethnologists have a limited number of research methods from which to choose
 - (D) life stories make it easy to distinguish between the important and unimportant features of a culture
 - (E) the collection of life stories does not require a culturally knowledgeable investigator

Supporting ideas

The phrase *according to the passage* indicates that the answer is stated in the passage. The final paragraph describes collecting life stories as *a useful tool* because the stories *are likely to throw more light on the working of the mind and emotions* of the people the ethnologists study than *any amount of speculation from an ethnologist . . . from another culture*.

- A **Correct.** Because they come from within a culture, the life stories reveal more about the culture than can any of the theories developed by those outside the culture.
- B Neither the ease nor the difficulty of gathering the stories is mentioned, but their vulnerability to misinterpretation is discussed in lines 19–28.
- C The passage does not discuss how many research tools are available.
- D The passage states that ethnologists regarded as *unimportant* some of the events that the people of the stories found *significant* (lines 33–37).
- E According to the passage, ethnologists were criticized for not being culturally knowledgeable enough (lines 25–26).

The correct answer is A.

36. Information in the passage suggests that which of the following may be a possible way to eliminate bias in the editing of life stories?
- (A) Basing all inferences made about the culture on an ethnological theory
 - (B) Eliminating all of the emotion laden information reported by the informant
 - (C) Translating the informant's words into the researcher's language
 - (D) Reducing the number of questions and carefully specifying the content of the questions that the investigator can ask the informant
 - (E) Reporting all of the information that the informant provides regardless of the investigator's personal opinion about its intrinsic value

Inference

The question's use of the word *suggests* means that the answer depends on making an inference. Lines 31–33 provide the reference for this question about biased editing: *Editors often decided what elements were significant to the field research on a given tribe*. The editors introduced bias with their choices about what was important. Therefore, it is reasonable to infer that, to eliminate bias, those choices must be eliminated. Reporting all the information, not just what the investigator or editor thinks is important, is a possible way to avoid bias.

- A The passage does not imply that bias results from veering away from a theory.
- B Investigators are criticized for allowing emotion to tinge their reports (lines 27–28), but informants are not criticized for having emotional material.
- C Lines 33–35 reveal that translations are not always possible.
- D The passage does not discuss the number and content of questions, so it cannot be inferred that restricting them would eliminate bias.
- E **Correct.** Reporting all the information, rather than choosing to report only what appears to the observer to be important, is a possible way to eliminate bias in editing life stories.

The correct answer is E.

37. The primary purpose of the passage as a whole is to
- (A) question an explanation
 - (B) correct a misconception
 - (C) critique a methodology
 - (D) discredit an idea
 - (E) clarify an ambiguity

Main idea

This question explicitly asks the reader to consider the passage as a whole in order to determine the author's intent. What is the subject of the passage? Collecting life stories is called a *method* (line 20) and a *useful tool* (line 43). The first paragraph introduces this research method, the middle paragraphs offer an extended critique of it, and the final paragraph reaffirms its usefulness.

- A Collecting life stories is not an explanation; it is a method to gain understanding of a culture.
- B The autobiographies may be misinterpreted, but they are not a misconception.
- C **Correct.** The passage is about a methodology; both its weaknesses and strengths are examined.
- D Collecting the stories is not an idea but a method; though its limitations are revealed, the method is not discredited.
- E The final paragraph implies that ambiguity is inherent in life stories; that ambiguity is not clarified.

The correct answer is C.

38. It can be inferred from the passage that a characteristic of the ethnological research on Native Americans conducted during the nineteenth century was the use of which of the following?

- (A) Investigators familiar with the culture under study
- (B) A language other than the informant's for recording life stories
- (C) Life stories as the ethnologist's primary source of information
- (D) Complete transcriptions of informants' descriptions of tribal beliefs
- (E) Stringent guidelines for the preservation of cultural data

Inference

An inference is drawn from stated information. To answer this question, find what the passage says about the ethnological research on Native American cultures in the nineteenth century. The third paragraph tells us that *much was inevitably lost* (line 31) when investigators wrote the oral stories down. *Native Americans recognized that the essence of their lives could not be communicated in English* (lines 33–35). From these two statements, it is reasonable to infer that the stories were written down in a language different from that of the storyteller.

- A The investigators were criticized for not being suitably familiar with the culture (lines 25–26).
- B **Correct.** Native Americans believed that English could not express their culture; at least some investigators, therefore, must have written the stories down in English.
- C Ethnologists wanted the stories to *supplement* their fieldwork (lines 5–9), not to replace it as their primary means of investigation.
- D Lines 31–33 reveal that the life stories were edited, not complete.
- E The passage provides no information about such guidelines.

The correct answer is B.

Questions 39–44 refer to the passage on page 36.

39. The primary function of the passage as a whole is to
- (A) account for the popularity of a practice
 - (B) evaluate the utility of a practice
 - (C) demonstrate how to institute a practice
 - (D) weigh the ethics of using a strategy
 - (E) explain the reasons for pursuing a strategy

Main idea

This question explicitly requires looking at the passage as a whole in order to determine the author's purpose. The first paragraph explains the practice of offering guarantees and lists circumstances in which an unconditional guarantee may be an appropriate marketing tool. The second paragraph begins with *However*, implying that a contradiction is about to follow. The serious drawbacks to guarantees are examined, and the passage closes with a warning.

- A The passage does not discuss the popularity of guarantees.
- B Correct.** The passage examines and judges the advantages and disadvantages of a business practice.
- C The passage does not show how to put guarantees into place.
- D The passage does not discuss ethics.
- E The first paragraph does explain the reasons for offering guarantees, but that is only a portion of the passage, not the passage as a whole.

The correct answer is B.

40. All of the following are mentioned in the passage as circumstances in which professional service firms can benefit from offering an unconditional guarantee EXCEPT:

- (A) The firm is having difficulty retaining its clients of long standing.
- (B) The firm is having difficulty getting business through client recommendations.
- (C) The firm charges substantial fees for its services.
- (D) The adverse effects of poor performance by the firm are significant for the client.
- (E) The client is reluctant to incur risk.

Supporting ideas

The phrase *mentioned in the passage* indicates that the necessary information is explicitly stated. To answer this question, use the process of elimination to find the one example that is NOT mentioned in the passage. The question refers to lines 8–13, where the circumstances in which an unconditional guarantee might be beneficial to a firm are listed. Check each of the responses to the question against the list; the one that does not appear in the list is the correct answer.

- A Correct.** The sentence begins by noting that unconditional guarantees are particularly important with new clients; clients of long standing are not discussed.
- B Lines 12–13 include the difficulty of getting business through referrals and word-of-mouth.
- C Line 10 cites high fees as such a circumstance.
- D Lines 10–11 include the severe repercussions of bad service.
- E Lines 9–10 cite the cautiousness of the client.

The correct answer is A.

41. Which of the following is cited in the passage as a goal of some professional service firms in offering unconditional guarantees of satisfaction?
- (A) A limit on the firm's liability
 - (B) Successful competition against other firms
 - (C) Ability to justify fee increases
 - (D) Attainment of an outstanding reputation in a field
 - (E) Improvement in the quality of the firm's service

Supporting ideas

When the question says to find an answer *cited* in the passage, the answer will be explicitly stated information. The passage opens with an explanation of why some firms want to offer unconditional guarantees: *Seeking a competitive advantage* explains their rationale. Firms offer the guarantees to compete more effectively against firms that do not offer guarantees.

- A The passage does not mention liability limits.
- B Correct.** Some firms offer unconditional guarantees as a way to compete successfully against firms that do not offer them.
- C Line 10 mentions that high fees would be a reason to offer guarantees, but fee increases are not discussed.
- D The second paragraph suggests the reverse: offering a guarantee may hurt a firm's reputation.
- E Improving the quality of service is not mentioned as a reason to offer guarantees.

The correct answer is B.

42. The passage's description of the issue raised by unconditional guarantees for health care or legal services most clearly implies that which of the following is true?
- (A) The legal and medical professions have standards of practice that would be violated by attempts to fulfill such unconditional guarantees.
 - (B) The result of a lawsuit or medical procedure cannot necessarily be determined in advance by the professionals handling a client's case.
 - (C) The dignity of the legal and medical professions is undermined by any attempts at marketing of professional services, including unconditional guarantees.
 - (D) Clients whose lawsuits or medical procedures have unsatisfactory outcomes cannot be adequately compensated by financial settlements alone.
 - (E) Predicting the monetary cost of legal or health care services is more difficult than predicting the monetary cost of other types of professional services.

Inference

The question's use of the word *implies* means that the answer depends on making an inference. This question refers to one sentence in the passage (lines 21–24), so it is essential to review what that sentence says in order to understand what it implies. An unconditional guarantee of satisfaction may have a particular disadvantage in the case of health care and legal services because clients may be misled into believing that lawsuits or medical procedures have guaranteed outcomes when they do not. Since an inference may be drawn only from explicitly stated information, the correct response must be about the problem of guarantees and outcomes.

- A Although this statement may be true, it cannot be derived from the cited reference.
- B Correct.** Legal and medical professionals cannot guarantee the outcomes of their work.
- C This statement cannot be drawn from the description of the issue.
- D Compensation is not discussed in the reference.
- E Predicting costs is not discussed in the reference.

The correct answer is B.

43. Which of the following hypothetical situations best exemplifies the potential problem noted in the second sentence of the second paragraph (lines 15–19)?
- (A) A physician's unconditional guarantee of satisfaction encourages patients to sue for malpractice if they are unhappy with the treatment they receive.
 - (B) A lawyer's unconditional guarantee of satisfaction makes clients suspect that the lawyer needs to find new clients quickly to increase the firm's income.
 - (C) A business consultant's unconditional guarantee of satisfaction is undermined when the consultant fails to provide all of the services that are promised.
 - (D) An architect's unconditional guarantee of satisfaction makes clients wonder how often the architect's buildings fail to please clients.
 - (E) An accountant's unconditional guarantee of satisfaction leads clients to believe that tax returns prepared by the accountant are certain to be accurate.

Application

This question involves taking the problem identified in lines 15–19 and applying it to the hypothetical situation that best fits it. Offering an unconditional guarantee may not work as a marketing strategy because potential clients may *doubt the firm's ability to deliver the promised level of service*. This strategy may actually introduce doubts or reservations on the part of potential clients and in fact discourage them from ever hiring the firm or the individual providing the service.

- A In this case, the problem occurs after, not before, the service is rendered.
- B This situation exemplifies another problem of unconditional guarantees, the suggestion that a *firm is begging for business* (line 21).
- C The problem occurs after, not before, the service is rendered.
- D **Correct.** The architect's apparent need to offer an unconditional guarantee makes potential clients question the outcome of the architect's work by suggesting the likelihood of their dissatisfaction with the architectural services.
- E This situation contradicts the problem.

The correct answer is D.

44. The passage most clearly implies which of the following about the professional service firms mentioned in lines 24–27?
- (A) They are unlikely to have offered unconditional guarantees of satisfaction in the past.
 - (B) They are usually profitable enough to be able to compensate clients according to the terms of an unconditional guarantee.
 - (C) They usually practice in fields in which the outcomes are predictable.
 - (D) Their fees are usually more affordable than those charged by other professional service firms.
 - (E) Their clients are usually already satisfied with the quality of service that is delivered.

Inference

The question asks for the implications of the statement in lines 24–27: *professional service firms with outstanding reputations and performance to match have little to gain from offering unconditional guarantees*. Why is it logical to infer that these firms have little to gain from this strategy? If their performance and reputation are both outstanding, it is likely that their clients are already satisfied with the quality of the work they provide and that offering such guarantees would provide no competitive advantage.

- A The statement in the passage concerns the present; nothing is implied about what may have been true in the past.
- B The statement includes no information about profitability, so no inference may be drawn.
- C No information is provided about specific fields or likely outcomes.
- D Fees are not discussed in this statement.
- E **Correct.** No guarantee is needed when clients are already satisfied with the quality of work provided.

The correct answer is E.

Questions 45–49 refer to the passage on page 38.

45. The passage is primarily concerned with
- (A) identifying historical circumstances that led Du Bois to alter his long-term goals
 - (B) defining “accommodationism” and showing how Du Bois used this strategy to achieve certain goals
 - (C) accounting for a particular position adopted by Du Bois during the First World War
 - (D) contesting the view that Du Bois was significantly influenced by either Washington or Trotter
 - (E) assessing the effectiveness of a strategy that Du Bois urged African Americans to adopt

Main idea

This question asks what the passage as a whole is attempting to do. The passage opens by indicating that many African Americans were surprised by a political position taken by Du Bois in 1918, which seemed more accommodationist than expected. The passage then goes on to demonstrate that Du Bois often *shifted positions* (line 9) and states that Du Bois’s 1918 position was pragmatic in that it responded to real social pressure. The passage then indicates that Du Bois’s accommodationist stance *did not last* (line 31), and that he returned to a more confrontationist stance upon learning of the treatment of African Americans in the military.

- A The passage indicates that Du Bois did not change his long-term goals (lines 22–24).
- B *Accommodationism* is not defined in the passage but is associated with certain actions (community improvement), ideologies (solidarity), and leaders (Washington); the passage does not indicate if Du Bois was successful in achieving the accommodationist goals of 1895 (lines 11–15).
- C **Correct.** The passage explains why Du Bois took his accommodationist position and why he eventually rejected it.
- D The passage offers no judgment as to how much Du Bois was influenced by Washington or Trotter.
- E The passage does not indicate that there was widespread adoption of any of the strategies Du Bois recommended.

The correct answer is C.

46. The passage indicates which of the following about Du Bois’s attitude toward Washington?
- (A) It underwent a shift during the First World War as Du Bois became more sympathetic with Trotter’s views.
 - (B) It underwent a shift in 1903 for reasons other than Du Bois’s disagreement with Washington’s accommodationist views.
 - (C) It underwent a shift as Du Bois made a long-term commitment to the strategy of accommodation.
 - (D) It remained consistently positive even though Du Bois disagreed with Washington’s efforts to control the African American press.
 - (E) It was shaped primarily by Du Bois’s appreciation of Washington’s pragmatic approach to the advancement of the interests of African Americans.

Supporting ideas

Answering this question involves recognizing what the passage indicates about a particular point of view it describes. In line 15, the passage indicates that Du Bois praised Washington’s ideas, but that in 1903 Du Bois aligned himself with *Washington’s militant opponent* (lines 16–17), a shift the passage describes as being due less to *ideological reasons* (lines 17–21) than to political reasons.

- A The passage indicates that the shift described occurred in 1903, not during the First World War.
- B **Correct.** The passage indicates Du Bois’s shift was not due to differences he had with Washington’s ideas or views.
- C The passage indicates that Du Bois accommodationist stance *did not last* (lines 30–31) and therefore was not a long-term commitment.
- D The passage indicates in lines 16–17 that Du Bois at one point aligned himself with Washington’s militant opponent.
- E The passage indicates that Du Bois eventually rejected the accommodationist views of Washington.

The correct answer is B.

47. The passage suggests which of the following about the contributions of African Americans to the United States war effort during the First World War?
- (A) The contributions were made largely in response to Du Bois's 1918 editorial.
 - (B) The contributions had much the same effect as African Americans' contributions to previous wars.
 - (C) The contributions did not end discrimination against African Americans in the military.
 - (D) The contributions were made in protest against Trotter's confrontationist tactics.
 - (E) The contributions were made primarily by civil rights activists who returned to activism after the war.

Inference

This question requires making an inference from information given in the passage. The passage begins by indicating that Du Bois called on African Americans to suspend their fight for equality and to help with the war effort during the First World War. The final sentence of the passage, however, indicates that Du Bois learned that African Americans were experiencing *systematic discrimination* in the military during this time.

- A The passage does not indicate how African Americans responded to Du Bois's editorial other than that many African Americans were surprised by it.
- B The passage indicates that African Americans' participation in previous wars brought legal and political advances but that African Americans experienced discrimination in the First World War.
- C **Correct.** The passage indicates that African Americans experienced systematic discrimination in the military during the First World War.
- D The passage does not describe how African Americans responded to Trotter's tactics during the First World War.
- E The passage does not indicate whether African Americans involved in the war effort were primarily civil rights activists.

The correct answer is C.

48. The author of the passage refers to Washington's call to African Americans in 1895 primarily in order to
- (A) identify Du Bois's characteristic position on the continuum between accommodationism and confrontationism
 - (B) explain why Du Bois was sympathetic with Washington's views in 1895
 - (C) clarify how Trotter's views differed from those of Washington in 1895
 - (D) support an assertion about Du Bois's tendency to shift his political positions
 - (E) dismiss the claim that Du Bois's position in his 1918 editorial was consistent with his previous views

Evaluation

This question requires understanding how a part of the passage functions within the passage as a whole. The passage begins by indicating that many African Americans were surprised by Du Bois's views in his 1918 editorial. The passage then explains that Du Bois *often shifted positions along the continuum* (lines 9–10). To demonstrate this, the passage indicates that Du Bois praised Washington's 1895 speech directed to African Americans, but that by 1903, Du Bois had aligned himself with Washington's *militant opponent* (lines 16–17).

- A The passage indicates that Du Bois *shifted positions* (line 9) along the accommodationist-confrontationist continuum.
- B The passage does not indicate why Du Bois praised Washington's 1895 speech.
- C The passage does not indicate what Trotter's views of Washington's 1895 speech were.
- D **Correct.** The passage uses Du Bois's praise for Washington's 1895 speech and subsequent support of Trotter to illustrate Du Bois's tendency to shift positions.
- E The passage does not include any claims that Du Bois's 1918 editorial was consistent with his previous views.

The correct answer is D.

49. According to the passage, which of the following is true of the strategy that Du Bois's 1918 editorial urged African Americans to adopt during the First World War?

- (A) It was a strategy that Du Bois had consistently rejected in the past.
- (B) It represented a compromise between Du Bois's own views and those of Trotter.
- (C) It represented a significant redefinition of the long-term goals Du Bois held prior to the war.
- (D) It was advocated by Du Bois in response to his recognition of the discrimination faced by African Americans during the war.
- (E) It was advocated by Du Bois in part because of his historical knowledge of gains African Americans had made during past wars.

Supporting ideas

This question requires recognizing how a part of the passage functions within the passage as a whole. The passage begins by indicating that Du Bois's 1918 editorial called on African Americans to abandon political and social activism and help with the war effort in the First World War. In the second paragraph, the passage indicates that Du Bois's wartime position, expressed in his 1918 speech, was at least partly motivated by his belief that *African Americans' contributions to past war efforts had brought them some legal and political advances* (lines 28–30).

- A The passage does not discuss whether Du Bois recommended this strategy prior to 1918.
- B The passage does not indicate that Du Bois consciously compromised with Trotter's views.
- C The passage indicates that his 1918 wartime views were *not a change in his long-term goals* (lines 22–23).
- D The passage indicates that Du Bois's recognition of discrimination in the military caused him to reject his own 1918 wartime views.
- E **Correct.** The passage indicates that Du Bois's 1918 views were influenced partly by a belief that past war efforts helped African Americans both legally and politically.

The correct answer is E.

Questions 50–55 refer to the passage on page 40.

50. The primary purpose of the passage is to

- (A) contrast possible outcomes of a type of business investment
- (B) suggest more careful evaluation of a type of business investment
- (C) illustrate various ways in which a type of business investment could fail to enhance revenues
- (D) trace the general problems of a company to a certain type of business investment
- (E) criticize the way in which managers tend to analyze the costs and benefits of business investments

Main idea

Look at the passage as a whole to find the primary purpose. This passage uses an example, described in the second paragraph, to illustrate the principle of business practice explained in the first paragraph. The author begins by saying that efforts to improve service do not always result in a *competitive advantage* for a company. Thus, an investment in service must be carefully evaluated to determine if it will reduce costs or increase revenues (lines 4–8).

- A Only one outcome, failure to gain a competitive advantage, is examined.
- B **Correct.** Investments in service must be carefully evaluated for the returns they will bring.
- C Only one way, an unnecessary investment in improved service, is discussed.
- D The example of the bank is used only to illustrate a general business principle; the bank itself is not the focus of the passage.
- E The passage criticizes the absence of such an analysis, not the way it is conducted.

The correct answer is B.

51. According to the passage, investments in service are comparable to investments in production and distribution in terms of the
- (A) tangibility of the benefits that they tend to confer
 - (B) increased revenues that they ultimately produce
 - (C) basis on which they need to be weighed
 - (D) insufficient analysis that managers devote to them
 - (E) degree of competitive advantage that they are likely to provide

Supporting ideas

The phrase *according to the passage* indicates that the question covers material that is explicitly stated in the passage. The answer to this question demands a careful reading of the second sentence (lines 4–8). Investments in service are like investments in production and distribution because they *must be balanced against other types of investments on the basis of direct, tangible benefits*. Thus, these investments should be weighed on the same basis.

- A The author is not equating the tangible benefits the different kinds of investments reap, but rather the basis on which decisions to make investments are made.
- B Revenues generated from investing in service are not said to be comparable to revenues generated from investing in production and distribution.
- C **Correct.** An evaluation of whether or not to make these investments must be made on the same basis.
- D How managers analyze investments in production and distribution is not discussed.
- E The competitive advantage of superior service is acknowledged, but not the degree of it; it is not mentioned at all in the context of production and distribution.

The correct answer is C.

52. The passage suggests which of the following about service provided by the regional bank prior to its investment in enhancing that service?
- (A) It enabled the bank to retain customers at an acceptable rate.
 - (B) It threatened to weaken the bank's competitive position with respect to other regional banks.
 - (C) It had already been improved after having caused damage to the bank's reputation in the past.
 - (D) It was slightly superior to that of the bank's regional competitors.
 - (E) It needed to be improved to attain parity with the service provided by competing banks.

Inference

Because the question uses the word *suggests*, finding the answer depends on making an inference about service at the bank. The paragraph that discusses the bank begins with the transitional expression, *this truth*, which refers to the previous sentence (lines 8–15). The *truth* is that investing in improved service is a waste *if a company is already effectively on a par with its competitors because it provides service that avoids a damaging reputation and keeps customers from leaving at an unacceptable rate*. Because of the way the author has linked this generalization to the description of the bank after investment, it is reasonable to infer that the hypothetical company's situation describes the bank prior to its investment in improved service.

- A **Correct.** The bank's service would have been good enough to avoid a damaging reputation and to retain customers at an acceptable rate.
- B The passage does not suggest that the bank's service was either poor or deficient to that of its competitors.
- C The passage implies that the bank's service avoided *a damaging reputation*.
- D The bank would have been *on a par with its competitors*, not superior to them.
- E The bank would have been *on a par with its competitors*, not inferior to them.

The correct answer is A.

53. The passage suggests that bank managers failed to consider whether or not the service improvement mentioned in lines 18–20

- (A) was too complicated to be easily described to prospective customers
- (B) made a measurable change in the experiences of customers in the bank's offices
- (C) could be sustained if the number of customers increased significantly
- (D) was an innovation that competing banks could have imitated
- (E) was adequate to bring the bank's general level of service to a level that was comparable with that of its competitors

Inference

The question's use of the word *suggests* means that the answer depends on making an inference. To answer this question, look at the entire sentence that contains the reference (lines 20–23). Managers failed to think ahead. Would the service improvement attract new customers because other banks would find it difficult to copy? Or would the service improvement be easily imitated by competitors? The managers should have investigated this area before investing in improved service.

- A The passage states the improvement *could easily be described to customers* (lines 28–29).
- B No evidence in the passage shows that the managers failed to think about their customers' experience in the bank.
- C The passage does not imply that managers failed to consider an increase in clients.
- D **Correct.** The managers did not wonder if other banks would copy their service improvement.
- E Lines 8–12 imply that the bank enjoyed a comparable level of service before investing in service improvement.

The correct answer is D.

54. The discussion of the regional bank in the second paragraph serves which of the following functions within the passage as a whole?

- (A) It describes an exceptional case in which investment in service actually failed to produce a competitive advantage.
- (B) It illustrates the pitfalls of choosing to invest in service at a time when investment is needed more urgently in another area.
- (C) It demonstrates the kind of analysis that managers apply when they choose one kind of service investment over another.
- (D) It supports the argument that investments in certain aspects of service are more advantageous than investments in other aspects of service.
- (E) It provides an example of the point about investment in service made in the first paragraph.

Logical structure

This question requires thinking about what the second paragraph contributes to the whole passage. The first paragraph makes a generalization about investing in improvements in service; in certain conditions, such improvements do not result in the *competitive advantage* a company hopes for. The second paragraph offers the bank as an example of this generalization.

- A The first sentence of the passage explains that improving service does not necessarily bring a *competitive advantage*, so the bank is not exceptional.
- B The bank illustrates the pitfall of not evaluating a service improvement on the basis of tangible benefits; other areas of the bank are not mentioned.
- C The passage does not discuss how managers analyze and choose different service investments.
- D Investments in different aspects of service are not evaluated in the passage.
- E **Correct.** The bank is an example of the position stated in the first paragraph that investing in improved service can be a waste if the investment is not evaluated carefully.

The correct answer is E.

55. The author uses the word “only” in line 27 most likely in order to
- (A) highlight the oddity of the service improvement
 - (B) emphasize the relatively low value of the investment in service improvement
 - (C) distinguish the primary attribute of the service improvement from secondary attributes
 - (D) single out a certain merit of the service improvement from other merits
 - (E) point out the limited duration of the actual service improvement

Logical structure

The question asks you to consider the logic of the author’s word choice. The previous two sentences discuss why the service improvement was a wasted investment. In contrast, the final sentence turns to the sole advantage of the service improvement, which is trivial by comparison. The author uses *only* to modify *merit* in order to emphasize the minimal nature of this advantage.

- A The passage does not indicate that the service improvement is somehow strange or peculiar.
- B Correct.** *Only* emphasizes the low value attached to the single benefit.
- C No attributes of the service improvement are mentioned.
- D *Only* signifies that there was one sole merit of the service improvement.
- E The duration of the benefit is not discussed in the passage.

The correct answer is B.

Questions 56–60 refer to the passage on page 42.

56. According to the passage, before the final results of the study were known, which of the following seemed likely?
- (A) That workers with the highest productivity would also be the most accurate
 - (B) That workers who initially achieved high productivity ratings would continue to do so consistently
 - (C) That the highest performance ratings would be achieved by workers with the highest productivity
 - (D) That the most productive workers would be those whose supervisors claimed to value productivity
 - (E) That supervisors who claimed to value productivity would place equal value on customer satisfaction

Supporting ideas

The phrase *according to the passage* indicates that the answer is stated in the passage. Only lines 17–20 refer to the expected outcome of the study: *there should have been a strong correlation between a monitored worker’s productivity and the overall rating the worker received.*

- A The passage does not state a prediction linking productivity with accuracy.
- B No prediction is stated that workers rated highly productive would remain so.
- C Correct.** It was expected that the most productive workers would be the most highly rated.
- D The passage does not state such a prediction.
- E The passage makes no such prediction.

The correct answer is C.

57. It can be inferred that the author of the passage discusses “unmonitored workers” (line 11) primarily in order to
- (A) compare the ratings of these workers with the ratings of monitored workers
 - (B) provide an example of a case in which monitoring might be effective
 - (C) provide evidence of an inappropriate use of CPMCS
 - (D) emphasize the effect that CPMCS may have on workers’ perceptions of their jobs
 - (E) illustrate the effect that CPMCS may have on workers’ ratings

Inference

An inference is drawn from stated information. Go to the specific line reference in the question to find the reason that the author included the detail about unmonitored workers. Unmonitored workers are compared with monitored workers on a single point: what they believe to be the most important element of their job (and thus of their ratings). While unmonitored workers believe it is customer service, monitored workers point to productivity. The logical inference from the information given is that the author is using this contrast to show that CPMCS affect how workers think about their jobs.

- A Unmonitored workers’ ratings are not discussed in the passage.
- B The passage does not link unmonitored workers with a potentially effective use of monitoring.
- C The passage does not connect unmonitored workers with inappropriate uses of CPMCS.
- D Correct.** The contrast in the workers’ responses demonstrates that CPMCS may influence how workers think about their jobs.
- E The passage does not connect unmonitored workers with the effect of CPMCS on workers’ ratings.

The correct answer is D.

58. Which of the following, if true, would most clearly have supported the conclusion referred to in lines 22–25?
- (A) Ratings of productivity correlated highly with ratings of both accuracy and attendance.
 - (B) Electronic monitoring greatly increased productivity.
 - (C) Most supervisors based overall ratings of performance on measures of productivity alone.
 - (D) Overall ratings of performance correlated more highly with measures of productivity than the researchers expected.
 - (E) Overall ratings of performance correlated more highly with measures of accuracy than with measures of productivity.

Logical structure

To answer this question, look at the actual conclusion of the study: in rating workers’ performances, *supervisors gave considerable weight to . . . attendance, accuracy, and indications of customer satisfaction*. What additional piece of information would support this conclusion? If one of these three criteria mattered as much as or more than productivity in assessing workers’ performances, then the conclusion would be strengthened. Thus, the supervisors’ overall performance ratings should correlate with measures of attendance, accuracy, or customer service to at least the same extent that they correlate with measures of productivity.

- A The conclusion is about the value supervisors place on criteria other than productivity, so a finding about productivity is irrelevant to the conclusion.
- B Increased productivity is not relevant to the conclusion, which concerns other criteria in performance assessment.
- C This statement contradicts the conclusion that supervisors value other criteria.
- D This statement contradicts the conclusion stated in lines 22–25.
- E Correct.** The conclusion is strengthened when measures of accuracy, one of the three criteria supervisors consider other than productivity, correlate with overall performance ratings more highly than measures of productivity do.

The correct answer is E.

59. According to the passage, a “hygiene factor” (line 27) is an aspect of a worker’s performance that
- (A) has no effect on the rating of a worker’s performance
 - (B) is so basic to performance that it is assumed to be adequate for all workers
 - (C) is given less importance than it deserves in rating a worker’s performance
 - (D) is not likely to affect a worker’s rating unless it is judged to be inadequate
 - (E) is important primarily because of the effect it has on a worker’s rating

Supporting ideas

The phrase *according to the passage* indicates that the answer is explicitly stated in the passage. By putting *hygiene factor* in quotation marks, the author is calling attention to the expression, which is explained in lines 27–31. A “*hygiene factor*” is a criterion in assessing job performance that hurts the overall rating if it is too low, but that does not improve the rating beyond a certain point.

- A If too low, a “*hygiene factor*” affects the rating negatively (lines 27–28).
- B Because the “*hygiene factor*” can affect the rating, it is not assumed to be uniformly adequate.
- C The passage does not provide enough information to make this determination.
- D Correct.** When low, the “*hygiene factor*” may affect workers’ overall ratings negatively, but when high, it does not affect the ratings beyond a certain point.
- E The passage does not assert that the primary importance of the “*hygiene factor*” is its effect on ratings.

The correct answer is D.

60. The primary purpose of the passage is to
- (A) explain the need for the introduction of an innovative strategy
 - (B) discuss a study of the use of a particular method
 - (C) recommend a course of action
 - (D) resolve a difference of opinion
 - (E) suggest an alternative approach

Main idea

To answer this question, look at the entire passage. What is its main point? It begins by explaining the use of CPMCS in some companies, and then it shows that a study of employees being monitored by CPMCS revealed unexpected results. The rest of the passage discusses the study.

- A The passage reports rather than argues; it does not explain the need for a strategy.
- B Correct.** The passage presents a method of recording workers’ activities, CPMCS, and then reports the findings of a study of this method.
- C The passage describes a study of a method; it does not recommend a course of action.
- D The passage provides study results, not conflicting opinions.
- E No alternative to CPMCS is discussed in the passage.

The correct answer is B.

Questions 61–63 refer to the passage on page 44.

61. The primary purpose of the passage is to
- (A) refute the idea that the zonation exhibited in mangrove forests is caused by adaptation to salinity
 - (B) describe the pattern of zonation typically found in Florida mangrove forests
 - (C) argue that Davis' succession paradigm cannot be successfully applied to Florida mangrove forests
 - (D) discuss hypotheses that attempt to explain the zonation of coastal mangrove forests
 - (E) establish that plants that do well in saline forest environments require salt to achieve maximum metabolic efficiency

Main idea

Look at the passage as a whole in order to find the passage's primary purpose. The first paragraph discusses zonation and species distribution in mangrove forests. The second paragraph presents Davis' theory that zonation is caused by plant succession. The third paragraph discusses a challenge to Davis' theory. The final paragraph presents research on salinity tolerance and zonation in mangrove forests. The passage as a whole is concerned with different explanations of zonation in mangrove forests.

- A The fourth paragraph discusses the relation of salinity and zonation, but the passage does not refute this idea. Since this idea is only discussed in one paragraph, it cannot be the primary concern of the whole passage.
- B Zonation is described in the first paragraph, but the passage's primary interest is in the possible causes of zonation.
- C The third paragraph shows that Davis' paradigm applies to some mangrove forests but not to those on stable coastlines.
- D **Correct.** The passage's primary purpose, as expressed throughout, is looking at different explanations of the causes of zonation in mangrove forests.
- E Salinity is discussed in the final paragraph, but the passage states that salt is not required. The brief discussion of this point shows that it is not the primary concern of the passage.

The correct answer is D.

62. According to the passage, the earliest research on mangrove forests produced which of the following?
- (A) Data that implied random patterns of mangrove species distribution
 - (B) Descriptions of species distributions suggesting zonation
 - (C) Descriptions of the development of mangrove forests over time
 - (D) Reclassification of species formerly thought to be identical
 - (E) Data that confirmed the "land-building" role of mangroves

Supporting ideas

As indicated by the phrase *according to the passage*, this question is based on factual information stated in the passage. Lines 5–8 describe the *earliest research on mangrove forests*. This research *produced descriptions of species distribution from shore to land*. This shore-to-land pattern is described as "zonal" in the first sentence.

- A The passage suggests that the distribution was not random.
- B **Correct.** The description of the species distribution goes from shore to land, fitting the definition of "zonal" in the first sentence.
- C The passage does not indicate that the earliest research looked at mangrove forest development over time.
- D There is no evidence that the earliest research involved reclassification.
- E The earliest research produced only descriptions; the land-building theory came later.

The correct answer is B.

63. It can be inferred from the passage that Davis' paradigm does NOT apply to which of the following?
- (A) The shoreline of Florida mangrove forests first studied by Davis
 - (B) A shoreline in an area with weak currents
 - (C) A shoreline in an area with weak tidal energy
 - (D) A shoreline extended by "land-building" species of mangroves
 - (E) A shoreline in which few sediments can accumulate

Application

To answer this question, apply Davis' paradigm to the situations in the answer choices. One situation will NOT fit the paradigm. According to Davis, the shoreline is extended seaward because of *the "land-building" role of mangroves* (lines 12–14). The third paragraph describes the circumstances favorable to the land-building process: weak currents, weak tidal energies, and the accumulation of sediments. In the absence of these conditions, land-building would not occur.

- A Since this is the area from which Davis drew his conclusions, it obviously fits the paradigm.
- B Weak currents favor the land-building paradigm.
- C Weak tidal energies favor the land-building paradigm.
- D If land-building has occurred, then the paradigm describing that land-building applies.
- E **Correct.** If few sediments can accumulate, land-building is NOT able to occur.

The correct answer is E.

Questions 64–70 refer to the passage on page 46.

64. The primary purpose of the passage is to
- (A) review research demonstrating the benefits of corporate mergers and acquisitions and examine some of the drawbacks that acquisition behavior entails
 - (B) contrast the effects of corporate mergers and acquisitions on acquiring firms and on firms that are acquired
 - (C) report findings that raise questions about a reason for corporate mergers and acquisitions and suggest possible alternative reasons
 - (D) explain changes in attitude on the part of acquiring firms toward corporate mergers and acquisitions
 - (E) account for a recent decline in the rate of corporate mergers and acquisitions

Main idea

This question requires understanding what the passage as a whole is trying to do. The passage begins by citing three studies that demonstrate that when firms acquire other firms, there is not necessarily a worthwhile economic gain. The passage then cites economic interests as the reason given by firms when they acquire other firms but calls into question the veracity of this reasoning. The passage then goes on to speculate as to why mergers and acquisitions occur.

- A The research cited in the passage calls into question whether mergers and acquisitions are beneficial to firms.
- B The passage is not concerned with comparing the relative effects of mergers and acquisitions on the acquired and acquiring firms.
- C **Correct.** The passage surveys reports that question the reasons given by firms when they acquire other firms and suggests other reasons for these acquisitions.
- D The passage does not indicate that there has been a change in the attitude of acquiring firms toward mergers and acquisitions.
- E The passage does not indicate that there has been a decline in the rate of mergers and acquisitions.

The correct answer is C.

65. The findings cited in the passage suggest which of the following about the outcomes of corporate mergers and acquisitions with respect to acquiring firms?

- (A) They include a decrease in value of many acquiring firms' stocks.
- (B) They tend to be more beneficial for small firms than for large firms.
- (C) They do not fulfill the professed goals of most acquiring firms.
- (D) They tend to be beneficial to such firms in the long term even though apparently detrimental in the short term.
- (E) They discourage many such firms from attempting to make subsequent bids and acquisitions.

Inference

Answering this question requires recognizing what is inferable from information given in the passage. The passage begins by citing three studies that show that mergers and acquisitions often harm the economic goals of acquiring firms. The passage also indicates that, nonetheless, acquiring firms *continue to assert that their objectives are economic ones* (lines 15–16), suggesting that the goals of these firms are not met by acquiring other firms.

- A The passage suggests that the stock of acquiring firms *tends to increase in value* (lines 12–13), albeit less than the firm it acquires.
- B The three studies cited in the passage do contrast the effects of corporate mergers on acquiring firms and on acquired firms, but the effects in question are significant only insofar as they contribute to the wider investigation into why mergers take place at all.
- C **Correct.** The passage indicates that even while acquiring firms cite economic goals, the results of the studies indicate that these goals are not being met.
- D The passage makes no comparison between the long-term and short-term gains of acquiring firms.
- E The passage does not indicate that firms have been affected by the results of the studies cited.

The correct answer is C.

66. It can be inferred from the passage that the author would be most likely to agree with which of the following statements about corporate acquisitions?

- (A) Their known benefits to national economies explain their appeal to individual firms during the 1970s and 1980s.
- (B) Despite their adverse impact on some firms, they are the best way to channel resources from less to more productive sectors of a nation's economy.
- (C) They are as likely to occur because of poor monitoring by boards of directors as to be caused by incentive compensation for managers.
- (D) They will be less prevalent in the future, since their actual effects will gain wider recognition.
- (E) Factors other than economic benefit to the acquiring firm help to explain the frequency with which they occur.

Inference

This question requires understanding what view the author has about a particular issue. The three studies cited by the passage all suggest that mergers and acquisitions do not necessarily bring economic benefit to the acquiring firms. The author concludes therefore that *factors having little to do with corporate economic interests explain acquisitions* (lines 23–24) and then goes on to speculate as to what the reasons may actually be.

- A The passage indicates that while mergers and acquisitions may benefit the national economy, the appeal of mergers and acquisitions must be tied to companies' *private economic interests* (lines 19–22).
- B The passage makes no judgment as to the best way for firms to help channel resources from less to more efficient economic sectors.
- C The passage makes no comparison between the influence of poor monitoring by boards and that of executive incentives.
- D The passage makes no prediction as to future trends in the market for mergers and acquisitions.
- E **Correct.** The passage states that factors other than economic interests drive mergers and acquisitions.

The correct answer is E.

67. The author of the passage mentions the effect of acquisitions on national economies most probably in order to
- (A) provide an explanation for the mergers and acquisitions of the 1970s and 1980s overlooked by the findings discussed in the passage
 - (B) suggest that national economic interests played an important role in the mergers and acquisitions of the 1970s and 1980s
 - (C) support a noneconomic explanation for the mergers and acquisitions of the 1970s and 1980s that was cited earlier in the passage
 - (D) cite and point out the inadequacy of one possible explanation for the prevalence of mergers and acquisitions during the 1970s and 1980s
 - (E) explain how modeling affected the decisions made by managers involved in mergers and acquisitions during the 1970s and 1980s

Evaluation

This question requires understanding why a piece of information is included in the passage. After the passage cites the results of the three studies on mergers and acquisitions, which call into question the economic benefits of acquisitions, it indicates that firms nonetheless claim that their objectives are economic. The passage then states that while acquisitions *may well have* a desirable effect on national economies (lines 17–19), the results of the studies suggest that factors other than economic interest must drive executives to arrange mergers and acquisitions.

- A The passage does not mention national economies as part of an explanation for the occurrence of mergers and acquisitions.
- B The passage suggests that the effect of acquisitions on national economies is not tied to any explanations for why acquisitions occur.
- C The effect of acquisitions on national economies is not mentioned in the passage as an explanation for why acquisitions occur.
- D **Correct.** The passage uses the mention of national economies as part of a larger point questioning the stated motivations behind firms' efforts to acquire other firms.

- E In the passage, modeling is unrelated to the idea that acquisitions may have a desirable effect on national economies.

The correct answer is D.

68. According to the passage, during the 1970s and 1980s bidding firms differed from the firms for which they bid in that bidding firms
- (A) tended to be more profitable before a merger than after a merger
 - (B) were more often concerned about the impact of acquisitions on national economies
 - (C) were run by managers whose actions were modeled on those of other managers
 - (D) anticipated greater economic advantages from prospective mergers
 - (E) experienced less of an increase in stock value when a prospective merger was announced

Supporting ideas

This question requires recognizing information contained in the passage. In lines 10–14, the passage describes the findings of the third study of mergers and acquisitions in the 1970s and 1980s. This study found that, after the announcement of a possible merger, the stock value of an acquiring, or bidding, firm increases much less than the stock value of the firm for which it is in the process of bidding.

- A The passage does not indicate whether the profitability of acquiring firms tended to be greater or less after a merger.
- B The passage does not indicate that acquiring firms were concerned about the impact of their actions on national economies.
- C The passage does not mention the actions of managers at firms that are being acquired.
- D The passage does not discuss whether acquiring firms tended to expect greater overall economic gains than actually occurred.
- E **Correct.** The passage indicates that the stock value of acquiring firms grew less than that of the firms they were attempting to acquire.

The correct answer is E.

69. According to the passage, which of the following was true of corporate acquisitions that occurred during the 1970s and 1980s?
- (A) Few of the acquisitions that firms made were subsequently divested.
 - (B) Most such acquisitions produced only small increases in acquired firms' levels of profitability.
 - (C) Most such acquisitions were based on an overestimation of the value of target firms.
 - (D) The gains realized by most acquiring firms did not equal the amounts expended in acquiring target firms.
 - (E) About half of such acquisitions led to long-term increases in the value of acquiring firms' stocks.

Supporting ideas

This question requires recognizing information contained in the passage. The passage reports on three studies of mergers and acquisitions in the 1970s and 1980s. In lines 7–10, the passage indicates that the second study found that the postacquisition gains to most of the acquiring firms did not offset, or at least equal, the price paid to acquire the firms.

- A The passage does not discuss post-acquisition divesting.
- B The passage indicates that on average, the profitability of acquired firms fell after being acquired (lines 5–7).
- C The passage does not indicate whether most acquiring firms overestimated the value of the firms they acquired.
- D **Correct.** The passage states that for most acquiring firms the costs of buying the acquired firm were greater than the gains derived from acquiring it.
- E The passage does not indicate what percentage of acquiring firms, if any, experienced long-term gains in their stock value.

The correct answer is D.

70. The author of the passage implies that which of the following is a possible partial explanation for acquisition behavior during the 1970s and 1980s?
- (A) Managers wished to imitate other managers primarily because they saw how financially beneficial other firms' acquisitions were.
 - (B) Managers miscalculated the value of firms that were to be acquired.
 - (C) Lack of consensus within boards of directors resulted in their imposing conflicting goals on managers.
 - (D) Total compensation packages for managers increased during that period.
 - (E) The value of bidding firms' stock increased significantly when prospective mergers were announced.

Inference

This question requires recognizing what can be inferred from the information in the passage. After providing the results of the studies of mergers and acquisitions, the author concludes that even though acquiring firms state that their objectives are economic, factors having little to do with corporate economic interests explain acquisitions (lines 22–24). Among alternative explanations, the author points to managerial error in estimating the value of firms targeted for acquisition (lines 27–28) as possibly contributing to acquisition behavior in the 1970s and 1980s.

- A While the passage indicates that managers may have modeled their behavior on other managers, it does not provide a reason for why this would be so.
- B **Correct.** The author states that one explanation for acquisition behavior may be that managers erred when they estimated the value of firms being acquired.
- C The author discusses a lack of monitoring by boards of directors but makes no mention of consensus within these boards.
- D The author does not discuss compensation packages for managers.
- E The passage does not state how significantly the value of the bidding firm's stock increased upon announcing a merger but only that it increased less in value than did the stock of the prospective firm being acquired.

The correct answer is B.

Questions 71–76 refer to the passage on page 48.

71. The primary purpose of the passage is to
- (A) discuss a plan for investigation of a phenomenon that is not yet fully understood
 - (B) present two explanations of a phenomenon and reconcile the differences between them
 - (C) summarize two theories and suggest a third theory that overcomes the problems encountered in the first two
 - (D) describe an alternative hypothesis and provide evidence and arguments that support it
 - (E) challenge the validity of a theory by exposing the inconsistencies and contradictions in it

Main idea

Examining the structure of the whole passage helps to identify the passage's primary purpose or main idea. The first two paragraphs introduce a recent hypothesis about how caffeine affects behavior. The third paragraph looks at an earlier, widely accepted theory and then presents the objections to it made by the scientists proposing the more recent hypothesis. The fourth and fifth paragraphs provide evidence to support the newer hypothesis. Since most of the passage is devoted to the recent hypothesis, clearly the primary purpose must be to present that hypothesis to readers.

- A The passage discusses a current investigation, not one planned for the future.
- B The passage examines two explanations, but the earlier theory is discussed only to expose its weakness and the differences between the explanations are not reconciled. Most of the passage is devoted to the more recent hypothesis.
- C Only two theories are presented in the passage.
- D **Correct.** The recent hypothesis provides an alternative to an earlier one and is supported by evidence and arguments.
- E Lines 32–37 do pose such a challenge to the earlier theory; however, the challenge is a small part of the whole passage. Similarly, in the final paragraph, an exception to the more recent theory is introduced, only to be dismissed as an unimportant concern.

The correct answer is D.

72. According to Snyder et al., caffeine differs from adenosine in that caffeine
- (A) stimulates behavior in the mouse and in humans, whereas adenosine stimulates behavior in humans only
 - (B) has mixed effects in the brain, whereas adenosine has only a stimulatory effect
 - (C) increases cyclic AMP concentrations in target neurons, whereas adenosine decreases such concentrations
 - (D) permits release of neurotransmitters when it is bound to adenosine receptors, whereas adenosine inhibits such release
 - (E) inhibits both neuron firing and the production of phosphodiesterase when there is a sufficient concentration in the brain, whereas adenosine inhibits only neuron firing

Supporting ideas

To answer this question, look for the section in the passage that discusses adenosine and caffeine. The first paragraph leads the reader through how adenosine (lines 7–11) and caffeine (lines 4–7) work in the brain, according to Snyder et al. Adenosine *depresses neuron firing by inhibiting the release of neurotransmitters*; it is able to achieve this by binding to *specific receptors on neuronal membranes*. Caffeine interrupts this process by binding to the receptors, which prevents adenosine from attaching to them, and the neurons then *fire more readily than they otherwise would* (lines 17–21).

- A The passage does not suggest that adenosine stimulates behavior.
- B While the final paragraph reveals that caffeine displays mixed effects, the passage does not state that adenosine has a stimulatory effect.
- C Increasing cyclic AMP concentrations is part of the earlier theory, not that of Snyder et al.
- D **Correct.** Lines 17–21 explain that caffeine binds to the receptors, releasing neurotransmitters, whereas adenosine hinders that release.
- E Inhibiting the production of phosphodiesterase is discussed in the earlier theory, not in the work of Snyder et al.

The correct answer is D.

73. In response to experimental results concerning IBMX, Snyder et al. contended that it is not uncommon for psychoactive drugs to have
- (A) mixed effects in the brain
 - (B) inhibitory effects on enzymes in the brain
 - (C) close structural relationships with caffeine
 - (D) depressive effects on mouse locomotion
 - (E) the ability to dislodge caffeine from receptors in the brain

Supporting ideas

To answer this question, look at the last paragraph, which discusses the effects of IBMX. This compound binds to the adenosine receptors, but instead of acting as a stimulant as other caffeine derivatives do, it was found to depress locomotion in mice. Snyder et al. explain that IBMX *has mixed effects in the brain, a not unusual occurrence with psychoactive drugs* (lines 58–60).

- A **Correct.** The results of one experiment can be explained by *mixed effects in the brain*, which Snyder et al. say may occur with psychoactive drugs.
- B This response refers back to the earlier theory, not to Snyder et al.'s response concerning IBMX experiment results.
- C Caffeine is only included within the broad category of psychoactive drugs.
- D This effect is attributed to one compound, IBMX, not to all psychoactive drugs.
- E This ability is not discussed in the passage.

The correct answer is A.

74. According to Snyder et al., all of the following compounds can bind to specific receptors in the brain EXCEPT
- (A) IBMX
 - (B) caffeine
 - (C) adenosine
 - (D) theophylline
 - (E) phosphodiesterase

Supporting ideas

This question asks the reader to rule out all the possibilities discussed in the text, leaving the single exception. The first paragraph explains that

both adenosine and caffeine bind to receptors in the brain. The third paragraph attests to the ability of theophylline to bind to the receptors. The last paragraph describes IBMX as a compound that binds to adenosine receptors. Thus, the exception has to be the enzyme phosphodiesterase.

- A Lines 54–55 state that IBMX binds to receptors.
- B Lines 17–19 state that caffeine binds to receptors.
- C Lines 13–14 state that adenosine binds to receptors.
- D Lines 46–50 state that theophylline binds to receptors.
- E **Correct.** The passage includes no evidence that phosphodiesterase binds to receptors.

The correct answer is E.

75. Snyder et al. suggest that caffeine's ability to bind to A₁ and A₂ receptors can be at least partially attributed to which of the following?
- (A) The chemical relationship between caffeine and phosphodiesterase
 - (B) The structural relationship between caffeine and adenosine
 - (C) The structural similarity between caffeine and neurotransmitters
 - (D) The ability of caffeine to stimulate behavior
 - (E) The natural occurrence of caffeine and adenosine in the brain

Supporting ideas

This question asks the reader to find information that is suggested but not directly stated in the passage. The A₁ and A₂ receptors are mentioned in line 16, so look at the surrounding material. Snyder et al. propose that caffeine, *which is structurally similar to adenosine*, binds to both types of receptors, just as adenosine does. Caffeine's ability to bind to these receptors may be due to this structural similarity to adenosine.

- A Phosphodiesterase is discussed in an entirely different context in lines 22–25.
- B **Correct.** Lines 17–19 suggest that caffeine's structural similarity to adenosine may be responsible for its ability to bind to A₁ and A₂ receptors.

- C Caffeine acts on neurotransmitters; it is not structurally similar to them.
- D Caffeine's ability to stimulate behavior results from, rather than causes, this process.
- E The passage does not discuss the natural occurrence of these compounds.

The correct answer is B.

76. The author quotes Snyder et al. in lines 43–48 most probably in order to
- (A) reveal some of the assumptions underlying their theory
 - (B) summarize a major finding of their experiments
 - (C) point out that their experiments were limited to the mouse
 - (D) indicate that their experiments resulted only in general correlations
 - (E) refute the objections made by supporters of the older theory

Logical structure

To find the reason that the author quotes Snyder et al., examine the fourth paragraph, where the quotation appears. The paragraph starts with evidence supporting the new hypothesis on the basis of experiments with mice. The quotation then begins with the phrase *in general*, which implies a summary of the results of the work with mice. The quoted material explains that the more the compounds were able to bind to the receptors, the greater the stimulatory effect. This major finding supports the hypothesis.

- A The quotation explains results of an experiment, not assumptions about a theory.
- B Correct.** The quotation summarizes the experiment with mice and reports a major finding in support of the hypothesis.
- C The quotation generalizes on the basis of the experiment; it does not limit the finding to mice.
- D Specific, not general, correlations were made between the ability to bind to receptors and to stimulate locomotion.
- E The passage includes no such objections; therefore no refutations are needed.

The correct answer is B.

Questions 77–84 refer to the passage on page 50.

77. According to the passage, job segregation by sex in the United States was
- (A) greatly diminished by labor mobilization during the Second World War
 - (B) perpetuated by those textile-mill owners who argued in favor of women's employment in wage labor
 - (C) one means by which women achieved greater job security
 - (D) reluctantly challenged by employers except when the economic advantages were obvious
 - (E) a constant source of labor unrest in the young textile industry

Supporting ideas

The question uses the phrase *according to the passage*, indicating that the answer is based on information stated in the passage. The second paragraph explains that *a prevailing definition of femininity* often dictates what jobs are given to women. For example, textile-mill owners used *hoary stereotypes associated with . . . homemaking activities* in order to justify their employment of women, claiming that *women were by nature skillful at detailed tasks and patient in carrying out repetitive chores*.

- A Just the reverse is true: Although some women were permitted to take “male” jobs during the Second World War, lines 45–47 show that *job segregation by sex characterized even the most important war industries*.
- B Correct.** Textile-mill owners exploited stereotypes about women and the work suited to them in order to justify employing them as wage laborers.
- C Many “female” jobs were *less secure* (lines 35–36).
- D No information in the passage leads to this conclusion; in fact, employers showed little interest in challenging job segregation *even when higher profits beckoned* (lines 40–42).
- E Labor unrest among textile-mill workers is not discussed.

The correct answer is B.

78. According to the passage, historians of women's labor focused on factory work as a more promising area of research than service-sector work because factory work

- (A) involved the payment of higher wages
- (B) required skill in detailed tasks
- (C) was assumed to be less characterized by sex segregation
- (D) was more readily accepted by women than by men
- (E) fit the economic dynamic of industrialism better

Supporting ideas

The phrase *according to the passage* indicates that the answer is stated in the passage. Look at the first paragraph, which discusses historians of women's labor. These historians disregarded service work in favor of factory work not only because factory work differed from traditional "*women's work*," but also because the *forces of industrialism were presumed to be gender-blind* (lines 8–10).

- A The passage does not indicate that historians studied factory workers because of higher wages.
- B The passage gives no evidence that historians chose this research area for this reason.
- C **Correct.** The passage indicates that the historians chose this research area because they assumed that sex segregation was less prevalent in factory work than in service-sector work.
- D Although the passage states that women accepted factory work more readily than did men, this difference is not cited in the passage as the reason historians focused on factory work.
- E Factory work may have fit the dynamic of industrialism better, but this is not the reason the passage gives for the historians' choice.

The correct answer is C.

79. It can be inferred from the passage that early historians of women's labor in the United States paid little attention to women's employment in the service sector of the economy because

- (A) the extreme variety of these occupations made it very difficult to assemble meaningful statistics about them
- (B) fewer women found employment in the service sector than in factory work
- (C) the wages paid to workers in the service sector were much lower than those paid in the industrial sector
- (D) women's employment in the service sector tended to be much more short-term than in factory work
- (E) employment in the service sector seemed to have much in common with the unpaid work associated with homemaking

Inference

Since this question asks for an inference, the answer is not directly stated in the passage; it must instead be derived from the information given. To answer this question, look at what the first paragraph says about the historians' focus on factory work. The historians *disregarded* service work and *focused instead on factory work* in part because *it seemed so different from traditional, unpaid "women's work" in the home* (lines 5–8). Since the two kinds of work are explicitly contrasted, it is reasonable to infer that what is not true of factory work is true of service work; service work is similar to *traditional, unpaid "women's work" in the home*.

- A No mention of statistics is made in the passage and service-sector jobs are not characterized as extremely various.
- B The numbers of women in each kind of work are not compared.
- C Wages earned in the two kinds of work are not compared.
- D Duration of employment in the two kinds of work is not compared.
- E **Correct.** Historians disregarded service work because it was similar to unpaid "*women's work*" in the home.

The correct answer is E.

80. The passage supports which of the following statements about the early mill owners mentioned in the second paragraph?
- (A) They hoped that by creating relatively unattractive “female” jobs they would discourage women from losing interest in marriage and family life.
 - (B) They sought to increase the size of the available labor force as a means to keep men’s wages low.
 - (C) They argued that women were inherently suited to do well in particular kinds of factory work.
 - (D) They thought that factory work bettered the condition of women by emancipating them from dependence on income earned by men.
 - (E) They felt guilty about disturbing the traditional division of labor in the family.

Supporting ideas

The second paragraph discusses the assumptions and actions of the mill owners. To answer this question, look for a perspective or action that the paragraph explicitly supports. The mill owners accepted and perpetuated the stereotypes of women, including their supposed greater attention to detail and patience with repetitive tasks, and thus argued that women were inherently (*by nature*) suited to the work in a textile mill.

- A The passage states that the mill owners *assumed that women’s “real” aspirations were for marriage and family life*, which they used as an excuse to pay women less.
- B The passage does not say that mill owners tried to keep men’s wages low.
- C **Correct.** The mill owners contended that certain factory work was suitable to a woman’s alleged patient, detail-oriented nature.
- D The passage does not credit mill owners with trying to emancipate women.
- E There is no indication in the passage that the mill owners felt any guilt.

The correct answer is C.

81. It can be inferred from the passage that the “unfinished revolution” the author mentions in line 15 refers to the
- (A) entry of women into the industrial labor market
 - (B) recognition that work done by women as homemakers should be compensated at rates comparable to those prevailing in the service sector of the economy
 - (C) development of a new definition of femininity unrelated to the economic forces of industrialism
 - (D) introduction of equal pay for equal work in all professions
 - (E) emancipation of women wage earners from gender-determined job allocation

Inference

An inference requires going beyond the material explicitly stated in the passage to the author’s ideas that underlie that material. To understand this reference, it is first necessary to analyze its context. The first paragraph explains that historians focused on factory work on the assumption that it was *gender-blind* and *emancipatory in effect*. However, the paragraph concludes, *emancipation has been less profound than expected, for not even industrial wage labor has escaped continued sex segregation in the workplace* (lines 11–14). The phrase *this unfinished revolution* occurs in the next sentence, and it refers back to *continued sex segregation in the workplace*. Here the passage implies that the author believes the revolution is unfinished because jobs are still allocated to women on the basis of their sex.

- A The first paragraph has established that women are already in the industrial workforce; this is not unfinished, even if women were excluded from some jobs during the Second World War.
- B Compensation for work at home is not discussed in the passage.
- C The only definition of femininity referred to in the passage is said to determine the kinds of jobs available to women.
- D Equal pay for equal work is not addressed in the passage.
- E **Correct.** The *unfinished revolution* refers to an emancipation that is incomplete because job segregation on the basis of sex continues.

The correct answer is E.

82. The passage supports which of the following statements about hiring policies in the United States?
- (A) After a crisis many formerly “male” jobs are reclassified as “female” jobs.
 - (B) Industrial employers generally prefer to hire women with previous experience as homemakers.
 - (C) Post–Second World War hiring policies caused women to lose many of their wartime gains in employment opportunity.
 - (D) Even war industries during the Second World War were reluctant to hire women for factory work.
 - (E) The service sector of the economy has proved more nearly gender-blind in its hiring policies than has the manufacturing sector.

Supporting ideas

Review each answer choice to see if it is explicitly supported by information in the passage. The last sentence of the passage states that, once the Second World War was over, men returned to take the “male” jobs that women had been temporarily allowed to master. Thus, the gains women had been allowed to make during the war (despite continued job segregation) were lost to them after men returned to work.

- A The last paragraph shows that after the Second World War, “male” jobs that had been held by women during the war were returned to men.
- B The passage does not mention industrial employers’ preferences for women with homemaking experience.
- C **Correct.** After the Second World War, women lost many employment opportunities that had been available to them during the war.
- D The passage says that job segregation persisted during the Second World War, but it does not indicate that those industries were reluctant to hire women.
- E No comparison is made in the passage to support this conclusion.

The correct answer is C.

83. Which of the following words best expresses the opinion of the author of the passage concerning the notion that women are more skillful than men in carrying out detailed tasks?
- (A) “patient” (line 24)
 - (B) “repetitive” (line 24)
 - (C) “hoary” (line 26)
 - (D) “homemaking” (line 27)
 - (E) “purview” (line 28)

Inference

This question asks the reader to make an inference about the author’s attitude. Word choice may reveal attitude, as it does here when the author describes the *hoary stereotypes* about women that mill owners perpetuated. *Hoary* means old—literally white with age—and so the stereotypes are being dismissed by the author as old-fashioned, even obsolete.

- A The mill owners stereotyped women as *patient*; this does not express the author’s opinion.
- B Mill owners claimed that women were suited to *repetitive* work; this does not express the author’s opinion.
- C **Correct.** *Hoary* carries with it a judgment, suggesting that the mill owners’ stereotypes are impossibly antiquated.
- D *Homemaking* describes activities but does not reveal the author’s opinion.
- E *Purview* simply means a range or a scope; it does not reveal an opinion.

The correct answer is C.

84. Which of the following best describes the relationship of the final paragraph to the passage as a whole?
- (A) The central idea is reinforced by the citation of evidence drawn from twentieth-century history.
 - (B) The central idea is restated in such a way as to form a transition to a new topic for discussion.
 - (C) The central idea is restated and juxtaposed with evidence that might appear to contradict it.
 - (D) A partial exception to the generalizations of the central idea is dismissed as unimportant.
 - (E) Recent history is cited to suggest that the central idea's validity is gradually diminishing.

Logical structure

Consider the final paragraph in the context of the whole passage to evaluate its relationship to the whole. The first two paragraphs examine job segregation in an unspecified but earlier time. The final paragraph brings the reader into the twentieth century, when, as the example drawn from the Second World War shows, job segregation persisted. Thus, the final paragraph updates and reinforces the author's thesis about the persistence of job segregation.

- A **Correct.** The central idea that sex segregation continued in the twentieth-century workplace is reinforced with an example from the Second World War.
- B The central idea is the persistence of job segregation, which is the only topic in the paragraph.
- C The last paragraph supports the passage; no apparently contradictory evidence is introduced.
- D The last paragraph supports the central idea with a twentieth-century example; no exceptions are either entertained or dismissed.
- E Twentieth-century history is cited to support the central idea, not to show that its validity is diminishing.

The correct answer is A.

Questions 85–90 refer to the passage on page 52.

85. The author of the passage alludes to the well-established nature of the concept of individual rights in the Anglo-Saxon legal and political tradition in order to
- (A) illustrate the influence of individualist feminist thought on more general intellectual trends in English history
 - (B) argue that feminism was already a part of the larger Anglo-Saxon intellectual tradition, even though this has often gone unnoticed by critics of women's emancipation
 - (C) explain the decline in individualist thinking among feminists in non-English-speaking countries
 - (D) help account for an increasing shift toward individualist feminism among feminists in English-speaking countries
 - (E) account for the philosophical differences between individualist and relational feminists in English-speaking countries

Logical structure

This question asks for the reason that the author has chosen to include the information about the Anglo-Saxon tradition in lines 24–28. The concept of individual rights was *well established* in this tradition, and that is the reason that *individualist feminism came to predominate in English-speaking countries*. Thus, this detail explains why feminists in English-speaking countries turned to individualist, rather than relational, feminism.

- A This statement reverses the order: the more general intellectual trends in English history influenced individualist feminism.
- B Feminism is not said to be a part of the Anglo-Saxon tradition.
- C While relational feminism is said to predominate among European and non-Western feminists, the passage offers no evidence of a decline in individualist feminism among these groups.
- D **Correct.** The author uses the information about individual rights and the Anglo-Saxon tradition to explain why individualist feminism predominated in English-speaking countries.

- E The Anglo-Saxon tradition is not said to account for all the philosophical differences between the two feminist traditions in English-speaking countries, but only for the fact that individualist feminism became predominant there.

The correct answer is D.

86. The passage suggests that the author of the passage believes which of the following?
- (A) The predominance of individualist feminism in English-speaking countries is a historical phenomenon, the causes of which have not yet been investigated.
- (B) The individualist and relational feminist views are irreconcilable, given their theoretical differences concerning the foundations of society.
- (C) A consensus concerning the direction of future feminist politics will probably soon emerge, given the awareness among feminists of the need for cooperation among women.
- (D) Political adversaries of feminism often misuse arguments predicated on differences between the sexes to argue that the existing social system should be maintained.
- (E) Relational feminism provides the best theoretical framework for contemporary feminist politics, but individualist feminism could contribute much toward refining and strengthening modern feminist thought.

Supporting ideas

To answer this question, look for an idea that the author explicitly supports in the passage. The first sentence of the last paragraph (lines 41–45) states that the relational feminists' argument—that women's biological role gives them a special (and undervalued) place in society—may be used by opponents of feminism to reinforce the existing dominance of men.

- A In lines 19–24, the author identifies one cause for the situation.
- B In lines 51–55, the author implies that a reconciliation might be possible, making this an overstatement.
- C The author does not suggest that consensus is likely to happen soon; cooperation is not discussed.

- D **Correct.** This statement is consistent with the view the author expressed in the third paragraph.

- E The last paragraph discusses the problems of both feminist traditions, but the author does not say one is better for contemporary feminist politics than the other.

The correct answer is D.

87. It can be inferred from the passage that the individualist feminist tradition denies the validity of which of the following causal statements?
- (A) A division of labor in a social group can result in increased efficiency with regard to the performance of group tasks.
- (B) A division of labor in a social group causes inequities in the distribution of opportunities and benefits among group members.
- (C) A division of labor on the basis of gender in a social group is necessitated by the existence of sex-linked biological differences between male and female members of the group.
- (D) Culturally determined distinctions based on gender in a social group foster the existence of differing attitudes and opinions among group members.
- (E) Educational programs aimed at reducing inequalities based on gender among members of a social group can result in a sense of greater well-being for all members of the group.

Inference

To make an inference about the individualist feminist tradition, begin by rereading the first paragraph, which sets forth the differing *modes of argumentation*. Relational feminism holds that the biological differences of the sexes must result in a division of labor based on those differences (lines 6–11). *By contrast*, individualist feminism downplays the importance of gender roles and attaches little importance to the biological function of childbearing (lines 11–16). Thus, it can be inferred that individualist feminists would disagree with the statement that biological differences should determine a gender-based division of labor in society.

- A The passage neither discusses increased efficiency nor implies that individualist feminists would reject it.

- B The passage does not indicate that individualist feminists would disagree with this statement.
- C **Correct.** This statement reflects the position of the relational feminists that the individualist feminists oppose; individualist feminists instead stress individual rights and personal autonomy.
- D The passage offers no evidence that individualist feminists would disagree with this statement.
- E Nothing in the passage indicates that individualist feminists would disagree with this statement.

The correct answer is C.

88. According to the passage, relational feminists and individualist feminists agree that
- (A) individual human rights take precedence over most other social claims
- (B) the gender-based division of labor in society should be eliminated
- (C) laws guaranteeing equal treatment for all citizens regardless of gender should be passed
- (D) a greater degree of social awareness concerning the importance of motherhood would be beneficial to society
- (E) the same educational and economic opportunities should be available to both sexes

Supporting ideas

This question asks for information that is explicitly stated in the passage in slightly different language. While the passage is largely devoted to the differences between the two feminist traditions, lines 30–34 indicate a point of convergence. Individualist feminists believe in *equal rights for all*. Relational feminists believe that *equal educational and economic opportunities* should be available to women.

- A Only individualist feminists believe that individual human rights are most important (lines 11–13).
- B Relational feminists do believe in a gender-based division of labor (lines 6–8).
- C Lines 30–37 show that relational feminists do not believe in gender-blind equal rights laws.

- D Only relational feminists believe in the importance of women's *special contributions to society* (lines 35–36).
- E **Correct.** Practitioners of both feminist traditions believe that equal educational and economic opportunities should be available to both sexes.

The correct answer is E.

89. According to the author, which of the following was true of feminist thought in Western societies before 1890?
- (A) Individualist feminist arguments were not found in the thought or writing of non-English-speaking feminists.
- (B) Individualist feminism was a strain in feminist thought, but another strain, relational feminism, predominated.
- (C) Relational and individualist approaches were equally prevalent in feminist thought and writing.
- (D) The predominant view among feminists held that the welfare of women was ultimately less important than the welfare of children.
- (E) The predominant view among feminists held that the sexes should receive equal treatment under the law.

Supporting ideas

To answer this question, look at what the author states in lines 17–24, where the years before and after 1890 are discussed. The second paragraph begins by explaining that the two feminist traditions *coexisted* up until the late nineteenth century, although relational feminism *had been the dominant strain in feminist thought*.

- A The passage states that relational feminism was *the dominant strain* of the two views that *coexisted*; thus, the individualist arguments existed before 1890.
- B **Correct.** Lines 20–21 explicitly state that relational feminism *had been the dominant strain in feminist thought* before 1890.
- C The passage shows that the two feminist traditions were not equally prevalent; relational feminism predominated.
- D No evidence in the passage supports this statement.
- E The passage does not show that most feminists before 1890 took this position.

The correct answer is B.

90. The author implies that which of the following was true of most feminist thinkers in England and the United States after 1920?
- (A) They were less concerned with politics than with intellectual issues.
 - (B) They began to reach a broader audience and their programs began to be adopted by mainstream political parties.
 - (C) They called repeatedly for international cooperation among women's groups to achieve their goals.
 - (D) They moderated their initial criticism of the economic systems that characterized their societies.
 - (E) They did not attempt to unite the two different feminist approaches in their thought.

Inference

Answering this question involves making an inference. Before 1890, the two feminist traditions *coexisted*. After 1920, *the goals of the two approaches began to seem increasingly irreconcilable* (lines 28–30). Lines 30–40 provide details on the differing and even opposing priorities of the relational feminists and individualist feminists. It is reasonable to infer that both feminist traditions pursued their own goals and did not try to reconcile the two different approaches in their work. The final paragraph reveals that the two feminist traditions continue to remain separate, although the author offers a possibility for their harmonization.

- A Individualist feminists advocated a *system with equal rights*, and relational feminists sought *protective legislation*, so it is clear both groups were politically active; the author does not imply that they were more interested in intellectual issues.
- B The passage offers no evidence to show broader or growing support for feminist ideas.
- C International cooperation is not discussed in the passage.
- D No information in the passage supports this statement.
- E **Correct.** As the goals of the two feminist traditions grew *increasingly irreconcilable*, feminists in England and the United States did not try to harmonize the two strains in their thinking.

The correct answer is E.

Questions 91–97 refer to the passage on page 54.

91. According to the passage, conventional spiral galaxies differ from low-surface-brightness galaxies in which of the following ways?
- (A) They have fewer stars than do low-surface-brightness galaxies.
 - (B) They evolve more quickly than low-surface-brightness galaxies.
 - (C) They are more diffuse than low-surface-brightness galaxies.
 - (D) They contain less helium than do low-surface-brightness galaxies.
 - (E) They are larger than low-surface-brightness galaxies.

Supporting ideas

This question requires recognizing information that is provided in the passage. The first paragraph describes and compares two types of galaxies: conventional galaxies and dim, or low-surface-brightness, galaxies. It states that dim galaxies have the same approximate number of stars as a common type of conventional galaxy but tend to be larger and more diffuse because their mass is spread over wider areas (lines 4–10). The passage also indicates that dim galaxies take longer than conventional galaxies to convert their primordial gases into stars, meaning that dim galaxies evolve much more slowly than conventional galaxies (lines 10–14), which entails that conventional galaxies evolve more quickly than dim galaxies.

- A The passage states that dim galaxies have approximately the same numbers of stars as a common type of conventional galaxy.
- B **Correct.** The passage indicates that dim galaxies evolve much more slowly than conventional galaxies, which entails that conventional galaxies evolve more quickly.
- C The passage states that dim galaxies are more spread out, and therefore more diffuse, than conventional galaxies.
- D The passage does not mention the relative amounts of helium in the two types of galaxies under discussion.
- E The passage states that dim galaxies tend to be much larger than conventional galaxies.

The correct answer is B.

92. It can be inferred from the passage that which of the following is an accurate physical description of typical low-surface-brightness galaxies?

- (A) They are large spiral galaxies containing fewer stars than do conventional galaxies.
- (B) They are compact but very dim spiral galaxies.
- (C) They are diffuse spiral galaxies that occupy a large volume of space.
- (D) They are small, young spiral galaxies that contain a high proportion of primordial gas.
- (E) They are large, dense spirals with low luminosity.

Inference

This question requires drawing an inference from information given in the passage. The first paragraph compares dim galaxies and conventional galaxies. Dim galaxies are described as having the same general shape (lines 4–5) as a common type of conventional galaxy, the spiral galaxy, suggesting that dim galaxies are, themselves, spiral shaped. The passage also indicates that, although both types of galaxies tend to have approximately the same number of stars, dim galaxies tend to be much larger and spread out over larger areas of space (lines 4–10) than conventional galaxies.

- A The passage states that the two types of galaxies have approximately the same number of stars.
- B The passage indicates that dim galaxies are relatively large and spread out.
- C **Correct.** The passage indicates that dim galaxies have the same general shape as spiral galaxies and that their mass is spread out over large areas of space.
- D The passage indicates that dim galaxies are relatively large and spread out.
- E The passage states that dim galaxies have few stars per unit of volume, suggesting that they are not dense but diffuse.

The correct answer is C.

93. It can be inferred from the passage that the “long-standing puzzle” refers to which of the following?

- (A) The difference between the rate at which conventional galaxies evolve and the rate at which low-surface-brightness galaxies evolve
- (B) The discrepancy between estimates of total baryonic mass derived from measuring helium and estimates based on measuring galactic luminosity
- (C) The inconsistency between the observed amount of helium in the universe and the number of stars in typical low-surface-brightness galaxies
- (D) Uncertainties regarding what proportion of baryonic mass is contained in intergalactic space and what proportion in conventional galaxies
- (E) Difficulties involved in detecting very distant galaxies and in investigating their luminosity

Inference

This question requires drawing an inference from information given in the passage. The second paragraph describes *the long-standing puzzle of the missing baryonic mass in the universe*. The passage states that baryons are the source of galactic luminosity, and so scientists can estimate the amount of baryonic mass in the universe by measuring the luminosity of galaxies (lines 17–21). The puzzle is that spectroscopic measures of helium in the universe suggest that the baryonic mass in the universe is much higher than measures of luminosity would indicate (21–25).

- A The differences between the rates of evolution of the two types of galaxies is not treated as being controversial in the passage.
- B **Correct.** The passage indicates that measurements using spectroscopy and measurements using luminosity result in puzzling differences in estimates of the universe’s baryonic mass.
- C The passage does not suggest how helium might relate to the numbers of stars in dim galaxies.
- D The passage indicates that astronomers have speculated that the missing baryonic mass might be discovered in intergalactic space or hard-to-detect galaxies, but does not suggest that these speculations are constituents of the long-standing puzzle.

- E The passage does not mention how the distance to galaxies affects scientists' ability to detect these galaxies.

The correct answer is B.

94. The author implies that low-surface-brightness galaxies could constitute an answer to the puzzle discussed in the second paragraph primarily because
- (A) they contain baryonic mass that was not taken into account by researchers using galactic luminosity to estimate the number of baryons in the universe
 - (B) they, like conventional galaxies that contain many baryons, have evolved from massive, primordial gas clouds
 - (C) they may contain relatively more helium, and hence more baryons, than do galaxies whose helium content has been studied using spectroscopy
 - (D) they have recently been discovered to contain more baryonic mass than scientists had thought when low-surface-brightness galaxies were first observed
 - (E) they contain stars that are significantly more luminous than would have been predicted on the basis of initial studies of luminosity in low-surface-brightness galaxies

Inference

This question requires drawing an inference from information given in the passage. The puzzle is that estimates of the baryonic mass of the universe based on luminosity are lower than those based on spectroscopy (lines 21–25). The passage states that astronomers did not notice dim galaxies until recently (lines 2–3), and that these galaxies may help account for the missing baryonic mass in the universe (lines 15–17). The passage also suggests that astronomers measure the luminosity of specific galaxies (lines 19–21). Thus it can be inferred that, prior to their being noticed by astronomers, the luminosity of these dim galaxies was not measured, and their baryonic mass was not taken into account in the estimates of luminosity that led to the long-standing puzzle.

- A **Correct.** The passage states that the missing baryonic mass in the universe may be discovered in the dim galaxies that have only recently been noticed by astronomers.
- B The passage does not suggest that dim and conventional galaxies both originating from primordial gas clouds help solve the long-standing puzzle of the missing baryonic mass in the universe.
- C The passage does not suggest that dim galaxies might contain more helium than do conventional galaxies, or that measures of baryonic mass using spectroscopy do not take some dim galaxies into account.
- D The passage does not suggest that dim galaxies contain more baryonic mass than scientists originally believed upon discovering these galaxies.
- E The passage suggests that scientists measured the luminosity of galaxies, not of individual stars.

The correct answer is A.

95. The author mentions the fact that baryons are the source of stars' luminosity primarily in order to explain
- (A) how astronomers determine that some galaxies contain fewer stars per unit volume than do others
 - (B) how astronomers are able to calculate the total luminosity of a galaxy
 - (C) why astronomers can use galactic luminosity to estimate baryonic mass
 - (D) why astronomers' estimates of baryonic mass based on galactic luminosity are more reliable than those based on spectroscopic studies of helium
 - (E) how astronomers know bright galaxies contain more baryons than do dim galaxies

Evaluation

This question requires understanding how one aspect of the passage relates to the reasoning in a larger portion of the passage. The second paragraph explains that scientists have been puzzled over missing baryonic mass in the universe as measured by luminosity (lines 21–25). Given that baryons are the source of luminosity in

the galaxy (lines 17–19), astronomers can estimate the baryonic mass of a galaxy by measuring its luminosity.

- A The passage discussion of baryons does not address the number of stars in individual galaxies.
- B The passage discusses how the luminosity of galaxies can be used to estimate baryonic mass, but does not address how total luminosity is measured.
- C **Correct.** The passage indicates that because baryons are the source of galactic luminosity, measuring luminosity can be used to estimate baryonic mass of galaxies.
- D The passage suggests that estimates based on luminosity may have been less accurate, not more accurate, than those based on spectroscopy.
- E The passage does not indicate that bright galaxies contain more baryons than do dim galaxies.

The correct answer is C.

96. The author of the passage would be most likely to disagree with which of the following statements?
- (A) Low-surface-brightness galaxies are more difficult to detect than are conventional galaxies.
 - (B) Low-surface-brightness galaxies are often spiral in shape.
 - (C) Astronomers have advanced plausible ideas about where missing baryonic mass might be found.
 - (D) Astronomers have devised a useful way of estimating the total baryonic mass in the universe.
 - (E) Astronomers have discovered a substantial amount of baryonic mass in intergalactic space.

Inference

This question involves identifying which answer option potentially conflicts with the information the author has provided in the passage. The second paragraph indicates that astronomers' estimates of the baryonic mass of the universe is lower when measured using luminosity than it is when measured using spectroscopy (lines 21–25). The final sentence states that astronomers have speculated that the missing baryonic mass might be discovered in intergalactic space or in hard-to-detect galaxies (lines 25–29). Although the passage does indicate that the discovery of dim, low-surface-brightness galaxies might help account for the missing baryonic mass (lines 15–17), the passage provides no support for the possibility that baryonic mass has been discovered in intergalactic space.

- A The passage indicates that low-surface-brightness galaxies went unnoticed until recently, unlike conventional galaxies.
- B The passage indicates that low-surface-brightness galaxies have the same general shape as spiral galaxies.
- C The passage describes two possible explanations astronomers have given for the missing baryonic mass, one of which was made more plausible by the discovery of low-surface-brightness galaxies.
- D The passage indicates that astronomers have used spectroscopy to estimate baryonic mass and gives no reason to suspect that this method is not useful.
- E **Correct.** The passage does not indicate that astronomers have found any baryonic mass in intergalactic space.

The correct answer is E.

97. The primary purpose of the passage is to
- (A) describe a phenomenon and consider its scientific significance
 - (B) contrast two phenomena and discuss a puzzling difference between them
 - (C) identify a newly discovered phenomenon and explain its origins
 - (D) compare two classes of objects and discuss the physical properties of each
 - (E) discuss a discovery and point out its inconsistency with existing theory

Main idea

This question requires understanding, in broad terms, the purpose of the passage as a whole. The first paragraph describes a phenomenon: the discovery of dim galaxies and some of their general attributes. The second paragraph describes how this discovery may help astronomers to solve a long-standing puzzle about the baryonic mass of the universe.

- A Correct.** The passage describes the phenomenon of dim galaxies and describes their significance in solving the long-standing puzzle of the missing baryonic mass in the universe.
- B** Although the passage discusses the puzzling difference between the two estimates of baryonic mass, this option does not account for the broader topic of dim galaxies.
- C** While the passage identifies the newly discovered phenomenon of dim galaxies, it does not offer a significant explanation for these galaxies' origins.
- D** Although the passage compares dim and conventional galaxies in the first paragraph, this option does not account for the important detail that dim galaxies may help solve a long-standing puzzle.
- E** The discovery of dim galaxies discussed in the passage is not said to be inconsistent with any existing scientific theory.

The correct answer is A.

Questions 98–104 refer to the passage on page 56.

98. According to the passage, all of the following were benefits of privatizing state-owned industries in the United Kingdom EXCEPT:
- (A) Privatized industries paid taxes to the government.
 - (B) The government gained revenue from selling state-owned industries.
 - (C) The government repaid some of its national debt.
 - (D) Profits from industries that were still state-owned increased.
 - (E) Total borrowings and losses of state-owned industries decreased.

Supporting ideas

This question begins with the phrase *according to the passage*, indicating that it can be answered using facts stated in the passage. The first paragraph lists the benefits of privatization. Use the process of elimination and check the five possible answer choices against the benefits described in lines 8–16. The point that is NOT discussed in the passage is the correct answer.

- A** Lines 11–12 discuss tax revenues.
- B** Lines 10–11 discuss revenue from the sales.
- C** Lines 14–16 discuss debt repayment.
- D Correct.** Profits from state-owned industries are not discussed.
- E** Lines 9–10 discuss decreased borrowings and losses.

The correct answer is D.

99. According to the passage, which of the following resulted in increased productivity in companies that have been privatized?
- (A) A large number of employees chose to purchase shares in their companies.
 - (B) Free shares were widely distributed to individual shareholders.
 - (C) The government ceased to regulate major industries.
 - (D) Unions conducted wage negotiations for employees.
 - (E) Employee-owners agreed to have their wages lowered.

Supporting ideas

This question is based on information explicitly stated in the passage. The second paragraph describes the increased productivity, and the third paragraph begins by stating one reason for it: *employees of privatized industries were given the opportunity to buy shares in their own companies* (lines 28–31). The paragraph also cites the high percentage of employees buying shares in three privatized companies, supporting the idea that many employees bought shares.

- A **Correct.** Productivity increased after employees became shareholders in their companies.
- B The theoretical advantages and disadvantages of free shares are discussed (lines 43–52), but the passage does not say that any were given away.
- C The passage does not examine governmental regulation.
- D Although wages are discussed in lines 38–42, the passage does not analyze the relation between wages and productivity.
- E Lines 38–42 cite one example of employee-owner willingness to accept lower wages, but this is not said to have resulted in increased productivity.

The correct answer is A.

100. It can be inferred from the passage that the author considers labor disruptions to be
- (A) an inevitable problem in a weak national economy
 - (B) a positive sign of employee concern about a company
 - (C) a predictor of employee reactions to a company's offer to sell shares to them
 - (D) a phenomenon found more often in state-owned industries than in private companies
 - (E) a deterrence to high performance levels in an industry

Inference

This question states that an inference is required; this inference is based on material presented in the second paragraph. To demonstrate that privatization has *raised the level of performance in every area*, the author gives three examples (lines 19–27). One example is the disappearance of labor disruptions, once common. If the absence of labor disruptions raises the level of performance, then the author must believe that the presence of labor disruptions impedes an increase in performance levels.

- A The author does not link labor disruptions with a weak national economy.
- B The author does not present labor disruptions in a positive light.
- C The author does not identify labor disruptions as a predictor of employees' responses to opportunities to buy a company's shares.
- D Labor disruptions in state-owned and private industries are not compared.
- E **Correct.** The author implies that labor disruptions interfere with high levels of performance in industry.

The correct answer is E.

101. The passage supports which of the following statements about employees buying shares in their own companies?
- (A) At three different companies, approximately nine out of ten of the workers were eligible to buy shares in their companies.
 - (B) Approximately 90 percent of the eligible workers at three different companies chose to buy shares in their companies.
 - (C) The opportunity to buy shares was discouraged by at least some labor unions.
 - (D) Companies that demonstrated the highest productivity were the first to allow their employees the opportunity to buy shares.
 - (E) Eligibility to buy shares was contingent on employees' agreeing to increased work loads.

Supporting ideas

Check each statement by comparing it to the information presented in the passage. Only one statement is supported. The third paragraph presents the percentages of the eligible employees who purchased shares in their companies: 89 percent at one company, 90 percent at a second, and 92 percent at a third (lines 32–35). Thus, it is true that roughly 90 percent of the eligible work force at three different companies bought shares in their companies once they were given the opportunity to do so.

- A The passage cites the percentages of the eligible employees who bought shares, not the percentages of the total workforce that were eligible.
- B Correct.** The passage shows that roughly 90 percent of the eligible employees at three different companies bought shares in their companies.
- C The passage does not address the attitude of labor unions toward employee share buying.
- D The passage offers no evidence that companies with high productivity were the first to offer shares to their employees.
- E The passage does not show eligibility to be dependent on increased workload.

The correct answer is B.

102. Which of the following statements is most consistent with the principle described in lines 35–38?
- (A) A democratic government that decides it is inappropriate to own a particular industry has in no way abdicated its responsibilities as guardian of the public interest.
 - (B) The ideal way for a government to protect employee interests is to force companies to maintain their share of a competitive market without government subsidies.
 - (C) The failure to harness the power of self-interest is an important reason that state-owned industries perform poorly.
 - (D) Governments that want to implement privatization programs must try to eliminate all resistance to the free-market system.
 - (E) The individual shareholder will reap only a minute share of the gains from whatever sacrifices he or she makes to achieve these gains.

Application

To answer this question, first identify the principle involved, and then find the statement that is most compatible with that principle. Lines 35–38 argue that having a *personal stake* in a business makes employees *work to make it prosper*. When there is no personal stake, or self-interest, involved, employees do not have the same incentive to work hard to make their industry *prosper*. Thus, the poor performance of state-owned industries can be ascribed in part to employees' lack of motivation when they have no personal stake in the business.

- A The principle involves a personal, rather than governmental, relationship.
- B According to the principle, self-interest may inspire people to do more; government coercion is not consistent with this principle.
- C Correct.** State-owned industries perform poorly in part because employees do not have the powerful motivation of self-interest.
- D The principle has to do with the motivation of individuals, not governments; eliminating all resistance to the free-market system is not discussed.
- E Lines 35–38 describe the principle of self-interest, not self-sacrifice.

The correct answer is C.

103. Which of the following can be inferred from the passage about the privatization process in the United Kingdom?
- (A) It depends to a potentially dangerous degree on individual ownership of shares.
 - (B) It conforms in its most general outlines to Thomas Paine's prescription for business ownership.
 - (C) It was originally conceived to include some giving away of free shares.
 - (D) It has been successful, even though privatization has failed in other countries.
 - (E) It is taking place more slowly than some economists suggest is necessary.

Inference

Answering this question requires looking at each possible inference to see if it is supported somewhere in the passage. Support for the inference about the pace of privatization is provided by the suggestion of some economists that *giving away free shares would provide a needed acceleration of the privatization process* (lines 43–45). If some economists think privatization needs to be accelerated, then it must be going too slowly, at least according to these economists.

- A The passage does not allude to any danger in individual ownership of shares.
- B Paine is quoted only in reference to employees' receiving free shares as opposed to buying shares; also, the process of privatization had occurred before employees bought shares in the newly privatized companies.
- C No evidence supports the distribution of free shares as part of the United Kingdom's plan to privatize.
- D A phrase in line 4, *one approach that works*, suggests that perhaps there were other approaches that did not work; however, nowhere does the passage indicate that privatization has not worked in other countries.
- E **Correct.** The economists' suggestion comes from what they see as the need to speed up a process that is currently taking too long.

The correct answer is E.

104. The quotation in lines 46–47 is most probably used to
- (A) counter a position that the author of the passage believes is incorrect
 - (B) state a solution to a problem described in the previous sentence
 - (C) show how opponents of the viewpoint of the author of the passage have supported their arguments
 - (D) point out a paradox contained in a controversial viewpoint
 - (E) present a historical maxim to challenge the principle introduced in the third paragraph

Logical structure

Looking at the quotation's context leads to an understanding of why the quotation was used. Paine's quotation offers a concise and time-honored counterargument to the view voiced in the preceding sentence. The economists suggest giving away free shares, but the author notes that these economists are forgetting that, according to Paine, people do not value what they get too cheaply. The author uses the quotation to show the basic error in the economists' thinking.

- A **Correct.** The author uses Paine's quotation as an apt counter to the economists' suggestion.
- B The quotation challenges the solution posed in the previous sentence.
- C The author agrees with Paine, as is evident in the final lines of the passage.
- D The author implies that a viewpoint is ill advised, but does not say it is controversial.
- E Paine's maxim does not challenge the principle of self-interest.

The correct answer is A.

3.4 Sample Questions

Each of the reading comprehension questions is based on the content of a passage. After reading the passage, answer all questions pertaining to it on the basis of what is stated or implied in the passage. For each question, select the best answer of the choices given.

Line	Human beings, born with a drive to explore and experiment, thrive on learning. Unfortunately, corporations are oriented predominantly toward controlling employees, not fostering their learning. Ironically, this orientation creates the very
(5)	conditions that predestine employees to mediocre performances. Over time, superior performance requires superior learning, because long-term corporate survival depends on continually exploring new business and organizational
(10)	opportunities that can create new sources of growth.
(15)	To survive in the future, corporations must become “learning organizations,” enterprises that are constantly able to adapt and expand their capabilities. To accomplish this, corporations must change how they view employees. The traditional view that a single charismatic leader should set the corporation’s direction and make key decisions is rooted in an individualistic worldview. In an
(20)	increasingly interdependent world, such a view is no longer viable. In learning organizations, thinking and acting are integrated at all job levels. Corporate leadership is shared, and leaders become designers, teachers, and stewards, roles
(25)	requiring new skills: the ability to build shared vision, to reveal and challenge prevailing mental models, and to foster broader, more integrated patterns of thinking. In short, leaders in learning organizations are responsible for building
(30)	organizations in which employees are continually learning new skills and expanding their capabilities to shape their future.

Questions 1–4 refer to the passage.

1. According to the passage, traditional corporate leaders differ from leaders in learning organizations in that the former
 - (A) encourage employees to concentrate on developing a wide range of skills
 - (B) enable employees to recognize and confront dominant corporate models and to develop alternative models
 - (C) make important policy decisions alone and then require employees in the corporation to abide by those decisions
 - (D) instill confidence in employees because of their willingness to make risky decisions and accept their consequences
 - (E) are concerned with offering employees frequent advice and career guidance
2. Which of the following best describes employee behavior encouraged within

learning organizations, as such organizations are described in the passage?

- (A) Carefully defining one's job description and taking care to avoid deviations from it
- (B) Designing mentoring programs that train new employees to follow procedures that have been used for many years
- (C) Concentrating one's efforts on mastering one aspect of a complicated task
- (D) Studying an organizational problem, preparing a report, and submitting it to a corporate leader for approval
- (E) Analyzing a problem related to productivity, making a decision about a solution, and implementing that solution

3. According to the author of the passage, corporate leaders of the future should do which of the following?

- (A) They should encourage employees to put long-term goals ahead of short-term profits.
- (B) They should exercise more control over employees in order to constrain production costs.
- (C) They should redefine incentives for employees' performance improvement.
- (D) They should provide employees with opportunities to gain new skills and expand their capabilities.
- (E) They should promote individual managers who are committed to established company policies.

4. The primary purpose of the passage is to

- (A) endorse a traditional corporate structure
- (B) introduce a new approach to corporate leadership and evaluate criticisms of it
- (C) explain competing theories about management practices and reconcile them
- (D) contrast two typical corporate organizational structures
- (E) propose an alternative to a common corporate approach

Line	The Gross Domestic Product (GDP), which measures the dollar value of finished goods and services produced by an economy during a given period, serves as the chief indicator of the economic well-being of the United States.
(5)	The GDP assumes that the economic significance of goods and services lies solely in their price, and that these goods and services add to the national

(10)	well-being, not because of any intrinsic value they may possess, but simply because they were produced and bought. Additionally, only those goods and services involved in monetary transactions are included in the GDP. Thus,
(15)	the GDP ignores the economic utility of such things as a clean environment and cohesive families and communities. It is therefore not merely
(20)	coincidental, since national policies in capitalist and noncapitalist countries alike are dependent on indicators such as the GDP, that both the environment and the social structure have been eroded in recent decades.
(25)	Not only does the GDP mask this erosion, it can actually portray it as an economic gain: an oil spill off a coastal region “adds” to the GDP because it generates commercial activity. In short, the nation’s central measure of economic well-being works like a calculating machine that adds but cannot subtract.

Questions 5–10 refer to the passage.

5. The primary purpose of the passage is to
 - (A) identify ways in which the GDP could be modified so that it would serve as a more accurate indicator of the economic well-being of the United States
 - (B) suggest that the GDP, in spite of certain shortcomings, is still the most reliable indicator of the economic well-being of the United States
 - (C) examine crucial shortcomings of the GDP as an indicator of the economic well-being of the United States
 - (D) argue that the growth of the United States economy in recent decades has diminished the effectiveness of the GDP as an indicator of the nation’s economic well-being
 - (E) discuss how the GDP came to be used as the primary indicator of the economic well-being of the United States
6. Which of the following best describes the function of the second sentence of the passage in the context of the passage as a whole?
 - (A) It describes an assumption about the GDP that is defended in the course of the passage.
 - (B) It contributes to a discussion of the origins of the GDP.
 - (C) It clarifies a common misconception about the use of the GDP.
 - (D) It identifies a major flaw in the GDP.
 - (E) It suggests a revision to the method of calculating the GDP.
7. It can be inferred that the author of the passage would agree with which of the following about the “economic significance” of those goods and services that are included in the GDP?

- (A) It is a comprehensive indicator of a nation's economic well-being.
- (B) It is not accurately captured by the price of those goods and services.
- (C) It is usually less than the intrinsic value of those goods and services.
- (D) It is more difficult to calculate than the economic significance of those goods and services that are not included in the GDP.
- (E) It is calculated differently in capitalist countries than in noncapitalist countries.

8. The comparison of the GDP to a calculating machine serves to do which of the following?

- (A) Refute an assertion that the calculations involved in the GDP are relatively complex in nature
- (B) Indicate that the GDP is better suited to record certain types of monetary transactions than others
- (C) Suggest that it is likely that the GDP will be supplanted by other, more sophisticated economic indicators
- (D) Illustrate the point that the GDP has no way of measuring the destructive impact of such things as oil spills on the nation's economic well-being
- (E) Exemplify an assertion that the GDP tends to exaggerate the amount of commercial activity generated by such things as oil spills

9. The passage implies that national policies that rely heavily on economic indicators such as the GDP tend to

- (A) become increasingly capitalistic in nature
- (B) disregard the economic importance of environmental and social factors that do not involve monetary transactions
- (C) overestimate the amount of commercial activity generated by environmental disasters
- (D) overestimate the economic significance of cohesive families and communities
- (E) assume that the economic significance of goods and services does not lie solely in the price of those goods and services

10. It can be inferred that the author of the passage would agree with which of the following assessments of the GDP as an indicator of the economic well-being of the United States?

- (A) It masks social and environmental erosion more fully than the chief economic indicators of other nations.

(B) It is based on inaccurate estimations of the prices of many goods and services.

(C) It overestimates the amount of commercial activity that is generated in the United States.

(D) It is conducive to error because it conflates distinct types of economic activity.

(E) It does not take into account the economic utility of certain environmental and social conditions.

Line	A key decision required of advertising managers is whether a “hard-sell” or “soft-sell” strategy is appropriate for a specific target market. The hard-sell approach involves the use of direct, forceful claims regarding the benefits of the advertised brand over competitors’ offerings. In contrast, the soft-sell approach involves the use of advertising claims that imply superiority more subtly.
(5)	
(10)	One positive aspect of the hard-sell approach is its use of very simple and straightforward product claims presented as explicit conclusions, with little room for confusion regarding the advertiser’s message. However, some
(15)	consumers may resent being told what to believe and some may distrust the message. Resentment and distrust often lead to counterargumentation and to boomerang effects where consumers come to believe conclusions
(20)	diametrically opposed to conclusions endorsed in advertising claims. By contrast, the risk of boomerang effects is greatly reduced with soft-sell approaches. One way to implement the soft-sell approach is to provide
(25)	information that implies the main conclusions the advertiser wants the consumer to draw, but leave the conclusions themselves unstated. Because consumers are invited to make up their own minds, implicit conclusions
(30)	reduce the risk of resentment, distrust, and counterargumentation. Recent research on consumer memory and judgment suggests another advantage of implicit conclusions. Beliefs or conclusions that are self-
(35)	generated are more accessible from memory than beliefs from conclusions provided explicitly by other individuals, and thus have a greater impact on judgment and decision making. Moreover, self-generated beliefs are often
(40)	perceived as more accurate and valid than the beliefs of others, because other individuals may be perceived as less knowledgeable, or may be perceived as manipulative or deliberately misleading.

Line	Despite these advantages, implicit conclusions may not always be more effective than explicit conclusions. One risk is that some consumers may fail to draw their own conclusions and thus miss the point of the message.
(45)	Inferential activity is likely only when consumers are motivated and able to engage in effortful cognitive processes. Another risk is that some consumers may draw conclusions other than the one intended. Even if inferential

(50) activity is likely there is no guarantee that consumers will follow the path provided by the advertiser. Finally, a third risk is that consumers may infer the intended conclusion but question the validity of their inference.

Questions 11–17 refer to the passage.

11. It can be inferred from the passage that one reason an advertiser might prefer a hard-sell approach to a soft-sell approach is that
- (A) the risks of boomerang effects are minimized when the conclusions an advertiser wants the consumer to draw are themselves left unstated
 - (B) counterargumentation is likely from consumers who fail to draw their own conclusions regarding an advertising claim
 - (C) inferential activity is likely to occur even if consumers perceive themselves to be more knowledgeable than the individuals presenting product claims
 - (D) research on consumer memory suggests that the explicit conclusions provided by an advertiser using the hard-sell approach have a significant impact on decision making
 - (E) the information presented by an advertiser using the soft-sell approach may imply different conclusions to different consumers
12. Each of the following is mentioned in the passage as a characteristic of the hard-sell approach EXCEPT:
- (A) Its overall message is readily grasped.
 - (B) It appeals to consumers' knowledge about the product.
 - (C) It makes explicit claims that the advertised brand is superior to other brands.
 - (D) It uses statements that are expressed very clearly.
 - (E) It makes claims in the form of direct conclusions.
13. It can be inferred from the passage that advertisers could reduce one of the risks discussed in the last paragraph if they were able to provide
- (A) motivation for consumers to think about the advertisement's message
 - (B) information that implies the advertiser's intended conclusion but leaves that conclusion unstated
 - (C) subtle evidence that the advertised product is superior to that of competitors
 - (D) information comparing the advertised product with its competitors
 - (E) opportunity for consumers to generate their own beliefs or conclusions

14. The primary purpose of the passage is to
- (A) point out the risks involved in the use of a particular advertising strategy
 - (B) make a case for the superiority of one advertising strategy over another
 - (C) illustrate the ways in which two advertising strategies may be implemented
 - (D) present the advantages and disadvantages of two advertising strategies
 - (E) contrast the types of target markets for which two advertising strategies are appropriate
15. Which of the following best describes the function of the sentence in lines 25–28 in the context of the passage as a whole?
- (A) It reiterates a distinction between two advertising strategies that is made in the first paragraph.
 - (B) It explains how a particular strategy avoids a drawback described earlier in the paragraph.
 - (C) It suggests that a risk described earlier in the paragraph is less serious than some researchers believe it to be.
 - (D) It outlines why the strategy described in the previous sentence involves certain risks for an advertiser.
 - (E) It introduces an argument that will be refuted in the following paragraph.
16. It can be inferred from the passage that one situation in which the boomerang effect often occurs is when consumers
- (A) have been exposed to forceful claims that are diametrically opposed to those in an advertiser's message
 - (B) have previous self-generated beliefs or conclusions that are readily accessible from memory
 - (C) are subjected to advertising messages that are targeted at specific markets to which those consumers do not belong
 - (D) are confused regarding the point of the advertiser's message
 - (E) come to view the advertiser's message with suspicion
17. It can be inferred from the passage that the research mentioned in line 29 supports which of the following statements?
- (A) Implicit conclusions are more likely to capture accurately the point of the advertiser's message than are explicit conclusions.
 - (B) Counterargumentation is less likely to occur if an individual's beliefs or

conclusions are readily accessible from memory.

(C) The hard-sell approach results in conclusions that are more difficult for the consumer to recall than are conclusions resulting from the soft-sell approach.

(D) When the beliefs of others are presented as definite and forceful claims, they are perceived to be as accurate as self-generated beliefs.

(E) Despite the advantages of implicit conclusions, the hard-sell approach involves fewer risks for the advertiser than does the soft-sell approach.

Line	Coral reefs are one of the most fragile, biologically complex, and diverse marine ecosystems on Earth. This ecosystem is one of the fascinating paradoxes of the biosphere: how do clear, and thus nutrient-poor, waters
(5)	support such prolific and productive communities? Part of the answer lies within the tissues of the corals themselves. Symbiotic cells of algae known as zooxanthellae carry out photosynthesis using the metabolic wastes of the
(10)	corals, thereby producing food for themselves, for their coral hosts, and even for other members of the reef community. This symbiotic process allows organisms in the reef community to use sparse nutrient resources
(15)	efficiently.
	Unfortunately for coral reefs, however, a variety of human activities are causing worldwide degradation of shallow marine habitats by adding
(20)	nutrients to the water. Agriculture, slash-and-burn land clearing, sewage disposal, and manufacturing that creates waste by-products all increase nutrient loads in these waters. Typical symptoms of reef decline are
(25)	destabilized herbivore populations and an increasing abundance of algae and filter-feeding animals. Declines in reef communities are consistent with observations that nutrient input is increasing in direct proportion to growing human populations, thereby threatening reef communities sensitive to subtle changes in nutrient input to their waters.

Questions 18–22 refer to the passage.

18. The passage is primarily concerned with

- (A) describing the effects of human activities on algae in coral reefs
- (B) explaining how human activities are posing a threat to coral reef communities
- (C) discussing the process by which coral reefs deteriorate in nutrient-poor waters
- (D) explaining how coral reefs produce food for themselves
- (E) describing the abundance of algae and filter-feeding animals in coral reef areas

19. The passage suggests which of the following about coral reef communities?
- (A) Coral reef communities may actually be more likely to thrive in waters that are relatively low in nutrients.
 - (B) The nutrients on which coral reef communities thrive are only found in shallow waters.
 - (C) Human population growth has led to changing ocean temperatures, which threatens coral reef communities.
 - (D) The growth of coral reef communities tends to destabilize underwater herbivore populations.
 - (E) Coral reef communities are more complex and diverse than most ecosystems located on dry land.
20. The author refers to “filter-feeding animals” (lines 23–24) in order to
- (A) provide an example of a characteristic sign of reef deterioration
 - (B) explain how reef communities acquire sustenance for survival
 - (C) identify a factor that helps herbivore populations thrive
 - (D) indicate a cause of decreasing nutrient input in waters that reefs inhabit
 - (E) identify members of coral reef communities that rely on coral reefs for nutrients
21. According to the passage, which of the following is a factor that is threatening the survival of coral reef communities?
- (A) The waters they inhabit contain few nutrient resources.
 - (B) A decline in nutrient input is disrupting their symbiotic relationship with zooxanthellae.
 - (C) The degraded waters of their marine habitats have reduced their ability to carry out photosynthesis.
 - (D) They are too biologically complex to survive in habitats with minimal nutrient input.
 - (E) Waste by-products result in an increase in nutrient input to reef communities.
22. It can be inferred from the passage that the author describes coral reef communities as paradoxical most likely for which of the following reasons?
- (A) They are thriving even though human activities have depleted the nutrients in their environment.
 - (B) They are able to survive in spite of an overabundance of algae inhabiting their waters.

- (C) They are able to survive in an environment with limited food resources.
- (D) Their metabolic wastes contribute to the degradation of the waters that they inhabit.
- (E) They are declining even when the water surrounding them remains clear.

Line	Suppose we were in a spaceship in free fall, where objects are weightless, and wanted to know a small solid object's mass. We could not simply balance that object against another of known weight, as we would on Earth. The
(5)	unknown mass could be determined, however, by placing the object on a spring scale and swinging the scale in a circle at the end of a string. The scale would measure the tension in the string, which would depend on both the
(10)	speed of revolution and the mass of the object. The tension would be greater, the greater the mass or the greater the speed of revolution. From the measured tension and speed of whirling, we could determine the object's
(15)	mass.
	Astronomers use an analogous procedure to "weigh" double-star systems. The speed with which the two stars in a double-star system circle one
(20)	another depends on the gravitational force between them, which holds the system together. This attractive force, analogous to the tension in the string, is proportional to the stars' combined mass, according to Newton's law of
(25)	gravitation. By observing the time required for the stars to circle each other (the period) and measuring the distance between them, we can deduce the restraining force, and hence the masses.

Questions 23–26 refer to the passage.

23. It can be inferred from the passage that the two procedures described in the passage have which of the following in common?
- (A) They have been applied in practice.
 - (B) They rely on the use of a device that measures tension.
 - (C) Their purpose is to determine an unknown mass.
 - (D) They can only be applied to small solid objects.
 - (E) They involve attraction between objects of similar mass.
24. According to the passage, the tension in the string mentioned in lines 8–9 is analogous to which of the following aspects of a double-star system?
- (A) The speed with which one star orbits the other
 - (B) The gravitational attraction between the stars
 - (C) The amount of time it takes for the stars to circle one another
 - (D) The distance between the two stars

(E) The combined mass of the two stars

25. Which of the following best describes the relationship between the first and the second paragraph of the passage?

(A) The first paragraph provides an illustration useful for understanding a procedure described in the second paragraph.

(B) The first paragraph describes a hypothetical situation whose plausibility is tested in the second paragraph.

(C) The first paragraph evaluates the usefulness of a procedure whose application is described further in the second paragraph.

(D) The second paragraph provides evidence to support a claim made in the first paragraph.

(E) The second paragraph analyzes the practical implications of a methodology proposed in the first paragraph.

26. The author of the passage mentions observations regarding the period of a double-star system as being useful for determining

(A) the distance between the two stars in the system

(B) the time it takes for each star to rotate on its axis

(C) the size of the orbit the system's two stars occupy

(D) the degree of gravitational attraction between the system's stars

(E) the speed at which the star system moves through space

Line	Homeostasis, an animal's maintenance of certain internal variables within an acceptable range, particularly in extreme physical environments, has long interested biologists. The desert rat and the camel in the most water-
(5)	deprived environments, and marine vertebrates in an all-water environment, encounter the same regulatory problem: maintaining adequate internal fluid balance.
(10)	For desert rats and camels, the problem is conservation of water in an environment where standing water is nonexistent, temperature is high, and humidity is low. Despite these handicaps, desert rats are able to maintain the
(15)	osmotic pressure of their blood, as well as their total body-water content, at approximately the same levels as other rats. One countermeasure is
(20)	behavioral: these rats stay in burrows during the hot part of the day, thus avoiding loss of fluid through panting or sweating, which are regulatory mechanisms for maintaining internal body temperature by evaporative
(25)	cooling. Also, desert rats' kidneys can excrete a urine having twice as high a salt content as seawater.
	Camels, on the other hand, rely more on simple endurance. They cannot store water, and their reliance on an entirely unexceptional kidney results in

- (30) a rate of water loss through renal function significantly higher than that of desert rats. As a result, camels must tolerate losses in body water of up to 30 percent of their body weight. Nevertheless, camels do rely on a special
- (35) mechanism to keep water loss within a tolerable range: by sweating and panting only when their body temperature exceeds that which would kill a human, they conserve internal water.
- (40) Marine vertebrates experience difficulty with their water balance because though there is no shortage of seawater to drink, they must drink a lot of it to maintain their internal fluid balance. But the excess salts from the
- (45) seawater must be discharged somehow, and the kidneys of most marine vertebrates are unable to excrete a urine in which the salts are more concentrated than in seawater. Most of these animals have special salt-secreting organs outside the kidney that enable them to eliminate excess salt.

Questions 27–29 refer to the passage.

27. Which of the following most accurately states the purpose of the passage?
- (A) To compare two different approaches to the study of homeostasis
 - (B) To summarize the findings of several studies regarding organisms' maintenance of internal variables in extreme environments
 - (C) To argue for a particular hypothesis regarding various organisms' conservation of water in desert environments
 - (D) To cite examples of how homeostasis is achieved by various organisms
 - (E) To defend a new theory regarding the maintenance of adequate fluid balance
28. It can be inferred from the passage that some mechanisms that regulate internal body temperature, like sweating and panting, can lead to which of the following?
- (A) A rise in the external body temperature
 - (B) A drop in the body's internal fluid level
 - (C) A decrease in the osmotic pressure of the blood
 - (D) A decrease in the amount of renal water loss
 - (E) A decrease in the urine's salt content
29. It can be inferred from the passage that the author characterizes the camel's kidney as "entirely unexceptional" (line 26) primarily to emphasize that it
- (A) functions much as the kidney of a rat functions
 - (B) does not aid the camel in coping with the exceptional water loss resulting from the extreme conditions of its environment

- (C) does not enable the camel to excrete as much salt as do the kidneys of marine vertebrates
- (D) is similar in structure to the kidneys of most mammals living in water-deprived environments
- (E) requires the help of other organs in eliminating excess salt

Line	In 1994, a team of scientists led by David McKay began studying the meteorite ALH84001, which had been discovered in Antarctica in 1984. Two
(5)	years later, the McKay team announced that ALH84001, which scientists generally agree originated on Mars, contained compelling evidence that life once existed on Mars. This evidence includes the discovery of organic
(10)	molecules in ALH84001, the first ever found in Martian rock. Organic molecules—complex, carbon-based compounds—form the basis for
(15)	terrestrial life. The organic molecules found in ALH84001 are polycyclic aromatic hydrocarbons, or PAHs. When microbes die, their organic material often decays into PAHs.
(20)	Skepticism about the McKay team’s claim remains, however. For example, ALH84001 has been on Earth for 13,000 years, suggesting to some scientists that its PAHs might have resulted from terrestrial contamination. However,
(25)	McKay’s team has demonstrated that the concentration of PAHs increases as one looks deeper into ALH84001, contrary to what one would expect from terrestrial contamination. The skeptics’ strongest argument, however, is that
(30)	processes unrelated to organic life can easily produce all the evidence found by McKay’s team, including PAHs. For example, star formation produces PAHs. Moreover, PAHs frequently appear in other meteorites, and no one attributes their presence to life processes. Yet McKay’s team notes that the particular combination of PAHs in ALH84001 is more similar to the combinations produced by decaying organisms than to those originating from nonbiological processes.

Questions 30–35 refer to the passage.

30. The primary purpose of the passage is to

- (A) describe new ways of studying the possibility that life once existed on Mars
- (B) revise a theory regarding the existence of life on Mars in light of new evidence
- (C) reconcile conflicting viewpoints regarding the possibility that life once existed on Mars
- (D) evaluate a recently proposed argument concerning the origin of ALH84001
- (E) describe a controversy concerning the significance of evidence from

31. The passage asserts which of the following about the claim that ALH84001 originated on Mars?
- (A) It was initially proposed by the McKay team of scientists.
 - (B) It is not a matter of widespread scientific dispute.
 - (C) It has been questioned by some skeptics of the McKay team's work.
 - (D) It has been undermined by recent work on PAHs.
 - (E) It is incompatible with the fact that ALH84001 has been on Earth for 13,000 years.
32. The passage suggests that the fact that ALH84001 has been on Earth for 13,000 years has been used by some scientists to support which of the following claims about ALH84001?
- (A) ALH84001 may not have originated on Mars.
 - (B) ALH84001 contains PAHs that are the result of nonbiological processes.
 - (C) ALH84001 may not have contained PAHs when it landed on Earth.
 - (D) The organic molecules found in ALH84001 are not PAHs.
 - (E) The organic molecules found in ALH84001 could not be the result of terrestrial contamination.
33. The passage suggests that if a meteorite contained PAHs that were the result of terrestrial contamination, then one would expect which of the following to be true?
- (A) The meteorite would have been on Earth for more than 13,000 years.
 - (B) The meteorite would have originated from a source other than Mars.
 - (C) The PAHs contained in the meteorite would have originated from nonbiological processes.
 - (D) The meteorite would contain fewer PAHs than most other meteorites contain.
 - (E) The PAHs contained in the meteorite would be concentrated toward the meteorite's surface.
34. Which of the following best describes the function of the last sentence of the first paragraph?
- (A) It identifies a possible organic source for the PAHs found in ALH84001.
 - (B) It describes a feature of PAHs that is not shared by other types of organic molecules.
 - (C) It explains how a characteristic common to most meteorites originates.

(D) It suggests how the terrestrial contamination of ALH84001 might have taken place.

(E) It presents evidence that undermines the claim that life once existed on Mars.

35. The passage suggests that McKay's team would agree with which of the following regarding the PAHs produced by nonorganic processes?

(A) These PAHs are not likely to be found in any meteorite that has been on Earth for 13,000 years or more.

(B) These PAHs are not likely to be found in any meteorite that originated from Mars.

(C) These PAHs are not likely to be produced by star formation.

(D) These PAHs are likely to be found in combinations that distinguish them from the PAHs produced by organic processes.

(E) These PAHs are likely to be found in fewer meteorites than the PAHs produced by organic processes.

Line	Neotropical coastal mangrove forests are usually “zonal,” with certain mangrove species found predominantly in the seaward portion of the habitat and other mangrove species on the more landward portions of the coast. The
(5)	earliest research on mangrove forests produced descriptions of species distribution from shore to land, without exploring the causes of the distributions.
(10)	The idea that zonation is caused by plant succession was first expressed by J. H. Davis in a study of Florida mangrove forests. According to Davis’ scheme, the shoreline is being extended in a seaward direction because of the “land-
(15)	building” role of mangroves, which, by trapping sediments over time, extend the shore. As a habitat gradually becomes more inland as the shore extends, the “land-building” species are replaced. This continuous process of
(20)	accretion and succession would be interrupted only by hurricanes or storm flushings.
(25)	Recently the universal application of Davis’ succession paradigm has been challenged. It appears that in areas where weak currents and weak tidal energies allow the accumulation of sediments, mangroves will follow land formation and accelerate the rate of soil accretion; succession will proceed
(30)	according to Davis’ scheme. But on stable coastlines, the distribution of mangrove species results in other patterns of zonation; “land building” does not occur.
(35)	To find a principle that explains the various distribution patterns, several researchers have looked to salinity and its effects on mangroves. While mangroves can develop in fresh water, they can also thrive in salinities as
(40)	high as 2.5 times that of seawater. However, those mangrove species found

(E) A shoreline in which few sediments can accumulate

Line	In current historiography, the picture of a consistent, unequivocal decline in women's status with the advent of capitalism and industrialization is giving way to an analysis that not only emphasizes both change (whether
(5)	improvement or decline) and continuity but also accounts for geographical and occupational variation. The history of women's work in English
(10)	farmhouse cheese making between 1800 and 1930 is a case in point. In her influential <i>Women Workers and the Industrial Revolution</i> (1930),
(15)	Pinchbeck argued that the agricultural revolution of the eighteenth and early nineteenth centuries, with its attendant specialization and enlarged scale of
(20)	operation, curtailed women's participation in the business of cheese production. Earlier, she maintained, women had concerned themselves with
(25)	feeding cows, rearing calves, and even selling the cheese in local markets and fairs. Pinchbeck thought that the advent of specialization meant that
(30)	women's work in cheese dairying was reduced simply to processing the milk. "Dairymen" (a new social category) raised and fed cows and sold the cheese
(35)	through factors, who were also men. With this narrowing of the scope of work, Pinchbeck believed, women lost business ability, independence, and
(40)	initiative. Though Pinchbeck portrayed precapitalist, preindustrial conditions as superior to what followed, recent scholarship has seriously questioned the
(45)	notion of a golden age for women in precapitalist society. For example, scholars note that women's control seldom extended to the disposal of the
(50)	proceeds of their work. In the case of cheese, the rise of factors may have compromised women's ability to market cheese at fairs. But merely selling
	the cheese did not necessarily imply access to the money: Davidoff cites the case of an Essex man who appropriated all but a fraction of the money from
	his wife's cheese sales. By focusing on somewhat peripheral operations, moreover, Pinchbeck missed a substantial element of continuity in women's participation:
	throughout the period women did the central work of actually making
	cheese. Their persistence in English cheese dairying contrasts with women's early disappearance from arable agriculture in southeast England and from
	American cheese dairying. Comparing these three divergent developments yields some reasons for the differences among them. English cheese-making
	women worked in a setting in which cultural values, agricultural conditions, and the nature of their work combined to support their continued
	participation. In the other cases, one or more of these elements was lacking.

Questions 39–42 refer to the passage.

39. The primary purpose of the passage is to

(A) present recently discovered evidence that supports a conventional

interpretation of a historical period

(B) describe how reinterpretations of available evidence have reinvigorated a once discredited scholarly position

(C) explain why some historians have tended to emphasize change rather than continuity in discussing a particular period

(D) explore how changes in a particular occupation serve to counter the prevailing view of a historical period

(E) examine a particular area of historical research in order to exemplify a general scholarly trend

40. Regarding English local markets and fairs, which of the following can be inferred from the passage?

(A) Both before and after the agricultural revolution, the sellers of agricultural products at these venues were men.

(B) Knowing who the active sellers were at these venues may not give a reliable indication of who controlled the revenue from the sales.

(C) There were no parallel institutions at which American cheese makers could sell their own products.

(D) Prior to the agricultural revolution, the sellers of agricultural products at these venues were generally the producers themselves.

(E) Prior to the agricultural revolution, women sold not only cheese but also products of arable agriculture at these venues.

41. The passage describes the work of Pinchbeck primarily in order to

(A) demonstrate that some of the conclusions reached by recent historians were anticipated in earlier scholarship

(B) provide an instance of the viewpoint that, according to the passage's author, is being superseded

(C) illustrate the ways in which recent historians have built on the work of their predecessors

(D) provide a point of reference for subsequent scholarship on women's work during the agricultural revolution

(E) show the effect that the specialization introduced in the agricultural and industrial revolutions had on women's work

42. It can be inferred from the passage that women did work in

(A) American cheesemaking at some point prior to industrialization

(B) arable agriculture in northern England both before and after the

agricultural revolution

(C) arable agriculture in southeast England after the agricultural revolution, in those locales in which cultural values supported their participation

(D) the sale of cheese at local markets in England even after the agricultural revolution

(E) some areas of American cheese dairying after industrialization

Line	Caffeine, the stimulant in coffee, has been called “the most widely used psychoactive substance on Earth.” Snyder, Daly, and Bruns have recently proposed that caffeine affects behavior by countering the activity in the
(5)	human brain of a naturally occurring chemical called adenosine. Adenosine normally depresses neuron firing in many areas of the brain. It apparently does this by inhibiting the release of neurotransmitters, chemicals that carry
(10)	nerve impulses from one neuron to the next.
	Like many other agents that affect neuron firing, adenosine must first bind to specific receptors on neuronal membranes. There are at least two classes
(15)	of these receptors, which have been designated A ₁ and A ₂ . Snyder et al. propose that caffeine, which is structurally similar to adenosine, is able to
(20)	bind to both types of receptors, which prevents adenosine from attaching there and allows the neurons to fire more readily than they otherwise would.
	For many years, caffeine’s effects have been attributed to its inhibition of the production of phosphodiesterase, an enzyme that breaks down the chemical
(25)	called cyclic AMP. A number of neurotransmitters exert their effects by first increasing cyclic AMP concentrations in target neurons. Therefore,
(30)	prolonged periods at the elevated concentrations, as might be brought about by a phosphodiesterase inhibitor, could lead to a greater amount of neuron
	firing and, consequently, to behavioral stimulation. But Snyder et al. point out that the caffeine concentrations needed to inhibit the production of
(35)	phosphodiesterase in the brain are much higher than those that produce stimulation. Moreover, other compounds that block phosphodiesterase’s
	activity are not stimulants.
(40)	To buttress their case that caffeine acts instead by preventing adenosine binding, Snyder et al. compared the stimulatory effects of a series of caffeine
	derivatives with their ability to dislodge adenosine from its receptors in the
(45)	brains of mice. “In general,” they reported, “the ability of the compounds to compete at the receptors correlates with their ability to stimulate locomotion
	in the mouse; i.e., the higher their capacity to bind at the receptors, the
(50)	higher their ability to stimulate locomotion.” Theophylline, a close structural relative of caffeine and the major stimulant in tea, was one of the most
	effective compounds in both regards.

Line	There were some apparent exceptions to the general correlation observed between adenosine-receptor binding and stimulation. One of these was a

(55)	compound called 3-isobutyl-1-methylxanthine (IBMX), which bound very well but actually depressed mouse locomotion. Snyder et al. suggest that this is not a major stumbling block to their hypothesis. The problem is that the compound has mixed effects in the brain, a not unusual occurrence with
(60)	psychoactive drugs. Even caffeine, which is generally known only for its stimulatory effects, displays this property, depressing mouse locomotion at very low concentrations and stimulating it at higher ones.

Questions 43–48 refer to the passage.

43. The primary purpose of the passage is to
- (A) discuss a plan for investigation of a phenomenon that is not yet fully understood
 - (B) present two explanations of a phenomenon and reconcile the differences between them
 - (C) summarize two theories and suggest a third theory that overcomes the problems encountered in the first two
 - (D) describe an alternative hypothesis and provide evidence and arguments that support it
 - (E) challenge the validity of a theory by exposing the inconsistencies and contradictions in it
44. According to Snyder et al., caffeine differs from adenosine in that caffeine
- (A) stimulates behavior in the mouse and in humans, whereas adenosine stimulates behavior in humans only
 - (B) has mixed effects in the brain, whereas adenosine has only a stimulatory effect
 - (C) increases cyclic AMP concentrations in target neurons, whereas adenosine decreases such concentrations
 - (D) permits release of neurotransmitters when it is bound to adenosine receptors, whereas adenosine inhibits such release
 - (E) inhibits both neuron firing and the production of phosphodiesterase when there is a sufficient concentration in the brain, whereas adenosine inhibits only neuron firing
45. In response to experimental results concerning IBMX, Snyder et al. contended that it is not uncommon for psychoactive drugs to have
- (A) mixed effects in the brain
 - (B) inhibitory effects on enzymes in the brain
 - (C) close structural relationships with caffeine

(D) depressive effects on mouse locomotion

(E) the ability to dislodge caffeine from receptors in the brain

46. According to Snyder et al., all of the following compounds can bind to specific receptors in the brain EXCEPT

(A) IBMX

(B) caffeine

(C) adenosine

(D) theophylline

(E) phosphodiesterase

47. Snyder et al. suggest that caffeine's ability to bind to A₁ and A₂ receptors can be at least partially attributed to which of the following?

(A) The chemical relationship between caffeine and phosphodiesterase

(B) The structural relationship between caffeine and adenosine

(C) The structural similarity between caffeine and neurotransmitters

(D) The ability of caffeine to stimulate behavior

(E) The natural occurrence of caffeine and adenosine in the brain

48. The author quotes Snyder et al. in lines 43–48 most probably in order to

(A) reveal some of the assumptions underlying their theory

(B) summarize a major finding of their experiments

(C) point out that their experiments were limited to the mouse

(D) indicate that their experiments resulted only in general correlations

(E) refute the objections made by supporters of the older theory

Line	Two modes of argumentation have been used on behalf of women's emancipation in Western societies. Arguments in what could be called the
(5)	"relational" feminist tradition maintain the doctrine of "equality in difference," or equity as distinct from equality. They posit that biological distinctions between the sexes result in a necessary sexual division of labor in the family and throughout society and that women's procreative labor is
(10)	currently undervalued by society, to the disadvantage of women. By contrast, the individualist feminist tradition emphasizes individual human rights and celebrates women's quest for personal autonomy, while downplaying the
(15)	importance of gender roles and minimizing discussion of childbearing and its attendant responsibilities.
(20)	Before the late nineteenth century, these views coexisted within the feminist movement, often within the writings of the same individual. Between 1890

and 1920, however, relational feminism, which had been the dominant strain in feminist thought, and which still predominates among European and non-

(25) Western feminists, lost ground in England and the United States. Because the concept of individual rights was already well established in the Anglo-Saxon legal and political tradition, individualist feminism came to

(30) predominate in English-speaking countries. At the same time, the goals of the two approaches began to seem increasingly irreconcilable. Individualist feminists began to advocate a totally gender-blind system with equal rights

(35) for all. Relational feminists, while agreeing that equal educational and economic opportunities outside the home should be available for all women, continued to emphasize women's special contributions to society as

(40) homemakers and mothers; they demanded special treatment for women, including protective legislation for women workers, state-sponsored maternity benefits, and paid compensation for housework.

(45) Relational arguments have a major pitfall: because they underline women's physiological and psychological distinctiveness, they are often appropriated by political adversaries and used to endorse male privilege. But the

(50) individualist approach, by attacking gender roles, denying the significance of physiological difference, and condemning existing familial institutions as hopelessly patriarchal, has often simply treated as irrelevant the family roles

Line important to many women. If the individualist framework, with its claim for women's autonomy, could be harmonized with the family-oriented concerns of relational feminists, a more fruitful model for contemporary feminist

(55) politics could emerge.

Questions 49–54 refer to the passage.

49. The author of the passage alludes to the well-established nature of the concept of individual rights in the Anglo-Saxon legal and political tradition in order to
- (A) illustrate the influence of individualist feminist thought on more general intellectual trends in English history
 - (B) argue that feminism was already a part of the larger Anglo-Saxon intellectual tradition, even though this has often gone unnoticed by critics of women's emancipation
 - (C) explain the decline in individualist thinking among feminists in non-English-speaking countries
 - (D) help account for an increasing shift toward individualist feminism among feminists in English-speaking countries
 - (E) account for the philosophical differences between individualist and relational feminists in English-speaking countries
50. The passage suggests that the author of the passage believes which of the following?

(A) The predominance of individualist feminism in English-speaking countries is a historical phenomenon, the causes of which have not yet been investigated.

(B) The individualist and relational feminist views are irreconcilable, given their theoretical differences concerning the foundations of society.

(C) A consensus concerning the direction of future feminist politics will probably soon emerge, given the awareness among feminists of the need for cooperation among women.

(D) Political adversaries of feminism often misuse arguments predicated on differences between the sexes to argue that the existing social system should be maintained.

(E) Relational feminism provides the best theoretical framework for contemporary feminist politics, but individualist feminism could contribute much toward refining and strengthening modern feminist thought.

51. It can be inferred from the passage that the individualist feminist tradition denies the validity of which of the following causal statements?

(A) A division of labor in a social group can result in increased efficiency with regard to the performance of group tasks.

(B) A division of labor in a social group causes inequities in the distribution of opportunities and benefits among group members.

(C) A division of labor on the basis of gender in a social group is necessitated by the existence of sex-linked biological differences between male and female members of the group.

(D) Culturally determined distinctions based on gender in a social group foster the existence of differing attitudes and opinions among group members.

(E) Educational programs aimed at reducing inequalities based on gender among members of a social group can result in a sense of greater well-being for all members of the group.

52. According to the passage, relational feminists and individualist feminists agree that

(A) individual human rights take precedence over most other social claims

(B) the gender-based division of labor in society should be eliminated

(C) laws guaranteeing equal treatment for all citizens regardless of gender should be passed

(D) a greater degree of social awareness concerning the importance of motherhood would be beneficial to society

(E) the same educational and economic opportunities should be available to both sexes

53. According to the author, which of the following was true of feminist thought in Western societies before 1890?

(A) Individualist feminist arguments were not found in the thought or writing of non-English-speaking feminists.

(B) Individualist feminism was a strain in feminist thought, but another strain, relational feminism, predominated.

(C) Relational and individualist approaches were equally prevalent in feminist thought and writing.

(D) The predominant view among feminists held that the welfare of women was ultimately less important than the welfare of children.

(E) The predominant view among feminists held that the sexes should receive equal treatment under the law.

54. The author implies that which of the following was true of most feminist thinkers in England and the United States after 1920?

(A) They were less concerned with politics than with intellectual issues.

(B) They began to reach a broader audience, and their programs began to be adopted by mainstream political parties.

(C) They called repeatedly for international cooperation among women's groups to achieve their goals.

(D) They moderated their initial criticism of the economic systems that characterized their societies.

(E) They did not attempt to unite the two different feminist approaches in their thought.

This passage was adapted from an article published in 1992.

Line	While there is no blueprint for transforming a largely government-controlled economy into a free one, the experience of the United Kingdom since 1979 clearly shows one approach that works: privatization, in which state-owned
(5)	industries are sold to private companies. By 1979, the total borrowings and losses of state-owned industries were running at about £3 billion a year. By
(10)	selling many of these industries, the government has decreased these borrowings and losses, gained over £34 billion from the sales, and now
(15)	receives tax revenues from the newly privatized companies. Along with a dramatically improved overall economy, the government has been able to
	repay 12.5 percent of the net national debt over a two-year period. In fact, privatization has not only rescued individual industries and a whole
	economy headed for disaster, but has also raised the level of performance in

(20) every area. At British Airways and British Gas, for example, productivity per employee has risen by 20 percent. At Associated British Ports, labor disruptions common in the 1970s and early 1980s have now virtually

(25) disappeared. At British Telecom, there is no longer a waiting list—as there always was before privatization—to have a telephone installed. Part of this improved productivity has come about because the employees of

(30) privatized industries were given the opportunity to buy shares in their own companies. They responded enthusiastically to the offer of shares: at British Aerospace, 89 percent of the eligible work force bought shares; at Associated

(35) British Ports, 90 percent; and at British Telecom, 92 percent. When people have a personal stake in something, they think about it, care about it, work to make it prosper. At the National Freight Consortium, the new employee-

(40) owners grew so concerned about their company's profits that during wage negotiations they actually pressed their union to lower its wage demands. Some economists have suggested that giving away free shares would provide

(45) a needed acceleration of the privatization process. Yet they miss Thomas Paine's point that "what we obtain too cheap we esteem too lightly." In order for the far-ranging benefits of individual ownership to be achieved by

(50) owners, companies, and countries, employees and other individuals must make their own decisions to buy, and they must commit some of their own resources to the choice.

Questions 55–61 refer to the passage.

55. According to the passage, all of the following were benefits of privatizing state-owned industries in the United Kingdom EXCEPT:
- (A) Privatized industries paid taxes to the government.
 - (B) The government gained revenue from selling state-owned industries.
 - (C) The government repaid some of its national debt.
 - (D) Profits from industries that were still state-owned increased.
 - (E) Total borrowings and losses of state-owned industries decreased.
56. According to the passage, which of the following resulted in increased productivity in companies that have been privatized?
- (A) A large number of employees chose to purchase shares in their companies.
 - (B) Free shares were widely distributed to individual shareholders.
 - (C) The government ceased to regulate major industries.
 - (D) Unions conducted wage negotiations for employees.
 - (E) Employee-owners agreed to have their wages lowered.

57. It can be inferred from the passage that the author considers labor disruptions to be

- (A) an inevitable problem in a weak national economy
- (B) a positive sign of employee concern about a company
- (C) a predictor of employee reactions to a company's offer to sell shares to them
- (D) a phenomenon found more often in state-owned industries than in private companies
- (E) a deterrence to high performance levels in an industry

58. The passage supports which of the following statements about employees buying shares in their own companies?

- (A) At three different companies, approximately nine out of ten of the workers were eligible to buy shares in their companies.
- (B) Approximately 90 percent of the eligible workers at three different companies chose to buy shares in their companies.
- (C) The opportunity to buy shares was discouraged by at least some labor unions.
- (D) Companies that demonstrated the highest productivity were the first to allow their employees the opportunity to buy shares.
- (E) Eligibility to buy shares was contingent on employees' agreeing to increased work loads.

59. Which of the following statements is most consistent with the principle described in lines 35–37?

- (A) A democratic government that decides it is inappropriate to own a particular industry has in no way abdicated its responsibilities as guardian of the public interest.
- (B) The ideal way for a government to protect employee interests is to force companies to maintain their share of a competitive market without government subsidies.
- (C) The failure to harness the power of self-interest is an important reason that state-owned industries perform poorly.
- (D) Governments that want to implement privatization programs must try to eliminate all resistance to the free-market system.
- (E) The individual shareholder will reap only a minute share of the gains from whatever sacrifices he or she makes to achieve these gains.

60. Which of the following can be inferred from the passage about the privatization

process in the United Kingdom?

- (A) It depends to a potentially dangerous degree on individual ownership of shares.
- (B) It conforms in its most general outlines to Thomas Paine’s prescription for business ownership.
- (C) It was originally conceived to include some giving away of free shares.
- (D) It has been successful, even though privatization has failed in other countries.
- (E) It is taking place more slowly than some economists suggest is necessary.

61. The quotation in lines 45–46 is most probably used to

- (A) counter a position that the author of the passage believes is incorrect
- (B) state a solution to a problem described in the previous sentence
- (C) show how opponents of the viewpoint of the author of the passage have supported their arguments
- (D) point out a paradox contained in a controversial viewpoint
- (E) present a historical maxim to challenge the principle introduced in the third paragraph

Line	The new school of political history that emerged in the 1960’s and 1970’s sought to go beyond the traditional focus of political historians on leaders and government institutions by examining directly the political practices of
(5)	ordinary citizens. Like the old approach, however, this new approach excluded women. The very techniques these historians used to uncover mass
(10)	political behavior in the nineteenth century United States—quantitative analyses of election returns, for example—were useless in analyzing the
(15)	political activities of women, who were denied the vote until 1920. By redefining “political activity,” historian Paula Baker has developed a
(20)	political history that includes women. She concludes that among ordinary citizens, political activism by women in the nineteenth century prefigured
(25)	trends in twentieth century politics. Defining “politics” as “any action taken to affect the course of behavior of government or of the community,” Baker
(30)	concludes that, while voting and holding office were restricted to men, women in the nineteenth century organized themselves into societies
	committed to social issues such as temperance and poverty. In other words, Baker contends, women activists were early practitioners of nonpartisan, issue-oriented politics and thus were more interested in enlisting
	lawmakers, regardless of their party affiliation, on behalf of certain issues than in ensuring that one party or another won an election. In the twentieth

century, more men drew closer to women's ideas about politics and took up modes of issue-oriented politics that Baker sees women as having pioneered.

Questions 62–67 refer to the passage.

62. The primary purpose of the passage is to
- (A) enumerate reasons why both traditional scholarly methods and newer scholarly methods have limitations
 - (B) identify a shortcoming in a scholarly approach and describe an alternative approach
 - (C) provide empirical data to support a long-held scholarly assumption
 - (D) compare two scholarly publications on the basis of their authors' backgrounds
 - (E) attempt to provide a partial answer to a long-standing scholarly dilemma
63. The passage suggests which of the following concerning the techniques used by the new political historians described in the first paragraph of the passage?
- (A) They involved the extensive use of the biographies of political party leaders and political theoreticians.
 - (B) They were conceived by political historians who were reacting against the political climates of the 1960's and 1970's.
 - (C) They were of more use in analyzing the positions of United States political parties in the nineteenth century than in analyzing the positions of those in the twentieth century.
 - (D) They were of more use in analyzing the political behavior of nineteenth-century voters than in analyzing the political activities of those who could not vote during that period.
 - (E) They were devised as a means of tracing the influence of nineteenth-century political trends on twentieth-century political trends.
64. It can be inferred that the author of the passage quotes Baker directly in the second paragraph primarily in order to
- (A) clarify a position before providing an alternative to that position
 - (B) differentiate between a novel definition and traditional definitions
 - (C) provide an example of a point agreed on by different generations of scholars
 - (D) provide an example of the prose style of an important historian
 - (E) amplify a definition given in the first paragraph
65. According to the passage, Paula Baker and the new political historians of the 1960's

and 1970's shared which of the following?

- (A) A commitment to interest group politics
- (B) A disregard for political theory and ideology
- (C) An interest in the ways in which nineteenth-century politics prefigured contemporary politics
- (D) A reliance on such quantitative techniques as the analysis of election returns
- (E) An emphasis on the political involvement of ordinary citizens

66. Which of the following best describes the structure of the first paragraph of the passage?

- (A) Two scholarly approaches are compared, and a shortcoming common to both is identified.
- (B) Two rival schools of thought are contrasted, and a third is alluded to.
- (C) An outmoded scholarly approach is described, and a corrective approach is called for.
- (D) An argument is outlined, and counterarguments are mentioned.
- (E) A historical era is described in terms of its political trends.

67. The information in the passage suggests that a pre-1960s political historian would have been most likely to undertake which of the following studies?

- (A) An analysis of voting trends among women voters of the 1920's
- (B) A study of male voters' gradual ideological shift from party politics to issue-oriented politics
- (C) A biography of an influential nineteenth-century minister of foreign affairs
- (D) An analysis of narratives written by previously unrecognized women activists
- (E) A study of voting trends among naturalized immigrant laborers in a nineteenth-century logging camp

Line	Seeking a competitive advantage, some professional service firms (for example, firms providing advertising, accounting, or health care services) have considered offering unconditional guarantees of satisfaction. Such
(5)	guarantees specify what clients can expect and what the firm will do if it fails to fulfill these expectations. Particularly with first-time clients, an unconditional guarantee can be an effective marketing tool if the client is
(10)	very cautious, the firm's fees are high, the negative consequences of bad service are grave, or business is difficult to obtain through referrals and

word-of-mouth.

- (15) However, an unconditional guarantee can sometimes hinder marketing efforts. With its implication that failure is possible, the guarantee may, paradoxically, cause clients to doubt the service firm's ability to deliver the
- (20) promised level of service. It may conflict with a firm's desire to appear sophisticated, or may even suggest that a firm is begging for business. In legal and health care services, it may mislead clients by suggesting that
- (25) lawsuits or medical procedures will have guaranteed outcomes. Indeed, professional service firms with outstanding reputations and performance to match have little to gain from offering unconditional guarantees. And any
- (30) firm that implements an unconditional guarantee without undertaking a commensurate commitment to quality of service is merely employing a potentially costly marketing gimmick.

Questions 68–73 refer to the passage.

68. The primary function of the passage as a whole is to
- (A) account for the popularity of a practice
 - (B) evaluate the utility of a practice
 - (C) demonstrate how to institute a practice
 - (D) weigh the ethics of using a strategy
 - (E) explain the reasons for pursuing a strategy
69. All of the following are mentioned in the passage as circumstances in which professional service firms can benefit from offering an unconditional guarantee EXCEPT:
- (A) The firm is having difficulty retaining its clients of long standing.
 - (B) The firm is having difficulty getting business through client recommendations.
 - (C) The firm charges substantial fees for its services.
 - (D) The adverse effects of poor performance by the firm are significant for the client.
 - (E) The client is reluctant to incur risk.
70. Which of the following is cited in the passage as a goal of some professional service firms in offering unconditional guarantees of satisfaction?
- (A) A limit on the firm's liability
 - (B) Successful competition against other firms
 - (C) Ability to justify fee increases

(D) Attainment of an outstanding reputation in a field

(E) Improvement in the quality of the firm's service

71. The passage's description of the issue raised by unconditional guarantees for health care or legal services most clearly implies that which of the following is true?

(A) The legal and medical professions have standards of practice that would be violated by attempts to fulfill such unconditional guarantees.

(B) The result of a lawsuit or medical procedure cannot necessarily be determined in advance by the professionals handling a client's case.

(C) The dignity of the legal and medical professions is undermined by any attempts at marketing of professional services, including unconditional guarantees.

(D) Clients whose lawsuits or medical procedures have unsatisfactory outcomes cannot be adequately compensated by financial settlements alone.

(E) Predicting the monetary cost of legal or health care services is more difficult than predicting the monetary cost of other types of professional services.

72. Which of the following hypothetical situations best exemplifies the potential problem noted in the second sentence of the second paragraph (lines 15–19)?

(A) A physician's unconditional guarantee of satisfaction encourages patients to sue for malpractice if they are unhappy with the treatment they receive.

(B) A lawyer's unconditional guarantee of satisfaction makes clients suspect that the lawyer needs to find new clients quickly to increase the firm's income.

(C) A business consultant's unconditional guarantee of satisfaction is undermined when the consultant fails to provide all of the services that are promised.

(D) An architect's unconditional guarantee of satisfaction makes clients wonder how often the architect's buildings fail to please clients.

(E) An accountant's unconditional guarantee of satisfaction leads clients to believe that tax returns prepared by the accountant are certain to be accurate.

73. The passage most clearly implies which of the following about the professional service firms mentioned in lines 24–27?

(A) They are unlikely to have offered unconditional guarantees of satisfaction in the past.

(B) They are usually profitable enough to be able to compensate clients according to the terms of an unconditional guarantee.

(C) They usually practice in fields in which the outcomes are predictable.

(D) Their fees are usually more affordable than those charged by other professional service firms.

(E) Their clients are usually already satisfied with the quality of service that is delivered.

Line	In a 1918 editorial, W. E. B. Du Bois advised African Americans to stop agitating for equality and to proclaim their solidarity with White Americans for the duration of the First World War. The editorial surprised many African
(5)	Americans who viewed Du Bois as an uncompromising African American leader and a chief opponent of the accommodationist tactics urged by Booker T. Washington. In fact, however, Du Bois often shifted positions along the
(10)	continuum between Washington and confrontationists such as William Trotter. In 1895, when Washington called on African Americans to concentrate on improving their communities instead of opposing
(15)	discrimination and agitating for political rights, Du Bois praised Washington's speech. In 1903, however, Du Bois aligned himself with Trotter, Washington's militant opponent, less for ideological reasons than
(20)	because Trotter had described to him Washington's efforts to silence those in the African American press who opposed Washington's positions. Du Bois's wartime position thus reflected not a change in his long-term goals
(25)	but rather a pragmatic response in the face of social pressures: government officials had threatened African American journalists with censorship if they continued to voice grievances. Furthermore, Du Bois believed that African
(30)	Americans' contributions to past war efforts had brought them some legal and political advances. Du Bois's accommodationism did not last, however. Upon learning of systematic discrimination experienced by African Americans in the military, he called on them to "return fighting" from the war.

Questions 74–78 refer to the passage.

74. The passage is primarily concerned with

(A) identifying historical circumstances that led Du Bois to alter his long-term goals

(B) defining “accommodationism” and showing how Du Bois used this strategy to achieve certain goals

(C) accounting for a particular position adopted by Du Bois during the First World War

(D) contesting the view that Du Bois was significantly influenced by either

Washington or Trotter

(E) assessing the effectiveness of a strategy that Du Bois urged African Americans to adopt

75. The passage indicates which of the following about Du Bois's attitude toward Washington?

(A) It underwent a shift during the First World War as Du Bois became more sympathetic with Trotter's views.

(B) It underwent a shift in 1903 for reasons other than Du Bois's disagreement with Washington's accommodationist views.

(C) It underwent a shift as Du Bois made a long-term commitment to the strategy of accommodation.

(D) It remained consistently positive even though Du Bois disagreed with Washington's efforts to control the African American press.

(E) It was shaped primarily by Du Bois's appreciation of Washington's pragmatic approach to the advancement of the interests of African Americans.

76. The passage suggests which of the following about the contributions of African Americans to the United States war effort during the First World War?

(A) The contributions were made largely in response to Du Bois's 1918 editorial.

(B) The contributions had much the same effect as African Americans' contributions to previous wars.

(C) The contributions did not end discrimination against African Americans in the military.

(D) The contributions were made in protest against Trotter's confrontationist tactics.

(E) The contributions were made primarily by civil rights activists who returned to activism after the war.

77. The author of the passage refers to Washington's call to African Americans in 1895 primarily in order to

(A) identify Du Bois's characteristic position on the continuum between accommodationism and confrontationism

(B) explain why Du Bois was sympathetic with Washington's views in 1895

(C) clarify how Trotter's views differed from those of Washington in 1895

(D) support an assertion about Du Bois's tendency to shift his political positions

(E) dismiss the claim that Du Bois's position in his 1918 editorial was consistent with his previous views

78. According to the passage, which of the following is true of the strategy that Du Bois's 1918 editorial urged African Americans to adopt during the First World War?

(A) It was a strategy that Du Bois had consistently rejected in the past.

(B) It represented a compromise between Du Bois's own views and those of Trotter.

(C) It represented a significant redefinition of the long-term goals Du Bois held prior to the war.

(D) It was advocated by Du Bois in response to his recognition of the discrimination faced by African Americans during the war.

(E) It was advocated by Du Bois in part because of his historical knowledge of gains African Americans had made during past wars.

Line	The fact that superior service can generate a competitive advantage for a company does not mean that every attempt at improving service will create such an advantage. Investments in service, like those in production and
(5)	distribution, must be balanced against other types of investments on the basis of direct, tangible benefits such as cost reduction and increased
(10)	revenues. If a company is already effectively on a par with its competitors because it provides service that avoids a damaging reputation and keeps
(15)	customers from leaving at an unacceptable rate, then investment in higher service levels may be wasted, since service is a deciding factor for customers
(20)	only in extreme situations. This truth was not apparent to managers of one regional bank, which failed to improve its competitive position despite its investment in reducing the
(25)	time a customer had to wait for a teller. The bank managers did not recognize the level of customer inertia in the consumer banking industry that arises from the inconvenience of switching banks. Nor did they analyze
	their service improvement to determine whether it would attract new customers by producing a new standard of service that would excite
	customers or by proving difficult for competitors to copy. The only merit of the improvement was that it could easily be described to customers.

Questions 79–84 refer to the passage.

79. The primary purpose of the passage is to

(A) contrast possible outcomes of a type of business investment

(B) suggest more careful evaluation of a type of business investment

(C) illustrate various ways in which a type of business investment could fail to enhance revenues

(D) trace the general problems of a company to a certain type of business investment

(E) criticize the way in which managers tend to analyze the costs and benefits of business investments

80. According to the passage, investments in service are comparable to investments in production and distribution in terms of the

(A) tangibility of the benefits that they tend to confer

(B) increased revenues that they ultimately produce

(C) basis on which they need to be weighed

(D) insufficient analysis that managers devote to them

(E) degree of competitive advantage that they are likely to provide

81. The passage suggests which of the following about service provided by the regional bank prior to its investment in enhancing that service?

(A) It enabled the bank to retain customers at an acceptable rate.

(B) It threatened to weaken the bank's competitive position with respect to other regional banks.

(C) It had already been improved after having caused damage to the bank's reputation in the past.

(D) It was slightly superior to that of the bank's regional competitors.

(E) It needed to be improved to attain parity with the service provided by competing banks.

82. The passage suggests that bank managers failed to consider whether or not the service improvement mentioned in lines 18–20

(A) was too complicated to be easily described to prospective customers

(B) made a measurable change in the experiences of customers in the bank's offices

(C) could be sustained if the number of customers increased significantly

(D) was an innovation that competing banks could have imitated

(E) was adequate to bring the bank's general level of service to a level that was comparable with that of its competitors

83. The discussion of the regional bank in the second paragraph serves which of the following functions within the passage as a whole?

(A) It describes an exceptional case in which investment in service actually failed to produce a competitive advantage.

(B) It illustrates the pitfalls of choosing to invest in service at a time when investment is needed more urgently in another area.

(C) It demonstrates the kind of analysis that managers apply when they choose one kind of service investment over another.

(D) It supports the argument that investments in certain aspects of service are more advantageous than investments in other aspects of service.

(E) It provides an example of the point about investment in service made in the first paragraph.

84. The author uses the word “only” in line 27 most likely in order to

(A) highlight the oddity of the service improvement

(B) emphasize the relatively low value of the investment in service improvement

(C) distinguish the primary attribute of the service improvement from secondary attributes

(D) single out a certain merit of the service improvement from other merits

(E) point out the limited duration of the actual service improvement

Line	Findings from several studies on corporate mergers and acquisitions during the 1970’s and 1980’s raise questions about why firms initiate and consummate such transactions. One study showed, for example, that
(5)	acquiring firms were on average unable to maintain acquired firms’ pre-merger levels of profitability. A second study concluded that post-acquisition gains to most acquiring firms were not adequate to cover the premiums paid
(10)	to obtain acquired firms. A third demonstrated that, following the announcement of a prospective merger, the stock of the prospective
(15)	acquiring firm tends to increase in value much less than does that of the firm for which it bids. Yet mergers and acquisitions remain common, and bidders continue to assert that their objectives are economic ones.
(20)	Acquisitions may well have the desirable effect of channeling a nation’s resources efficiently from less to more efficient sectors of its economy, but the individual acquisitions executives arranging these deals must see them as advancing either their own or their companies’ private economic interests.
(25)	It seems that factors having little to do with corporate economic interests explain acquisitions. These factors may include the incentive compensation of executives, lack of monitoring by boards of directors, and managerial error
(30)	in estimating the value of firms targeted for acquisition. Alternatively, the acquisition acts of bidders may derive from modeling: a manager does what other managers do.

Questions 85–91 refer to the passage.

85. The primary purpose of the passage is to
- (A) review research demonstrating the benefits of corporate mergers and acquisitions and examine some of the drawbacks that acquisition behavior entails
 - (B) contrast the effects of corporate mergers and acquisitions on acquiring firms and on firms that are acquired
 - (C) report findings that raise questions about a reason for corporate mergers and acquisitions and suggest possible alternative reasons
 - (D) explain changes in attitude on the part of acquiring firms toward corporate mergers and acquisitions
 - (E) account for a recent decline in the rate of corporate mergers and acquisitions
86. The findings cited in the passage suggest which of the following about the outcomes of corporate mergers and acquisitions with respect to acquiring firms?
- (A) They include a decrease in value of many acquiring firms' stocks.
 - (B) They tend to be more beneficial for small firms than for large firms.
 - (C) They do not fulfill the professed goals of most acquiring firms.
 - (D) They tend to be beneficial to such firms in the long term even though apparently detrimental in the short term.
 - (E) They discourage many such firms from attempting to make subsequent bids and acquisitions.
87. It can be inferred from the passage that the author would be most likely to agree with which of the following statements about corporate acquisitions?
- (A) Their known benefits to national economies explain their appeal to individual firms during the 1970's and 1980's.
 - (B) Despite their adverse impact on some firms, they are the best way to channel resources from less to more productive sectors of a nation's economy.
 - (C) They are as likely to occur because of poor monitoring by boards of directors as to be caused by incentive compensation for managers.
 - (D) They will be less prevalent in the future, since their actual effects will gain wider recognition.
 - (E) Factors other than economic benefit to the acquiring firm help to explain the frequency with which they occur.
88. The author of the passage mentions the effect of acquisitions on national economies most probably in order to

- (A) provide an explanation for the mergers and acquisitions of the 1970's and 1980's overlooked by the findings discussed in the passage
- (B) suggest that national economic interests played an important role in the mergers and acquisitions of the 1970's and 1980's
- (C) support a noneconomic explanation for the mergers and acquisitions of the 1970's and 1980's that was cited earlier in the passage
- (D) cite and point out the inadequacy of one possible explanation for the prevalence of mergers and acquisitions during the 1970's and 1980's
- (E) explain how modeling affected the decisions made by managers involved in mergers and acquisitions during the 1970's and 1980's

89. According to the passage, during the 1970's and 1980's bidding firms differed from the firms for which they bid in that bidding firms

- (A) tended to be more profitable before a merger than after a merger
- (B) were more often concerned about the impact of acquisitions on national economies
- (C) were run by managers whose actions were modeled on those of other managers
- (D) anticipated greater economic advantages from prospective mergers
- (E) experienced less of an increase in stock value when a prospective merger was announced

90. According to the passage, which of the following was true of corporate acquisitions that occurred during the 1970's and 1980's?

- (A) Few of the acquisitions that firms made were subsequently divested.
- (B) Most such acquisitions produced only small increases in acquired firms' levels of profitability.
- (C) Most such acquisitions were based on an overestimation of the value of target firms.
- (D) The gains realized by most acquiring firms did not equal the amounts expended in acquiring target firms.
- (E) About half of such acquisitions led to long-term increases in the value of acquiring firms' stocks.

91. The author of the passage implies that which of the following is a possible partial explanation for acquisition behavior during the 1970's and 1980's?

- (A) Managers wished to imitate other managers primarily because they saw how financially beneficial other firms' acquisitions were.

- (B) Managers miscalculated the value of firms that were to be acquired.
- (C) Lack of consensus within boards of directors resulted in their imposing conflicting goals on managers.
- (D) Total compensation packages for managers increased during that period.
- (E) The value of bidding firms' stock increased significantly when prospective mergers were announced.

Line	In addition to conventional galaxies, the universe contains very dim galaxies that until recently went unnoticed by astronomers. Possibly as numerous as conventional galaxies, these galaxies have the same general shape and even
(5)	the same approximate number of stars as a common type of conventional galaxy, the spiral, but tend to be much larger. Because these galaxies' mass is spread out over larger areas, they have far fewer stars per unit volume than
(10)	do conventional galaxies. Apparently these low-surface-brightness galaxies, as they are called, take much longer than conventional galaxies to condense their primordial gas and convert it to stars—that is, they evolve much more
(15)	slowly.
	These galaxies may constitute an answer to the long-standing puzzle of the missing baryonic mass in the universe. Baryons—subatomic particles that
(20)	are generally protons or neutrons—are the source of stellar, and therefore galactic, luminosity, and so their numbers can be estimated based on how luminous galaxies are. However, the amount of helium in the universe, as
(25)	measured by spectroscopy, suggests that there are far more baryons in the universe than estimates based on galactic luminosity indicate. Astronomers have long speculated that the missing baryonic mass might eventually be discovered in intergalactic space or as some large population of galaxies that are difficult to detect.

Questions 92–98 refer to the passage.

92. According to the passage, conventional spiral galaxies differ from low-surface-brightness galaxies in which of the following ways?
- (A) They have fewer stars than do low-surface-brightness galaxies.
 - (B) They evolve more quickly than low-surface-brightness galaxies.
 - (C) They are more diffuse than low-surface-brightness galaxies.
 - (D) They contain less helium than do low-surface-brightness galaxies.
 - (E) They are larger than low-surface-brightness galaxies.
93. It can be inferred from the passage that which of the following is an accurate physical description of typical low-surface-brightness galaxies?
- (A) They are large spiral galaxies containing fewer stars than conventional galaxies.

- (B) They are compact but very dim spiral galaxies.
- (C) They are diffuse spiral galaxies that occupy a large volume of space.
- (D) They are small, young spiral galaxies that contain a high proportion of primordial gas.
- (E) They are large, dense spirals with low luminosity.

94. It can be inferred from the passage that the “long-standing puzzle” refers to which of the following?

- (A) The difference between the rate at which conventional galaxies evolve and the rate at which low-surface-brightness galaxies evolve
- (B) The discrepancy between estimates of total baryonic mass derived from measuring helium and estimates based on measuring galactic luminosity
- (C) The inconsistency between the observed amount of helium in the universe and the number of stars in typical low-surface-brightness galaxies
- (D) Uncertainties regarding what proportion of baryonic mass is contained in intergalactic space and what proportion in conventional galaxies
- (E) Difficulties involved in detecting very distant galaxies and in investigating their luminosity

95. The author implies that low-surface-brightness galaxies could constitute an answer to the puzzle discussed in the second paragraph primarily because

- (A) they contain baryonic mass that was not taken into account by researchers using galactic luminosity to estimate the number of baryons in the universe
- (B) they, like conventional galaxies that contain many baryons, have evolved from massive, primordial gas clouds
- (C) they may contain relatively more helium, and hence more baryons, than do galaxies whose helium content has been studied using spectroscopy
- (D) they have recently been discovered to contain more baryonic mass than scientists had thought when low-surface-brightness galaxies were first observed
- (E) they contain stars that are significantly more luminous than would have been predicted on the basis of initial studies of luminosity in low-surface-brightness galaxies

96. The author mentions the fact that baryons are the source of stars’ luminosity primarily in order to explain

- (A) how astronomers determine that some galaxies contain fewer stars per unit volume than do others

- (B) how astronomers are able to calculate the total luminosity of a galaxy
- (C) why astronomers can use galactic luminosity to estimate baryonic mass
- (D) why astronomers' estimates of baryonic mass based on galactic luminosity are more reliable than those based on spectroscopic studies of helium
- (E) how astronomers know bright galaxies contain more baryons than do dim galaxies

97. The author of the passage would be most likely to disagree with which of the following statements?

- (A) Low-surface-brightness galaxies are more difficult to detect than are conventional galaxies.
- (B) Low-surface-brightness galaxies are often spiral in shape.
- (C) Astronomers have advanced plausible ideas about where missing baryonic mass might be found.
- (D) Astronomers have devised a useful way of estimating the total baryonic mass in the universe.
- (E) Astronomers have discovered a substantial amount of baryonic mass in intergalactic space.

98. The primary purpose of the passage is to

- (A) describe a phenomenon and consider its scientific significance
- (B) contrast two phenomena and discuss a puzzling difference between them
- (C) identify a newly discovered phenomenon and explain its origins
- (D) compare two classes of objects and discuss the physical properties of each
- (E) discuss a discovery and point out its inconsistency with existing theory

Line	Micro-wear patterns found on the teeth of long-extinct specimens of the primate species australopithecine may provide evidence about their diets. For example, on the basis of tooth micro-wear patterns, Walker dismisses
(5)	Jolly's hypothesis that australopithecines ate hard seeds. He also disputes Szalay's suggestion that the heavy enamel of australopithecine teeth is an adaptation to bone crunching, since both seed cracking and bone crunching
(10)	produce distinctive micro-wear characteristics on teeth. His conclusion that australopithecines were frugivores (fruit eaters) is based upon his observation that the tooth micro-wear characteristics of east African
(15)	australopithecine specimens are indistinguishable from those of chimpanzees and orangutans, which are commonly assumed to be

frugivorous primates.

- (20) However, research on the diets of contemporary primates suggests that micro-wear studies may have limited utility in determining the foods that are actually eaten. For example, insect eating, which can cause distinct
- (25) micro-wear patterns, would not cause much tooth abrasion in modern baboons, who eat only soft-bodied insects rather than hard-bodied insects. In addition, the diets of current omnivorous primates vary considerably
- (30) depending on the environments that different groups within a primate species inhabit; if australopithecines were omnivores too, we might expect to find considerable population variation in their tooth micro-wear patterns. Thus, Walker's description of possible australopithecine diets may need to be expanded to include a much more diverse diet.

Questions 99–105 refer to the passage.

99. According to the passage, Walker and Szalay disagree on which of the following points?
- (A) The structure and composition of australopithecine teeth
 - (B) The kinds of conclusions that can be drawn from the micro-wear patterns on australopithecine teeth
 - (C) The idea that fruit was a part of the australopithecine diet
 - (D) The extent to which seed cracking and bone crunching produce similar micro-wear patterns on teeth
 - (E) The function of the heavy enamel on australopithecine teeth
100. The passage suggests that Walker's research indicated which of the following about australopithecine teeth?
- (A) They had micro-wear characteristics indicating that fruit constituted only a small part of their diet.
 - (B) They lacked micro-wear characteristics associated with seed eating and bone crunching.
 - (C) They had micro-wear characteristics that differed in certain ways from the micro-wear patterns of chimpanzees and orangutans.
 - (D) They had micro-wear characteristics suggesting that the diet of australopithecines varied from one region to another.
 - (E) They lacked the micro-wear characteristics distinctive of modern frugivores.
101. The passage suggests that which of the following would be true of studies of tooth micro-wear patterns conducted on modern baboons?
- (A) They would inaccurately suggest that some baboons eat more soft-

bodied than hard-bodied insects.

(B) They would suggest that insects constitute the largest part of some baboons' diets.

(C) They would reveal that there are no significant differences in tooth micro-wear patterns among baboon populations.

(D) They would inadequately reflect the extent to which some baboons consume certain types of insects.

(E) They would indicate that baboons in certain regions eat only soft-bodied insects, whereas baboons in other regions eat hard-bodied insects.

102. The passage suggests which of the following about the micro-wear patterns found on the teeth of omnivorous primates?

(A) The patterns provide information about what kinds of foods are not eaten by the particular species of primate, but not about the foods actually eaten.

(B) The patterns of various primate species living in the same environment resemble one another.

(C) The patterns may not provide information about the extent to which a particular species' diet includes seeds.

(D) The patterns provide more information about these primates' diet than do the tooth micro-wear patterns of primates who are frugivores.

(E) The patterns may differ among groups within a species depending on the environment within which a particular group lives.

103. It can be inferred from the passage that if studies of tooth micro-wear patterns were conducted on modern baboons, which of the following would most likely be true of the results obtained?

(A) There would be enough abrasion to allow a determination of whether baboons are frugivorous or insectivorous.

(B) The results would suggest that insects constitute the largest part of the baboons' diet.

(C) The results would reveal that there are no significant differences in tooth micro-wear patterns from one regional baboon population to another.

(D) The results would provide an accurate indication of the absence of some kinds of insects from the baboons' diet.

(E) The results would be unlikely to provide any indication of what inferences about the australopithecine diet can or cannot be drawn from micro-wear studies.

104. It can be inferred from the passage that Walker's conclusion about the australopithecine diet would be called into question under which of the following circumstances?
- (A) The tooth enamel of australopithecines is found to be much heavier than that of modern frugivorous primates.
 - (B) The micro-wear patterns of australopithecine teeth from regions other than east Africa are analyzed.
 - (C) Orangutans are found to have a much broader diet than is currently recognized.
 - (D) The environment of east Africa at the time australopithecines lived there is found to have been far more varied than is currently thought.
 - (E) The area in which the australopithecine specimens were found is discovered to have been very rich in soft-bodied insects during the period when australopithecines lived there.
105. The author of the passage mentions the diets of baboons and other living primates most likely in order to
- (A) provide evidence that refutes Walker's conclusions about the foods making up the diets of australopithecines
 - (B) suggest that studies of tooth micro-wear patterns are primarily useful for determining the diets of living primates
 - (C) suggest that australopithecines were probably omnivores rather than frugivores
 - (D) illustrate some of the limitations of using tooth micro-wear patterns to draw definitive conclusions about a group's diet
 - (E) suggest that tooth micro-wear patterns are caused by persistent, as opposed to occasional, consumption of particular foods

3.5 Answer Key

1. C
2. E
3. D
4. E
5. C
6. D
7. B
8. D
9. B
10. E
11. E
12. B
13. A
14. D
15. B
16. E
17. C
18. B
19. A
20. A
21. E
22. C
23. C
24. B
25. A
26. D
27. D
28. B
29. B

30. E
31. B
32. C
33. E
34. A
35. D
36. D
37. B
38. E
39. E
40. B
41. B
42. A
43. D
44. D
45. A
46. E
47. B
48. B
49. D
50. D
51. C
52. E
53. B
54. E
55. D
56. A
57. E
58. B
59. C
60. E

51. A
52. B
53. D
54. B
55. E
56. A
57. C
58. B
59. A
60. B
61. B
62. D
63. E
64. C
65. B
66. C
67. D
68. E
69. B
70. C
71. A
72. D
73. E
74. B
75. C
76. C
77. E
78. D
79. E
80. D
81. B

- 02. B
- 03. C
- 04. B
- 05. A
- 06. C
- 07. E
- 08. A
- 09. E
- 10. B
- 11. D
- 12. E
- 13. D
- 14. C
- 15. D

3.6 Answer Explanations

The following discussion of reading comprehension is intended to familiarize you with the most efficient and effective approaches to the kinds of problems common to reading comprehension. The particular questions in this chapter are generally representative of the kinds of reading comprehension questions you will encounter on the GMAT. Remember that it is the problem solving strategy that is important, not the specific details of a particular question.

Questions 1–4 refer to the passage on page 22.

1. According to the passage, traditional corporate leaders differ from leaders in learning organizations in that the former
 - (A) encourage employees to concentrate on developing a wide range of skills
 - (B) enable employees to recognize and confront dominant corporate models and to develop alternative models
 - (C) make important policy decisions alone and then require employees in the corporation to abide by those decisions
 - (D) instill confidence in employees because of their willingness to make risky decisions and accept their consequences
 - (E) are concerned with offering employees frequent advice and career guidance

Supporting idea

This question requires understanding of the contrast the passage draws between leaders of traditional corporations and leaders of learning organizations. According to the second paragraph, the former are traditionally charismatic leaders who set policy and make decisions, while the latter foster integrated thinking at all levels of the organization.

A According to the passage, it is leaders in learning organizations, not traditional corporate leaders, who encourage the development of a wide range of skills.

B Leaders in learning organizations are those who want their employees to challenge dominant models.

C Correct. The second paragraph states that traditional corporate leaders are individualistic; they alone *set the corporation's direction and make key decisions*.

D The passage does not address the question of whether traditional corporate leaders instill confidence in employees. In fact, the first paragraph suggests that they may not; rather, they might come across as objectionably controlling.

E The passage suggests that advice and guidance are more likely to be offered by leaders of learning organizations than by leaders of traditional corporations.

The correct answer is C.

2. Which of the following best describes employee behavior encouraged within learning organizations, as such organizations are described in the passage?
- (A) Carefully defining one's job description and taking care to avoid deviations from it
 - (B) Designing mentoring programs that train new employees to follow procedures that have been used for many years
 - (C) Concentrating one's efforts on mastering one aspect of a complicated task
 - (D) Studying an organizational problem, preparing a report, and submitting it to a corporate leader for approval
 - (E) Analyzing a problem related to productivity, making a decision about a solution, and implementing that solution

Application

The second paragraph of the passage indicates that employees of learning organizations are encouraged to think and act for themselves; they learn new skills and expand their capabilities.

A Avoiding deviations from one's carefully defined job description would more likely be encouraged in a traditional corporation, as described in the first paragraph, than in a learning organization.

B Any employee training that involves following long-standing procedures would more likely be encouraged in a traditional corporation than a learning organization.

C According to the passage, mastering only one aspect of a task, no matter how complicated, would be insufficient in a learning organization, in which broad patterns of thinking are encouraged.

D As described in the passage, the role of corporate leaders in learning organizations is not, characteristically, to approve employees' solutions to problems, but rather to enable and empower employees to implement solutions on their own.

E Correct. Employees in learning organizations are expected to act on their own initiative; thus, they would be encouraged to analyze and solve problems on their own, implementing whatever solutions they devised.

The correct answer is E.

3. According to the author of the passage, corporate leaders of the future should do which of the following?

- (A) They should encourage employees to put long-term goals ahead of short-term profits.
- (B) They should exercise more control over employees in order to constrain production costs.
- (C) They should redefine incentives for employees' performance improvement.
- (D) They should provide employees with opportunities to gain new skills and expand their capabilities.
- (E) They should promote individual managers who are committed to established company policies.

Supporting idea

This question focuses on what the author recommends in the passage for future corporate leaders. In the second paragraph, the author states that, among other things, corporate leaders need to be teachers to provide challenges to their employees and create an atmosphere where *employees are continually learning new skills and expanding their capabilities to shape their future*.

A The passage does not directly discuss the issue of corporate goals and profitability in the long or short term.

B The passage does not address the topic of production costs, and it suggests that its author would favor reducing, rather than increasing, corporate leaders' control over employees. The first paragraph states that leaders who attempt to control employees lead those employees to perform in mediocre fashion.

C The passage does not discuss incentivizing employees' performance; rather, employees, performance will improve, the passage suggests, under different corporate leadership.

D Correct. The final sentence of the passage states directly that leaders must build organizations in which employees can learn new skills and expand their capabilities.

E The first paragraph indicates that clinging to established company policies is a strategy for the future that is likely to be unproductive.

The correct answer is D.

4. The primary purpose of the passage is to

- (A) endorse a traditional corporate structure

(B) introduce a new approach to corporate leadership and evaluate criticisms of it

(C) explain competing theories about management practices and reconcile them

(D) contrast two typical corporate organizational structures

(E) propose an alternative to a common corporate approach

Main idea

This question depends on understanding the passage as a whole. The first paragraph explains the way in which corporations fail to facilitate how humans learn. The second paragraph suggests that corporations should change the way they view employees in order to promote learning, and it explains the positive outcomes that would result from that shift in thinking.

A The first paragraph explains that the traditional corporate structure leads to mediocre performance; it does not endorse that structure.

B The second paragraph introduces the concept of a *learning organization* and its attendant approach to corporate leadership. Rather than identifying any criticisms of that approach, the passage endorses it wholeheartedly.

C The passage discusses the difference between the idea of a single charismatic leader and that of a shared corporate leadership, but it does not attempt to reconcile these two ideas.

D The passage's main focus is on advocating a particular approach, not on merely contrasting it with another. Furthermore, it portrays only one of the approaches as typical. It suggests that the organizational structure that relies on a single charismatic leader is typical but that another approach, that in which leadership is shared, should instead become typical.

E Correct. The passage identifies a common corporate approach, one based on controlling employees, and proposes that corporations should instead become *learning organizations*.

The correct answer is E.

Questions 5–10 refer to the passage on page 24.

5. The primary purpose of the passage is to

(A) identify ways in which the GDP could be modified so that it would serve as a more accurate indicator of the economic well-being of the United States

(B) suggest that the GDP, in spite of certain shortcomings, is still the most reliable indicator of the economic well-being of the United States

(C) examine crucial shortcomings of the GDP as an indicator of the

economic well-being of the United States

(D) argue that the growth of the United States economy in recent decades has diminished the effectiveness of the GDP as an indicator of the nation's economic well-being

(E) discuss how the GDP came to be used as the primary indicator of the economic well-being of the United States

Main idea

This question requires determining the main purpose of the passage as a whole. The passage begins by broadly defining GDP and describing how it is used as an indicator of the economic well-being of the United States. The passage then describes in more detail what is and is not taken into account by the GDP and then draws a causal connection between the limitations of what the GDP measures and disturbing trends within the U.S. in recent decades.

A There is no discussion in the passage about modifying how the GDP is calculated.

B The passage makes no judgment about the merits of using the GDP in relation to other economic indicators.

C Correct. The passage portrays the GDP as having limitations that make it a problematic indicator of real economic well-being.

D The passage does not portray the GDP as being any less useful as an economic indicator than it ever was.

E There is no discussion in the passage of the history of how the GDP came to be used as an economic indicator.

The correct answer is C.

6. Which of the following best describes the function of the second sentence of the passage in the context of the passage as a whole?

(A) It describes an assumption about the GDP that is defended in the course of the passage.

(B) It contributes to a discussion of the origins of the GDP.

(C) It clarifies a common misconception about the use of the GDP.

(D) It identifies a major flaw in the GDP.

(E) It suggests a revision to the method of calculating the GDP.

Evaluation

Answering this question requires understanding how a particular part of the passage functions in the passage as a whole. The second sentence describes the GDP as being solely concerned with the prices of goods and services produced in

the United States, aside from any other kind of value. The passage then goes on to imply that by ignoring value other than price, the GDP may actually mask problems present in the nation's overall economy.

A The passage is concerned with calling into question the use of the GDP, not defending it.

B The passage does not mention how the GDP came to be used as a primary economic indicator.

C The passage does not describe the function of the GDP as being commonly misunderstood.

D Correct. The limitations of the GDP as described in the second sentence are then, in the rest of the passage, tied to problems in the United States.

E The passage makes no explicit recommendations about revising how the GDP is measured.

The correct answer is D.

7. It can be inferred that the author of the passage would agree with which of the following about the “economic significance” of those goods and services that are included in the GDP?

(A) It is a comprehensive indicator of a nation's economic well-being.

(B) It is not accurately captured by the price of those goods and services.

(C) It is usually less than the intrinsic value of those goods and services.

(D) It is more difficult to calculate than the economic significance of those goods and services that are not included in the GDP.

(E) It is calculated differently in capitalist countries than in noncapitalist countries.

Inference

This question asks what the author implies about a piece of information given in the passage. The passage states that *the GDP assumes that the economic significance of goods and services lies solely in their price* (lines 5–7) and that *the GDP ignores the economic utility* (lines 13–14) of things such as a healthy environment and a cohesive social structure. The passage then implies that the worsening problems with the environment and social structure in recent decades are due to the way the GDP is calculated.

A In describing the GDP as limited in what it measures, the author would not agree that the GDP is a comprehensive indicator.

B Correct. The author implies that because the GDP ignores the economic utility of certain things, it is an inaccurate indicator of economic well-being.

C The author makes no comparison between the economic value and the intrinsic value of goods and services.

D The author makes no judgment about the difficulty of measuring the value of goods and services not measured by the GDP.

E The author does not indicate how noncapitalist countries calculate GDP.

The correct answer is B.

8. The comparison of the GDP to a calculating machine serves to do which of the following?

(A) Refute an assertion that the calculations involved in the GDP are relatively complex in nature

(B) Indicate that the GDP is better suited to record certain types of monetary transactions than others

(C) Suggest that it is likely that the GDP will be supplanted by other, more sophisticated economic indicators

(D) Illustrate the point that the GDP has no way of measuring the destructive impact of such things as oil spills on the nation's economic well-being

(E) Exemplify an assertion that the GDP tends to exaggerate the amount of commercial activity generated by such things as oil spills

Evaluation

This question asks how a certain statement in the passage functions in the passage as a whole. In lines 13–16 and 20–24, respectively, the passage indicates that the GDP not only ignores problems affecting a nation's economy but that it actually can portray these problems as economic gains, and it subsequently uses the example of an oil spill adding to the GDP to illustrate this. The passage then closes by describing the GDP as a calculating machine that can add but not subtract.

A The passage does not discuss the complexities of calculating the GDP.

B The passage makes no judgment about the relative successes of the GDP in recording different types of monetary transactions.

C The passage makes no mention of other economic indicators aside from the GDP.

D Correct. By characterizing the GDP as a calculating machine that cannot subtract, the passage helps illustrate why something like an oil spill is misrepresented by the GDP.

E While the passage does mention that the GDP measures commercial activity generated by an oil spill, it does not suggest that the GDP

exaggerates the amount of that activity.

The correct answer is D.

9. The passage implies that national policies that rely heavily on economic indicators such as the GDP tend to
- (A) become increasingly capitalistic in nature
 - (B) disregard the economic importance of environmental and social factors that do not involve monetary transactions
 - (C) overestimate the amount of commercial activity generated by environmental disasters
 - (D) overestimate the economic significance of cohesive families and communities
 - (E) assume that the economic significance of goods and services does not lie solely in the price of those goods and services

Inference

This question requires understanding what the passage implies about the main issue it discusses. In lines 13–14, the passage states that *the GDP ignores the economic utility* of things such as a clean environment and social cohesiveness. It then indicates that in countries that are dependent on economic indicators such as the GDP, *the environment and the social structure have been eroded in recent decades* (lines 19–20).

A The passage does not mention how or if the GDP affects the capitalist nature of national policies.

B Correct. In indicating that the GDP ignores environmental and social factors, the passage implies that policies dependent on the GDP will also ignore these issues.

C The passage indicates that the GDP takes into account the commercial activity generated by environmental disasters but does not suggest that the amount of that activity is overestimated.

D The passage indicates that the GDP ignores the value of social cohesion.

E The passage indicates that *the GDP assumes that the economic significance of goods and services lies solely in their price* (lines 5–7).

The correct answer is B.

10. It can be inferred that the author of the passage would agree with which of the following assessments of the GDP as an indicator of the economic well-being of the United States?
- (A) It masks social and environmental erosion more fully than the chief

economic indicators of other nations.

(B) It is based on inaccurate estimations of the prices of many goods and services.

(C) It overestimates the amount of commercial activity that is generated in the United States.

(D) It is conducive to error because it conflates distinct types of economic activity.

(E) It does not take into account the economic utility of certain environmental and social conditions.

Inference

This question requires understanding what the author implies about information in the passage. The passage states that the GDP is *the chief indicator of the economic well-being of the United States* (lines 4–5). It also states that *the GDP ignores the economic utility* (lines 13–16) of things such as a clean environment and social cohesiveness. Therefore, the GDP does not take into account the economic utility of certain environmental and social conditions.

A The passage makes no comparisons among different nations' economic indicators.

B The passage does not describe the GDP as being inaccurate in its estimates of the prices of goods and services.

C The passage does not describe the GDP as overestimating amounts of commercial activity.

D The passage does not describe the GDP as confusing different types of economic activity.

E Correct. The passage states that the GDP ignores the economic utility of a clean environment and social cohesiveness.

The correct answer is E.

Questions 11–17 refer to the passage on page 26.

11. It can be inferred from the passage that one reason an advertiser might prefer a hard-sell approach to a soft-sell approach is that

(A) the risks of boomerang effects are minimized when the conclusions an advertiser wants the consumer to draw are themselves left unstated

(B) counterargumentation is likely from consumers who fail to draw their own conclusions regarding an advertising claim

(C) inferential activity is likely to occur even if consumers perceive themselves to be more knowledgeable than the individuals presenting

product claims

(D) research on consumer memory suggests that the explicit conclusions provided by an advertiser using the hard-sell approach have a significant impact on decision making

(E) the information presented by an advertiser using the soft-sell approach may imply different conclusions to different consumers

Inference

This question relies on what the passage suggests about the difference between the hard-sell and soft-sell approaches—and why the hard-sell approach might be preferred. The hard-sell approach, according to the second paragraph, presents explicit conclusions. The soft-sell approach, on the other hand, does not explicitly state conclusions about products; instead, consumers make up their own minds.

A While the passage makes clear that boomerang effects are minimized when conclusions are left unstated, this is an advantage of the soft-sell approach over the hard-sell approach.

B According to the second paragraph, counterargumentation is a disadvantage, not an advantage, of the hard-sell approach. This is a reason not to prefer the hard sell.

C The third paragraph suggests that in cases in which consumers may perceive themselves as more knowledgeable than individuals presenting product claims, the soft-sell approach offers an advantage over the hard-sell approach.

D According to the third paragraph, self-generated conclusions that are associated with the soft-sell approach have a greater impact on decision making than explicit conclusions. The passage does not allude to any research on memory that would favor the hard-sell approach.

E Correct. The fourth paragraph suggests that one problem with the soft-sell approach is that consumers could miss the point; they may not come to the conclusions that the advertiser would prefer. Thus an advertiser might prefer a hard-sell approach.

The correct answer is E.

12. Each of the following is mentioned in the passage as a characteristic of the hard-sell approach EXCEPT:

(A) Its overall message is readily grasped.

(B) It appeals to consumers' knowledge about the product.

(C) It makes explicit claims that the advertised brand is superior to other brands.

(D) It uses statements that are expressed very clearly.

(E) It makes claims in the form of direct conclusions.

Supporting idea

This question asks about what is directly stated in the passage about the hard-sell approach. The first and second paragraphs provide the details about this approach, including that it uses *direct, forceful claims* about benefits of a brand over competitors' brands; its claims are simple and straightforward, in the form of explicit conclusions; and consumers are generally left with little room for confusion about the message.

A The second paragraph states that there is little room for confusion about the message.

B Correct. The extent of consumers' knowledge about the product is not mentioned in the passage.

C The first paragraph indicates that in the hard-sell approach advertisers make direct claims regarding the benefits of the advertised brand over other offerings.

D The first and second paragraphs say that hard-sell claims are direct, simple, and straightforward.

E The second paragraph emphasizes that the hard-sell approach presents its claims in the form of explicit conclusions.

The correct answer is B.

13. It can be inferred from the passage that advertisers could reduce one of the risks discussed in the last paragraph if they were able to provide

(A) motivation for consumers to think about the advertisement's message

(B) information that implies the advertiser's intended conclusion but leaves that conclusion unstated

(C) subtle evidence that the advertised product is superior to that of competitors

(D) information comparing the advertised product with its competitors

(E) opportunity for consumers to generate their own beliefs or conclusions

Inference

This question requires understanding the risks discussed in the last paragraph of the passage. Those risks are, first, that consumers would not be motivated to think about the advertisement and thus would miss the message's point; second, that consumers may draw conclusions that the advertiser did not intend; and finally, that consumers could question the validity of the conclusions they reach, even if

those conclusions are what advertisers intend.

A Correct. Providing motivation for consumers to think about an advertisement's message would reduce the first risk discussed in the last paragraph: that consumers would fail to draw any conclusions because they would lack motivation to engage with advertisements.

B Providing *information that implies a conclusion but leaves it unstated* is the very definition of the soft-sell approach, and it is this approach that gives rise to the risks discussed in the last paragraph.

C Providing subtle evidence that a product is superior is most likely to give rise to all three of the risks identified in the last paragraph, in that its subtlety would leave consumers free to draw their own conclusions, to fail to draw those conclusions, or to question the validity of their own conclusions.

D A direct comparison of the advertised product with its competitors would run all the risks identified in the last paragraph, in that consumers might not find the comparison motivating, they could draw conclusion that the advertiser did not intend (e.g., that the competing products are superior), or they could question whatever conclusions they do draw.

E Giving consumers the opportunity *to generate their own beliefs or conclusions* is an intrinsic part of the soft-sell approach, which produces the risks discussed in the last paragraph.

The correct answer is A.

14. The primary purpose of the passage is to

- (A) point out the risks involved in the use of a particular advertising strategy
- (B) make a case for the superiority of one advertising strategy over another
- (C) illustrate the ways in which two advertising strategies may be implemented
- (D) present the advantages and disadvantages of two advertising strategies
- (E) contrast the types of target markets for which two advertising strategies are appropriate

Inference

Overall, the passage is concerned with two advertising strategies. The first paragraph introduces the strategies. The second paragraph explains how a particular aspect of one approach may be both positive and negative and how the second approach mitigates these problems. The third paragraph continues this discussion of mitigation, while the fourth paragraph points out that there are drawbacks to this approach, too. Thus, according to the passage, both strategies

have positive and negative aspects.

A The passage is concerned not with one particular advertising strategy but with two, and it discusses benefits, as well as risks, involved with both strategies.

B The passage does not suggest that one strategy is superior to the other but rather that each has positive and negative aspects.

C The passage does not discuss how to implement either of the strategies it is concerned with; instead, it deals with how consumers are likely to respond once the implementation has already taken place.

D Correct. The passage is primarily concerned with showing that both of the strategies described have advantages and disadvantages.

E The passage provides some indirect grounds for inferring the target markets for which each advertising strategy might be appropriate, but it is not primarily concerned with contrasting those markets.

The correct answer is D.

15. Which of the following best describes the function of the sentence in lines 25–28 in the context of the passage as a whole?

(A) It reiterates a distinction between two advertising strategies that is made in the first paragraph.

(B) It explains how a particular strategy avoids a drawback described earlier in the paragraph.

(C) It suggests that a risk described earlier in the paragraph is less serious than some researchers believe it to be.

(D) It outlines why the strategy described in the previous sentence involves certain risks for an advertiser.

(E) It introduces an argument that will be refuted in the following paragraph.

Evaluation

The sentence in lines 25–28 explains how the kinds of conclusions consumers are invited to draw based on the soft-sell approach reduce the risk that consumers will respond with *resentment*, *distrust*, and *counterargumentation*—that is, the possible *boomerang effect* identified earlier in the paragraph as a drawback of the hard-sell approach.

A The sentence does not reiterate the distinction between the hard- and soft-sell approaches; rather, it explains an advantage of the soft-sell approach.

B Correct. The sentence explains how the soft-sell approach avoids the problems that can arise from the hard-sell approach's explicitly stated conclusions.

C The sentence suggests that the risk of boomerang effects described earlier in the paragraph is serious but that a different approach can mitigate it.

D The sentence outlines why the strategy described in the previous sentence reduces advertisers' risks, not why it involves risks.

E At no point does the passage refute the idea that implicit conclusions reduce the risk of boomerang effects. It does say that there could be drawbacks to the soft-sell approach, but those drawbacks are related to the problem with implicit conclusions themselves and how people reach them. In addition, the *following paragraph* does not mention the drawbacks, only the advantages of implicit conclusions.

The correct answer is B.

16. It can be inferred from the passage that one situation in which the boomerang effect often occurs is when consumers

(A) have been exposed to forceful claims that are diametrically opposed to those in an advertiser's message

(B) have previous self-generated beliefs or conclusions that are readily accessible from memory

(C) are subjected to advertising messages that are targeted at specific markets to which those consumers do not belong

(D) are confused regarding the point of the advertiser's message

(E) come to view the advertiser's message with suspicion

Inference

The passage discusses the boomerang effect in the second paragraph. This effect is defined as consumers deriving conclusions from advertising that are the opposite of those that advertisers intended to present, and it occurs when consumers resent and/or distrust what they are being told.

A The passage provides no grounds for inferring that consumers need to be exposed to opposing claims in order to believe such claims; they may reach opposing claims on their own.

B The passage indicates that the boomerang effect can be reduced by using a soft-sell approach, which can result in self-generated conclusions, but it provides no evidence about any possible effects of preexisting self-generated beliefs or conclusions on the boomerang effect.

C The passage does not address how consumers who are subjected to

advertising messages not intended for them might respond.

D Confusion regarding the point of the advertiser's message is more likely to occur, the passage suggests, when advertisers use a soft-sell approach—but it is the hard-sell approach, not the soft-sell, that is likely to result in the boomerang effect.

E Correct. The second paragraph indicates that consumers who resent being told what to believe and come to distrust the advertiser's message—that is, those who view the message with suspicion—may experience a boomerang effect, believing the opposite of the conclusions offered.

The correct answer is E.

17. It can be inferred from the passage that the research mentioned in line 29 supports which of the following statements?

(A) Implicit conclusions are more likely to capture accurately the point of the advertiser's message than are explicit conclusions.

(B) Counterargumentation is less likely to occur if an individual's beliefs or conclusions are readily accessible from memory.

(C) The hard-sell approach results in conclusions that are more difficult for the consumer to recall than are conclusions resulting from the soft-sell approach.

(D) When the beliefs of others are presented as definite and forceful claims, they are perceived to be as accurate as self-generated beliefs.

(E) Despite the advantages of implicit conclusions, the hard-sell approach involves fewer risks for the advertiser than does the soft-sell approach.

Inference

The research this item refers to—research on consumer memory and judgment—indicates that beliefs are more memorable when they are self-generated and so matter when making judgments and decisions. Further, self-generated beliefs seem more believable to those who have them than beliefs that come from elsewhere.

A The fourth paragraph indicates that implicit conclusions are more likely to fail to replicate the advertiser's message than explicit conclusions are.

B The research discussed in the passage does not address when counterargumentation is more or less likely to occur. Even though counterargumentation is a risk when consumers distrust the advertiser's message—as they may do when harder-to-recall explicit conclusions are given—it may be as much of a risk when consumers reach an implicit conclusion that is readily accessible from memory.

C Correct. The research indicates that it is easier for consumers to recall conclusions they have reached on their own—that is, the sorts of conclusions that are encouraged by the soft-sell approach—than conclusions that have been provided explicitly, as happens in the hard-sell approach.

D The research does not show that the forcefulness with which claims are presented increases perceptions of the accuracy of those claims. Indeed, it is most likely the opposite, as the forcefulness of others' claims may make them seem even less related to any conclusions the consumer might generate for him- or herself.

E The research suggests that it is the soft-sell, not the hard-sell, approach that has fewer risks. The fourth paragraph indicates that there could be some risks to the implicit conclusions that consumers draw, but this is not part of the research in question.

The correct answer is C.

Questions 18–22 refer to the passage on page 28.

18. The passage is primarily concerned with

- (A) describing the effects of human activities on algae in coral reefs
- (B) explaining how human activities are posing a threat to coral reef communities
- (C) discussing the process by which coral reefs deteriorate in nutrient-poor waters
- (D) explaining how coral reefs produce food for themselves
- (E) describing the abundance of algae and filter-feeding animals in coral reef areas

Main idea

This question concerns the author's main point, the focus of the passage as a whole. The first paragraph describes the symbiotic process of coral reefs so that readers will understand how human activities are degrading this fragile ecosystem, as explained in the second paragraph. The author focuses on how harmful these human activities are to coral reefs.

A The increased abundance of algae (line 23) is a detail supporting the main point.

B Correct. Human activities are threatening complex coral reef communities.

C The first paragraph explains how coral reefs thrive in nutrient-poor waters.

D The zooxanthellae cells of algae feed the coral reefs (lines 7–12); this point is a detail that supports the main idea.

E This abundance is a detail supporting the main idea, not the main idea itself.

The correct answer is B.

19. The passage suggests which of the following about coral reef communities?

(A) Coral reef communities may actually be more likely to thrive in waters that are relatively low in nutrients.

(B) The nutrients on which coral reef communities thrive are only found in shallow waters.

(C) Human population growth has led to changing ocean temperatures, which threatens coral reef communities.

(D) The growth of coral reef communities tends to destabilize underwater herbivore populations.

(E) Coral reef communities are more complex and diverse than most ecosystems located on dry land.

Inference

The word *suggests* in the question indicates that the answer will be an inference based on what the passage says about coral reef communities. The beginning of the passage states that *nutrient-poor* waters (lines 4–5) sustain the thriving life of a coral reef. Lines 25–27 show that *nutrient input is increasing* because of human activities, with consequent *declines in reef communities* (line 24). Given this information, it is reasonable to conclude that coral reefs thrive in nutrient-poor, rather than nutrient-rich, waters.

A Correct. Coral reefs flourish in clear, nutrient-poor waters.

B Shallow waters are mentioned only in the context of deteriorating marine habitats (line 17), not as a source of nutrients; the passage does not indicate that the nutrients are unique to shallow waters.

C Ocean temperatures are not mentioned in the passage.

D Reef decline, not reef growth, leads to destabilized herbivore populations (lines 21–22).

E No comparisons are made between ecosystems in water and on land.

The correct answer is A.

20. The author refers to “filter-feeding animals” (lines 23–24) in order to

(A) provide an example of a characteristic sign of reef deterioration

- (B) explain how reef communities acquire sustenance for survival
- (C) identify a factor that helps herbivore populations thrive
- (D) indicate a cause of decreasing nutrient input in waters that reefs inhabit
- (E) identify members of coral reef communities that rely on coral reefs for nutrients

Logical structure

This question concerns why the author has included a particular detail. Look at the context for the phrase *filter-feeding animals*. The complete sentence (lines 21–24) shows that a higher population of filter-feeding animals is a symptom of reef decline.

- A Correct.** An *increasing abundance* of these animals is a *typical* sign of reef decline.
- B Zooxanthellae cells of algae, not filter-feeding animals, provide sustenance for reef communities (lines 7–12).
- C An increase in filter-feeding animals is associated with *destabilized*, not thriving, herbivore populations.
- D An increase in nutrients, rather than a decrease, causes reef decline, when the population of filter-feeding animals then grows.
- E The author includes filter-feeding animals in the context of the decline of coral reefs, not the symbiotic process of coral reefs.

The correct answer is A.

21. According to the passage, which of the following is a factor that is threatening the survival of coral reef communities?
- (A) The waters they inhabit contain few nutrient resources.
 - (B) A decline in nutrient input is disrupting their symbiotic relationship with zooxanthellae.
 - (C) The degraded waters of their marine habitats have reduced their ability to carry out photosynthesis.
 - (D) They are too biologically complex to survive in habitats with minimal nutrient input.
 - (E) Waste by-products result in an increase in nutrient input to reef communities.

Supporting ideas

The phrase *according to the passage* indicates that the necessary information is explicitly stated in the passage. Look at the threats to coral reefs listed in lines 18–

21 and match them against the possible answers. Waste by-products increase nutrients in the water, and reefs decline as nutrients grow more plentiful (lines 21–24).

A Coral reefs thrive in nutrient-poor waters, as the first paragraph explains.

B Nutrient input is increasing, not decreasing (lines 20–21).

C The passage does not say that the degraded waters inhibit photosynthesis.

D The complex ecosystem of coral reefs thrives in nutrient-poor waters.

E Correct. Waste by-products contribute to increased nutrient input, which causes reef decline.

The correct answer is E.

22. It can be inferred from the passage that the author describes coral reef communities as paradoxical most likely for which of the following reasons?

(A) They are thriving even though human activities have depleted the nutrients in their environment.

(B) They are able to survive in spite of an overabundance of algae inhabiting their waters.

(C) They are able to survive in an environment with limited food resources.

(D) Their metabolic wastes contribute to the degradation of the waters that they inhabit.

(E) They are declining even when the water surrounding them remains clear.

Inference

A paradox is a puzzling statement that seems to contradict itself. To answer this question, look for information that appears puzzling. The author calls coral reefs *one of the fascinating paradoxes of the biosphere* because the reefs are *prolific and productive* despite inhabiting clear waters with few nutrients. The paradox is that the reefs seem to flourish with little food.

A Human activities have harmed coral reefs by increasing nutrient input (lines 24–29).

B An increase in algae is a sign of reef decline, not reef survival (lines 21–23).

C Correct. Coral reefs thrive in waters that provide little food.

D Algae cells use the metabolic wastes of the corals to carry out photosynthesis; the result is sustenance for the reef community, not a degradation of waters (lines 9–12).

E Coral reefs thrive in clear, nutrient-poor water and decline in nutrient-rich water.

The correct answer is C.

Questions 23–26 refer to the passage on page 30.

23. It can be inferred from the passage that the two procedures described in the passage have which of the following in common?
- (A) They have been applied in practice.
 - (B) They rely on the use of a device that measures tension.
 - (C) Their purpose is to determine an unknown mass.
 - (D) They can only be applied to small solid objects.
 - (E) They involve attraction between objects of similar mass.

Inference

The procedures described in the passage are introduced by the suggestion in the first paragraph that someone in a spaceship who wanted to determine a solid object's mass could do so in a particular way. The second paragraph uses the word *weigh* in quotes to refer to a similar procedure for determining the mass of a double-star system.

A The language of the first paragraph is hypothetical: we *could* do particular things. Thus, there is no way to determine from the passage whether that procedure has been applied in practice.

B The first procedure relies on a spring scale, which measures tension, but the second procedure measures time and distance to determine restraining force.

C Correct. Both procedures determine mass: the first procedure can determine the mass of a small solid object on a spaceship in free fall, and the second can determine the mass of a double-star system.

D The first procedure would, according to the passage, be applied to a small solid object, but the second *weighs* double-star systems, which are clearly not small objects.

E The second procedure involves attraction between two stars, which could be of similar mass, in the same system, but the first procedure involves measuring tension in a string and speed of whirling, not attraction between objects.

The correct answer is C.

24. According to the passage, the tension in the string mentioned in lines 8–9 is analogous to which of the following aspects of a double-star system?

- (A) The speed with which one star orbits the other
- (B) The gravitational attraction between the stars
- (C) The amount of time it takes for the stars to circle one another
- (D) The distance between the two stars
- (E) The combined mass of the two stars

Supporting idea

The second paragraph states that an *attractive force* is analogous to the tension in the string. This attractive force is identified in the previous sentence as the gravitational force between the two stars in a double-star system.

A The second paragraph states that the speed with which the stars circle each other depends on the gravitational force between them, but it is that force that is analogous to the tension in the string.

B Correct. The second paragraph clearly identifies the gravitational force between the two stars as the attractive force that is analogous to the tension in the spring scale's string.

C The amount of time it takes for the stars to circle one another is necessary for calculating the force that holds them together, but it is the force itself that is analogous to the string's tension.

D The distance between the stars must be measured if the attraction between them is to be determined, but the attraction, not the distance, is analogous to the string's tension.

E The combined mass of the two stars is what the procedure is designed to determine; it is analogous to the mass of the small solid object, as described in the first paragraph.

The correct answer is B.

25. Which of the following best describes the relationship between the first and the second paragraph of the passage?

(A) The first paragraph provides an illustration useful for understanding a procedure described in the second paragraph.

(B) The first paragraph describes a hypothetical situation whose plausibility is tested in the second paragraph.

(C) The first paragraph evaluates the usefulness of a procedure whose application is described further in the second paragraph.

(D) The second paragraph provides evidence to support a claim made in the first paragraph.

(E) The second paragraph analyzes the practical implications of a

methodology proposed in the first paragraph.

Evaluation

This question requires understanding that the second paragraph describes a somewhat difficult-to-understand procedure that the first paragraph illustrates in smaller, and simpler, terms.

A Correct. The first paragraph illustrates, hypothetically, a simple procedure for determining mass, and this illustration provides the grounds on which the passage explains the procedure of the second paragraph.

B The first paragraph describes a situation in hypothetical terms, but the second paragraph does not test that situation's plausibility. Instead, the second paragraph draws an analogy between the initial situation and another procedure.

C The first paragraph does not evaluate the usefulness of the procedure for determining a small solid object's mass while in a spaceship in freefall; it simply describes how that procedure would work.

D The second paragraph provides no evidence; it describes a procedure analogous to what is described in the first paragraph.

E The second paragraph does not discuss the practical implications of the first paragraph's methodology but rather a procedure that is analogous to the hypothetical situation of the first paragraph.

The correct answer is A.

26. The author of the passage mentions observations regarding the period of a double-star system as being useful for determining
- (A) the distance between the two stars in the system
 - (B) the time it takes for each star to rotate on its axis
 - (C) the size of the orbit the system's two stars occupy
 - (D) the degree of gravitational attraction between the system's stars
 - (E) the speed at which the star system moves through space

Supporting idea

The author mentions the period of a double-star system in the final sentence of the second paragraph, defining it as the time required for stars to circle each other. Knowing this time, in combination with the distance between the stars, enables the determination of the restraining force between the stars.

A The final sentence of the second paragraph indicates that the period of a double-star system is measured independently of the distance between the two stars in the system.

B The passage is not concerned with how long it takes each star to rotate on its axis.

C The passage does not mention anyone's trying to determine the size of the orbit of a system's two stars. It does mention the related topic of distance between the stars but indicates that knowing such distance is required for measuring the stars' mass, not that it can be inferred from the period of the system.

D Correct. According to the passage, the restraining force, or gravitational attraction, between the two stars can be deduced based on the period and the distance between them.

E The passage does not mention the speed at which the star system moves through space.

The correct answer is D.

Questions 27–29 refer to the passage on page 32.

27. Which of the following most accurately states the purpose of the passage?
- (A) To compare two different approaches to the study of homeostasis
 - (B) To summarize the findings of several studies regarding organisms' maintenance of internal variables in extreme environments
 - (C) To argue for a particular hypothesis regarding various organisms' conservation of water in desert environments
 - (D) To cite examples of how homeostasis is achieved by various organisms
 - (E) To defend a new theory regarding the maintenance of adequate fluid balance

Main idea

To answer this question, look at the passage as a whole. The first paragraph defines homeostasis and names three animals that must maintain internal fluid balance in difficult circumstances. The topic of the second paragraph is how desert rats maintain fluid balance. The third paragraph discusses how camels maintain fluid balance, while the final paragraph describes maintenance of water balance in marine vertebrates. Thus, the overall purpose is to give three examples of how homeostasis is achieved.

A Examples of homeostasis are given, but different approaches to studying it are not discussed.

B The passage describes examples, but it does not summarize studies.

C While the passage does discuss two desert animals, it does not present any argument for a particular hypothesis.

D Correct. The passage discusses the examples of desert rats, camels, and marine vertebrates to show how these organisms are able to achieve homeostasis.

E The passage describes how three organisms maintain water balance, but it presents no theory about it.

The correct answer is D.

28. It can be inferred from the passage that some mechanisms that regulate internal body temperature, like sweating and panting, can lead to which of the following?
- (A) A rise in the external body temperature
 - (B) A drop in the body's internal fluid level
 - (C) A decrease in the osmotic pressure of the blood
 - (D) A decrease in the amount of renal water loss
 - (E) A decrease in the urine's salt content

Inference

An inference is drawn from stated information. To answer this question, look at the information about sweating and panting in lines 18–21 and 33–35. The passage states that desert rats avoid *loss of fluid through panting or sweating, which are regulatory mechanisms for maintaining internal body temperature by evaporative cooling*. These mechanisms reduce internal body temperatures. Additionally, camels *conserve internal water* (line 35) when they avoid sweating and panting, except at very high body temperatures. Therefore, they must lose internal water when they do sweat and pant.

A The passage does not discuss *external body temperature*; sweating and panting lower internal body temperature, and there is no reason to infer external body temperatures might rise.

B Correct. Sweating and panting lead to *loss of fluid*. Desert rats avoid sweating and panting by staying in burrows, and camels do not employ these mechanisms except at very high body temperatures (lines 33–35) and thus *conserve internal water*.

C The passage states that *desert rats are able to maintain the osmotic pressure of their blood, as well as their total body-water content* (lines 13–15) and does not connect changes in osmotic pressure to temperature-regulating mechanisms such as sweating and panting.

D While the passage does discuss renal water loss, it does not relate this to temperature-regulating mechanisms like sweating and panting.

E The passage does not relate body temperature regulators like sweating and panting to changes in the urine's salt content.

The correct answer is B.

29. It can be inferred from the passage that the author characterizes the camel's kidney as "entirely unexceptional" (line 26) primarily to emphasize that it
- (A) functions much as the kidney of a rat functions
 - (B) does not aid the camel in coping with the exceptional water loss resulting from the extreme conditions of its environment
 - (C) does not enable the camel to excrete as much salt as do the kidneys of marine vertebrates
 - (D) is similar in structure to the kidneys of most mammals living in water-deprived environments
 - (E) requires the help of other organs in eliminating excess salt

Inference

To answer this question, look at the phrase *entirely unexceptional* in the context of the passage. Desert rats and camels share the problem of conserving water in an environment where water is lacking, *temperature is high, and humidity is low* (lines 10–12). Desert rats have as part of their coping mechanisms exceptional kidneys that produce urine with a high salt content. The author compares camels' kidneys to those of desert rats and shows that the camels have ordinary kidneys that do not help the camels conserve water.

A Since a contrast is drawn between the kidneys of camels and those of desert rats, the two must function differently; the passage makes no reference to the kidneys of other rats.

B Correct. The camel's kidney does nothing special to help the camel cope with its difficult environment.

C No comparison between the kidneys of camels and the kidneys of marine vertebrates is made.

D There is no information given about the kidney structure of most mammals in desert environments so this conclusion is not justified.

E Marine vertebrates have other organs that help eliminate extra salt; camels do not.

The correct answer is B.

Questions 30–35 refer to the passage on page 34.

30. The primary purpose of the passage is to
- (A) describe new ways of studying the possibility that life once existed on Mars
 - (B) revise a theory regarding the existence of life on Mars in light of new

evidence

(C) reconcile conflicting viewpoints regarding the possibility that life once existed on Mars

(D) evaluate a recently proposed argument concerning the origin of ALH84001

(E) describe a controversy concerning the significance of evidence from ALH84001

Main idea

Answering this question requires determining the purpose of the passage as a whole. In the first paragraph, the passage indicates that a research team found that a Martian meteorite in Antarctica contains compelling evidence that life existed on Mars. The rest of the passage then describes arguments by skeptics against the research team's conclusion together with the research team's rebuttals to the skeptics' arguments.

A While the passage discusses one type of evidence that life might have existed on Mars, it does not describe multiple ways of studying the possibility of Martian life, nor characterize any method of study as *new*.

B The passage merely reports and does not make any attempt at revising existing theories.

C The passage describes but does not try to reconcile conflicting viewpoints concerning life on Mars.

D The origin of ALH84001 is generally agreed upon (line 5), not a recently proposed hypothesis evaluated by the passage.

E Correct. The passage describes opposing arguments about whether ALH84001 suggests life ever existed on Mars.

The correct answer is E.

31. The passage asserts which of the following about the claim that ALH84001 originated on Mars?

(A) It was initially proposed by the McKay team of scientists.

(B) It is not a matter of widespread scientific dispute.

(C) It has been questioned by some skeptics of the McKay team's work.

(D) It has been undermined by recent work on PAHs.

(E) It is incompatible with the fact that ALH84001 has been on Earth for 13,000 years.

Supporting ideas

This question requires recognizing what the passage indicates about a piece of information it offers. The passage states that *scientists generally agree* (line 5) that ALH84001 originated on Mars, which strongly suggests that there is not much dispute about it.

A While it is possible that McKay's team initially made the proposal, the passage does not say so.

B Correct. In stating that scientists generally agree ALH84001 originated on Mars, the passage indicates there is no real controversy on this matter.

C The skeptics mentioned in the passage are not described as calling into question that ALH84001 originated on Mars.

D The passage does not tie the existence of PAHs in ALH84001 to questions about its Martian origins.

E The passage makes no connection between the time ALH84001 has been on the Earth and questions as to its Martian origins.

The correct answer is B.

32. The passage suggests that the fact that ALH84001 has been on Earth for 13,000 years has been used by some scientists to support which of the following claims about ALH84001?

(A) ALH84001 may not have originated on Mars.

(B) ALH84001 contains PAHs that are the result of nonbiological processes.

(C) ALH84001 may not have contained PAHs when it landed on Earth.

(D) The organic molecules found in ALH84001 are not PAHs.

(E) The organic molecules found in ALH84001 could not be the result of terrestrial contamination.

Supporting ideas

This question requires recognizing how a particular fact is used to support a particular point of view reported in the passage. In the second paragraph, the passage presents various skeptics' arguments about whether the PAHs in ALH84001 originated on Mars. In lines 15–19, the passage indicates that some scientists see the fact that ALH84001 has been on Earth for 13,000 years as raising the possibility that the PAHs in ALH84001 *resulted from terrestrial contamination* or in other words that it did not contain PAHs when it landed on Earth.

A The passage indicates only that most scientists believe that ALH84001 originated on Mars.

B Although the passage indicates that skeptics have pointed out that PAHs can be formed by nonbiological processes, their point is not related to the

length of time ALH84001 has been on Earth.

C Correct. The passage indicates that some scientists believe that the PAHs in ALH84001 may have been transferred to it during its 13,000 years on Earth.

D The passage does not indicate that any scientists doubt the presence of PAHs in ALH84001.

E The passage indicates that the fact that ALH84001 has been on Earth for 13,000 years is used by some scientists to support the idea of terrestrial contamination.

The correct answer is C.

33. The passage suggests that if a meteorite contained PAHs that were the result of terrestrial contamination, then one would expect which of the following to be true?
- (A) The meteorite would have been on Earth for more than 13,000 years.
 - (B) The meteorite would have originated from a source other than Mars.
 - (C) The PAHs contained in the meteorite would have originated from nonbiological processes.
 - (D) The meteorite would contain fewer PAHs than most other meteorites contain.
 - (E) The PAHs contained in the meteorite would be concentrated toward the meteorite's surface.

Application

Answering this question involves applying information contained in the passage to a situation that is not described in the passage. According to the passage, some scientists believe that because ALH84001 has been on Earth for as long as 13,000 years, any PAHs contained in it may have been transferred from the Earth, a process the passage describes as *terrestrial contamination* (line 19). The passage also indicates that if terrestrial contamination occurred with ALH84001, then, contrary to the findings of McKay's team that showed PAH concentrations increasing *as one looks deeper into ALH84001* (lines 21–22), the PAHs would be expected to be concentrated more toward the outer parts, or surface, of ALH84001.

A The passage indicates that scientists believe that 13,000 years is sufficient time for terrestrial contamination to happen.

B The passage does not suggest that the origin of a meteorite affects its ability to become contaminated with terrestrial PAHs.

C The passage does not indicate whether PAHs resulting from terrestrial contamination would be nonbiological or not.

D The passage does not mention that different meteorites may contain different amounts of PAHs.

E Correct. The passage suggests that if ALH84001 experienced terrestrial contamination, then the PAHs would be more concentrated toward the outer surface of the meteorite.

The correct answer is E.

34. Which of the following best describes the function of the last sentence of the first paragraph?
- (A) It identifies a possible organic source for the PAHs found in ALH84001.
 - (B) It describes a feature of PAHs that is not shared by other types of organic molecules.
 - (C) It explains how a characteristic common to most meteorites originates.
 - (D) It suggests how the terrestrial contamination of ALH84001 might have taken place.
 - (E) It presents evidence that undermines the claim that life once existed on Mars.

Evaluation

This question requires understanding how a part of the passage functions within the passage as a whole. The first paragraph begins by establishing that McKay's team believes that the PAHs found in ALH84001 provide compelling evidence that life existed on Mars. To explain this, the passage indicates that PAHs are a type of organic molecules, which form the basis for life. Furthermore, to connect PAHs to possible life on Mars, the final sentence of the first paragraph indicates that one source of PAHs is the decay of dead microbes.

A Correct. Without evidence of an organic source for the PAHs in ALH84001, the team's argument would not make sense.

B The passage indicates that PAHs can be formed by the decay of organic material from microbes but does not imply that other organic molecules cannot be formed this way.

C The sentence referred to explains one possible origin of a molecule found in ALH84001 but does not imply that most meteorites contain that molecule.

D The sentence referred to does not involve the process of terrestrial contamination.

E The sentence referred to provides information necessary to the team's argument that life may have existed on Mars.

The correct answer is A.

35. The passage suggests that McKay's team would agree with which of the following regarding the PAHs produced by nonorganic processes?
- (A) These PAHs are not likely to be found in any meteorite that has been on Earth for 13,000 years or more.
 - (B) These PAHs are not likely to be found in any meteorite that originated from Mars.
 - (C) These PAHs are not likely to be produced by star formation.
 - (D) These PAHs are likely to be found in combinations that distinguish them from the PAHs produced by organic processes.
 - (E) These PAHs are likely to be found in fewer meteorites than the PAHs produced by organic processes.

Inference

This question involves understanding a particular point of view presented in the passage. The passage indicates in lines 11–13 that the organic molecules found in ALH84001 are PAHs. In lines 23–27, skeptics of McKay's team's findings point out that processes unrelated to organic life, including star formation, can produce PAHs. In the final sentence of the passage, McKay's team notes that the type of PAHs found in ALH84001 are more similar to those produced by organic processes than to those produced by nonorganic processes.

A McKay's team does not tie the presence of nonorganic PAHs in meteorites to the length of time the meteorites have been on Earth.

B McKay's team does not deny the possibility that at least some of the PAHs found in Martian meteorites are nonorganic in origin.

C McKay's team does not deny that PAHs can be produced by the formation of stars.

D Correct. McKay's team notes in lines 29–34 that the PAH combinations produced by organic processes can be distinguished from those produced by nonorganic processes.

E McKay's team does not address the probability of nonorganic PAHs being found in meteorites.

The correct answer is D.

Questions 36–38 refer to the passage on page 36.

36. The primary purpose of the passage is to
- (A) refute the idea that the zonation exhibited in mangrove forests is caused by adaptation to salinity

(B) describe the pattern of zonation typically found in Florida mangrove forests

(C) argue that Davis' succession paradigm cannot be successfully applied to Florida mangrove forests

(D) discuss hypotheses that attempt to explain the zonation of coastal mangrove forests

(E) establish that plants that do well in saline forest environments require salt to achieve maximum metabolic efficiency

Main idea

Look at the passage as a whole in order to find the passage's primary purpose. The first paragraph discusses zonation and species distribution in mangrove forests. The second paragraph presents Davis' theory that zonation is caused by plant succession. The third paragraph discusses a challenge to Davis' theory. The final paragraph presents research on salinity tolerance and zonation in mangrove forests. The passage as a whole is concerned with different explanations of zonation in mangrove forests.

A The fourth paragraph discusses the relation of salinity and zonation, but the passage does not refute this idea. Since this idea is only discussed in one paragraph, it cannot be the primary concern of the whole passage.

B Zonation is described in the first paragraph, but the passage's primary interest is in the possible causes of zonation.

C The third paragraph shows that Davis' paradigm applies to some mangrove forests but not to those on stable coastlines.

D Correct. The passage's primary purpose, as expressed throughout, is looking at different explanations of the causes of zonation in mangrove forests.

E Salinity is discussed in the final paragraph, but the passage states that salt is not required. The brief discussion of this point shows that it is not the primary concern of the passage.

The correct answer is D.

37. According to the passage, the earliest research on mangrove forests produced which of the following?

(A) Data that implied random patterns of mangrove species distribution

(B) Descriptions of species distributions suggesting zonation

(C) Descriptions of the development of mangrove forests over time

(D) Reclassification of species formerly thought to be identical

(E) Data that confirmed the “land-building” role of mangroves

Supporting ideas

As indicated by the phrase *according to the passage*, this question is based on factual information stated in the passage. Lines 5–8 describe the *earliest research on mangrove forests*. This research *produced descriptions of species distribution from shore to land*. This shore-to-land pattern is described as “*zonal*” in the first sentence.

A The passage suggests that the distribution was not random.

B Correct. The description of the species distribution goes from shore to land, fitting the definition of “*zonal*” in the first sentence.

C The passage does not indicate that the earliest research looked at mangrove forest development over time.

D There is no evidence that the earliest research involved reclassification.

E The earliest research produced only descriptions; the land-building theory came later.

The correct answer is B.

38. It can be inferred from the passage that Davis’ paradigm does NOT apply to which of the following?

(A) The shoreline of Florida mangrove forests first studied by Davis

(B) A shoreline in an area with weak currents

(C) A shoreline in an area with weak tidal energy

(D) A shoreline extended by “land-building” species of mangroves

(E) A shoreline in which few sediments can accumulate

Application

To answer this question, apply Davis’ paradigm to the situations in the answer choices. One situation will NOT fit the paradigm. According to Davis, the shoreline is extended seaward because of *the “land-building” role of mangroves* (lines 12–14). The third paragraph describes the circumstances favorable to the land-building process: weak currents, weak tidal energies, and the accumulation of sediments. In the absence of these conditions, land-building would not occur.

A Since this is the area from which Davis drew his conclusions, it obviously fits the paradigm.

B Weak currents favor the land-building paradigm.

C Weak tidal energies favor the land-building paradigm.

D If land-building has occurred, then the paradigm describing that land-

building applies.

E Correct. If few sediments can accumulate, land-building is NOT able to occur.

The correct answer is E.

Questions 39–42 refer to the passage on page 38.

39. The primary purpose of the passage is to

- (A) present recently discovered evidence that supports a conventional interpretation of a historical period
- (B) describe how reinterpretations of available evidence have reinvigorated a once-discredited scholarly position
- (C) explain why some historians have tended to emphasize change rather than continuity in discussing a particular period
- (D) explore how changes in a particular occupation serve to counter the prevailing view of a historical period
- (E) examine a particular area of historical research in order to exemplify a general scholarly trend

Main idea

This question asks about the passage's main purpose. The first paragraph initially describes a way in which historiography is changing: the idea of a consistent, monolithic decline in women's status is being complicated by *recent research*. The rest of the passage uses the example of Pinchbeck's interpretation of women's work in English cheesemaking to show the limits of earlier ideas about women's status: Pinchbeck's work illustrates the idea of consistent decline, but recent scholarship has called that work into question.

A The first paragraph suggests that Pinchbeck's work represents the conventional position that women's status declined consistently with the advent of capitalism; according to the passage, recent evidence undermines, rather than supports, that position.

B According to the passage, reinterpretations of evidence have inspired new interpretations; they have not reinvigorated a discredited position.

C The passage is concerned with noting both change and continuity, as stated in the first sentence.

D In the passage, continuity, not change, in a particular occupation—English farmhouse cheesemaking—helps to counter the prevailing view.

E Correct. The passage's main purpose is to examine women's work in English farmhouse cheesemaking so as to illustrate a trend in

historiography of women's status under capitalism and industrialization.

The correct answer is E.

40. Regarding English local markets and fairs, which of the following can be inferred from the passage?

- (A) Both before and after the agricultural revolution, the sellers of agricultural products at these venues were men.
- (B) Knowing who the active sellers were at these venues may not give a reliable indication of who controlled the revenue from the sales.
- (C) There were no parallel institutions at which American cheese makers could sell their own products.
- (D) Prior to the agricultural revolution, the sellers of agricultural products at these venues were generally the producers themselves.
- (E) Prior to the agricultural revolution, women sold not only cheese but also products of arable agriculture at these venues.

Inference

The passage discusses English local markets and fairs in the first and second paragraphs: the first paragraph states that before the agricultural revolution, women had sold cheese in such venues but that after that, factors, who were men, sold the cheese. The second paragraph argues that even though English women in precapitalist, preindustrial times may have at one point sold cheese at fairs, evidence indicates that in at least one case, a man appropriated most of the money his wife made from her sales.

A The first paragraph states that prior to the agricultural revolution, women sold cheese at local markets and fairs.

B Correct. As the second paragraph indicates, women may have sold the cheese, but there is evidence to suggest that they did not necessarily control the revenue from its sale.

C The passage does not provide evidence regarding any institutions at which American cheese makers sold their products.

D While the passage indicates that the producers of English farmhouse cheese may have been the ones who sold that cheese at local markets and fairs, there is no evidence to suggest that this was necessarily the case for other agricultural products.

E The passage provides no information regarding whether women sold products of arable agriculture in any venue.

The correct answer is B.

41. The passage describes the work of Pinchbeck primarily in order to
- (A) demonstrate that some of the conclusions reached by recent historians were anticipated in earlier scholarship
 - (B) provide an instance of the viewpoint that, according to the passage's author, is being superseded
 - (C) illustrate the ways in which recent historians have built on the work of their predecessors
 - (D) provide a point of reference for subsequent scholarship on women's work during the agricultural revolution
 - (E) show the effect that the specialization introduced in the agricultural and industrial revolutions had on women's work

Evaluation

This question focuses on the function of Pinchbeck's work in the passage. Pinchbeck's study of women's work in cheese production is, according to the passage, an illustration of the view that women's status declined consistently with the advent of industrialization. That view, the author claims, is being challenged by current historiography.

A The passage indicates that the conclusions of Pinchbeck, who represents earlier scholarship, did not anticipate recent work, but rather that recent work argues against those conclusions.

B Correct. Pinchbeck's work illustrates earlier trends in historiography, trends that the author suggests are now giving way to newer ideas.

C The passage does not focus on any ways in which recent historians have built on Pinchbeck's work; instead, it discusses how they have argued against its conclusions.

D Pinchbeck's work provides a point of reference only insofar as subsequent scholarship is arguing against it.

E Pinchbeck makes the argument that specialization caused women's status to decline, but the passage is concerned with undermining this argument.

The correct answer is B.

42. It can be inferred from the passage that women did work in
- (A) American cheesemaking at some point prior to industrialization
 - (B) arable agriculture in northern England both before and after the agricultural revolution
 - (C) arable agriculture in southeast England after the agricultural revolution, in those locales in which cultural values supported their participation

(D) the sale of cheese at local markets in England even after the agricultural revolution

(E) some areas of American cheese dairying after industrialization

Inference

This question focuses mainly on the final paragraph of the passage, in which women's continued work in English cheese dairying is contrasted with what the passage calls their *disappearance from arable agriculture in southeast England and from American cheese dairying*, presumably during the period of industrialization. The correct answer will be a conclusion that can be drawn from this information.

A Correct. That women “disappeared” from American cheese dairying during industrialization provides grounds for inferring that they did such dairying work at some point prior to industrialization.

B The passage says that women disappeared from arable agriculture in southeast England, but it gives no information about their participation in arable agriculture in northern England.

C The passage makes a blanket statement about women's *disappearance from arable agriculture in southeast England*, so there is no reason to infer that any locales supported women's participation in agriculture.

D The first paragraph states that factors, who were men, sold cheese after the agricultural revolution.

E The final paragraph explicitly states that women disappeared from American cheese dairying; thus, there is no basis for inferring that women worked in any areas of that field after industrialization.

The correct answer is A.

Questions 43–48 refer to the passage on page 40.

43. The primary purpose of the passage is to

(A) discuss a plan for investigation of a phenomenon that is not yet fully understood

(B) present two explanations of a phenomenon and reconcile the differences between them

(C) summarize two theories and suggest a third theory that overcomes the problems encountered in the first two

(D) describe an alternative hypothesis and provide evidence and arguments that support it

(E) challenge the validity of a theory by exposing the inconsistencies and

contradictions in it

Main idea

Examining the structure of the whole passage helps to identify the passage's primary purpose or main idea. The first two paragraphs introduce a recent hypothesis about how caffeine affects behavior. The third paragraph looks at an earlier, widely accepted theory and then presents the objections to it made by the scientists proposing the more recent hypothesis. The fourth and fifth paragraphs provide evidence to support the newer hypothesis. Since most of the passage is devoted to the recent hypothesis, clearly the primary purpose must be to present that hypothesis to readers.

A The passage discusses a current investigation, not one planned for the future.

B The passage examines two explanations, but the earlier theory is discussed only to expose its weakness and the differences between the explanations are not reconciled. Most of the passage is devoted to the more recent hypothesis.

C Only two theories are presented in the passage.

D Correct. The recent hypothesis provides an alternative to an earlier one and is supported by evidence and arguments.

E Lines 32–37 do pose such a challenge to the earlier theory; however, the challenge is a small part of the whole passage. Similarly, in the final paragraph, an exception to the more recent theory is introduced, only to be dismissed as an unimportant concern.

The correct answer is D.

44. According to Snyder et al., caffeine differs from adenosine in that caffeine
- (A) stimulates behavior in the mouse and in humans, whereas adenosine stimulates behavior in humans only
 - (B) has mixed effects in the brain, whereas adenosine has only a stimulatory effect
 - (C) increases cyclic AMP concentrations in target neurons, whereas adenosine decreases such concentrations
 - (D) permits release of neurotransmitters when it is bound to adenosine receptors, whereas adenosine inhibits such release
 - (E) inhibits both neuron firing and the production of phosphodiesterase when there is a sufficient concentration in the brain, whereas adenosine inhibits only neuron firing

Supporting ideas

To answer this question, look for the section in the passage that discusses adenosine and caffeine. The first paragraph leads the reader through how adenosine (lines 7–11) and caffeine (lines 4–6) work in the brain, according to Snyder et al. Adenosine *depresses neuron firing by inhibiting the release of neurotransmitters*; it is able to achieve this by binding to *specific receptors on neuronal membranes*. Caffeine interrupts this process by binding to the receptors, which prevents adenosine from attaching to them, and the neurons then *fire more readily than they otherwise would* (lines 17–21).

A The passage does not suggest that adenosine stimulates behavior.

B While the final paragraph reveals that caffeine displays mixed effects, the passage does not state that adenosine has a stimulatory effect.

C Increasing cyclic AMP concentrations is part of the earlier theory, not that of Snyder et al.

D Correct. Lines 17–21 explain that caffeine binds to the receptors, releasing neurotransmitters, whereas adenosine hinders that release.

E Inhibiting the production of phosphodiesterase is discussed in the earlier theory, not in the work of Snyder et al.

The correct answer is D.

45. In response to experimental results concerning IBMX, Snyder et al. contended that it is not uncommon for psychoactive drugs to have

(A) mixed effects in the brain

(B) inhibitory effects on enzymes in the brain

(C) close structural relationships with caffeine

(D) depressive effects on mouse locomotion

(E) the ability to dislodge caffeine from receptors in the brain

Supporting ideas

To answer this question, look at the last paragraph, which discusses the effects of IBMX. This compound binds to the adenosine receptors, but instead of acting as a stimulant as other caffeine derivatives do, it was found to depress locomotion in mice. Snyder et al. explain that IBMX *has mixed effects in the brain, a not unusual occurrence with psychoactive drugs* (lines 58–60).

A Correct. The results of one experiment can be explained by *mixed effects in the brain*, which Snyder et al. say may occur with psychoactive drugs.

B This response refers back to the earlier theory, not to Snyder et al.'s response concerning IBMX experiment results.

C Caffeine is only included within the broad category of psychoactive drugs.

D This effect is attributed to one compound, IBMX, not to all psychoactive drugs.

E This ability is not discussed in the passage.

The correct answer is A.

46. According to Snyder et al., all of the following compounds can bind to specific receptors in the brain EXCEPT

(A) IBMX

(B) caffeine

(C) adenosine

(D) theophylline

(E) phosphodiesterase

Supporting ideas

This question asks the reader to rule out all the possibilities discussed in the text, leaving the single exception. The first paragraph explains that both adenosine and caffeine bind to receptors in the brain. The third paragraph attests to the ability of theophylline to bind to the receptors. The last paragraph describes IBMX as a compound that binds to adenosine receptors. Thus, the exception has to be the enzyme phosphodiesterase.

A Lines 54–55 state that IBMX binds to receptors.

B Lines 17–19 state that caffeine binds to receptors.

C Lines 13–14 state that adenosine binds to receptors.

D Lines 46–50 state that theophylline binds to receptors.

E Correct. The passage includes no evidence that phosphodiesterase binds to receptors.

The correct answer is E.

47. Snyder et al. suggest that caffeine's ability to bind to A₁ and A₂ receptors can be at least partially attributed to which of the following?

(A) The chemical relationship between caffeine and phosphodiesterase

(B) The structural relationship between caffeine and adenosine

(C) The structural similarity between caffeine and neurotransmitters

(D) The ability of caffeine to stimulate behavior

(E) The natural occurrence of caffeine and adenosine in the brain

Supporting ideas

This question asks the reader to find information that is suggested but not directly stated in the passage. The A₁ and A₂ receptors are mentioned in line 16, so look at the surrounding material. Snyder et al. propose that caffeine, *which is structurally similar to adenosine*, binds to both types of receptors, just as adenosine does. Caffeine's ability to bind to these receptors may be due to this structural similarity to adenosine.

A Phosphodiesterase is discussed in an entirely different context in lines 22–25.

B Correct. Lines 17–19 suggest that caffeine's structural similarity to adenosine may be responsible for its ability to bind to A₁ and A₂ receptors.

C Caffeine acts on neurotransmitters; it is not structurally similar to them.

D Caffeine's ability to stimulate behavior results from, rather than causes, this process.

E The passage does not discuss the natural occurrence of these compounds.

The correct answer is B.

48. The author quotes Snyder et al. in lines 43–48 most probably in order to
- (A) reveal some of the assumptions underlying their theory
 - (B) summarize a major finding of their experiments
 - (C) point out that their experiments were limited to the mouse
 - (D) indicate that their experiments resulted only in general correlations
 - (E) refute the objections made by supporters of the older theory

Logical structure

To find the reason that the author quotes Snyder et al., examine the fourth paragraph, where the quotation appears. The paragraph starts with evidence supporting the new hypothesis on the basis of experiments with mice. The quotation then begins with the phrase *in general*, which implies a summary of the results of the work with mice. The quoted material explains that the more the compounds were able to bind to the receptors, the greater the stimulatory effect. This major finding supports the hypothesis.

A The quotation explains results of an experiment, not assumptions about a theory.

B Correct. The quotation summarizes the experiment with mice and reports a major finding in support of the hypothesis.

C The quotation generalizes on the basis of the experiment; it does not limit the finding to mice.

D Specific, not general, correlations were made between the ability to bind to receptors and to stimulate locomotion.

E The passage includes no such objections; therefore no refutations are needed.

The correct answer is B.

Questions 49–54 refer to the passage on page 42.

49. The author of the passage alludes to the well-established nature of the concept of individual rights in the Anglo-Saxon legal and political tradition in order to
- (A) illustrate the influence of individualist feminist thought on more general intellectual trends in English history
 - (B) argue that feminism was already a part of the larger Anglo-Saxon intellectual tradition, even though this has often gone unnoticed by critics of women's emancipation
 - (C) explain the decline in individualist thinking among feminists in non-English-speaking countries
 - (D) help account for an increasing shift toward individualist feminism among feminists in English-speaking countries
 - (E) account for the philosophical differences between individualist and relational feminists in English-speaking countries

Logical structure

This question asks for the reason that the author has chosen to include the information about the Anglo-Saxon tradition in lines 24–28. The concept of individual rights was *well established* in this tradition, and that is the reason that *individualist feminism came to predominate in English-speaking countries*. Thus, this detail explains why feminists in English-speaking countries turned to individualist, rather than relational, feminism.

A This statement reverses the order: the more general intellectual trends in English history influenced individualist feminism.

B Feminism is not said to be a part of the Anglo-Saxon tradition.

C While relational feminism is said to predominate among European and non-Western feminists, the passage offers no evidence of a decline in individualist feminism among these groups.

D Correct. The author uses the information about individual rights and the Anglo-Saxon tradition to explain why individualist feminism predominated in English-speaking countries.

E The Anglo-Saxon tradition is not said to account for all the philosophical

differences between the two feminist traditions in English-speaking countries but only for the fact that individualist feminism became predominant there.

The correct answer is D.

50. The passage suggests that the author of the passage believes which of the following?

- (A) The predominance of individualist feminism in English-speaking countries is a historical phenomenon, the causes of which have not yet been investigated.
- (B) The individualist and relational feminist views are irreconcilable, given their theoretical differences concerning the foundations of society.
- (C) A consensus concerning the direction of future feminist politics will probably soon emerge, given the awareness among feminists of the need for cooperation among women.
- (D) Political adversaries of feminism often misuse arguments predicated on differences between the sexes to argue that the existing social system should be maintained.
- (E) Relational feminism provides the best theoretical framework for contemporary feminist politics, but individualist feminism could contribute much toward refining and strengthening modern feminist thought.

Supporting ideas

To answer this question, look for an idea that the author explicitly supports in the passage. The first sentence of the last paragraph (lines 41–45) states that the relational feminists' argument—that women's biological role gives them a special (and undervalued) place in society—may be used by opponents of feminism to reinforce the existing dominance of men.

A In lines 19–24, the author identifies one cause for the situation.

B In lines 51–55, the author implies that a reconciliation might be possible, making this an overstatement.

C The author does not suggest that consensus is likely to happen soon; cooperation is not discussed.

D Correct. This statement is consistent with the view the author expressed in the third paragraph.

E The last paragraph discusses the problems of both feminist traditions, but the author does not say one is better for contemporary feminist politics than the other.

The correct answer is D.

51. It can be inferred from the passage that the individualist feminist tradition denies the validity of which of the following causal statements?
- (A) A division of labor in a social group can result in increased efficiency with regard to the performance of group tasks.
 - (B) A division of labor in a social group causes inequities in the distribution of opportunities and benefits among group members.
 - (C) A division of labor on the basis of gender in a social group is necessitated by the existence of sex-linked biological differences between male and female members of the group.
 - (D) Culturally determined distinctions based on gender in a social group foster the existence of differing attitudes and opinions among group members.
 - (E) Educational programs aimed at reducing inequalities based on gender among members of a social group can result in a sense of greater well-being for all members of the group.

Inference

To make an inference about the individualist feminist tradition, begin by rereading the first paragraph, which sets forth the differing *modes of argumentation*.

Relational feminism holds that the biological differences of the sexes must result in a division of labor based on those differences (lines 6–11). *By contrast*, individualist feminism downplays the importance of gender roles and attaches little importance to the biological function of childbearing (lines 11–16). Thus, it can be inferred that individualist feminists would disagree with the statement that biological differences should determine a gender-based division of labor in society.

A The passage neither discusses increased efficiency nor implies that individualist feminists would reject it.

B The passage does not indicate that individualist feminists would disagree with this statement.

C Correct. This statement reflects the position of the relational feminists that the individualist feminists oppose; individualist feminists instead stress individual rights and personal autonomy.

D The passage offers no evidence that individualist feminists would disagree with this statement.

E Nothing in the passage indicates that individualist feminists would disagree with this statement.

The correct answer is C.

52. According to the passage, relational feminists and individualist feminists agree that

- (A) individual human rights take precedence over most other social claims
- (B) the gender-based division of labor in society should be eliminated
- (C) laws guaranteeing equal treatment for all citizens regardless of gender should be passed
- (D) a greater degree of social awareness concerning the importance of motherhood would be beneficial to society
- (E) the same educational and economic opportunities should be available to both sexes

Supporting ideas

This question asks for information that is explicitly stated in the passage in slightly different language. While the passage is largely devoted to the differences between the two feminist traditions, lines 30–34 indicate a point of convergence.

Individualist feminists believe in *equal rights for all*. Relational feminists believe that *equal educational and economic opportunities* should be available to women.

A Only individualist feminists believe that individual human rights are most important (lines 11–13).

B Relational feminists do believe in a gender-based division of labor (lines 6–8).

C Lines 30–37 show that relational feminists do not believe in gender-blind equal rights laws.

D Only relational feminists believe in the importance of women’s *special contributions to society* (lines 35–36).

E Correct. Practitioners of both feminist traditions believe that equal educational and economic opportunities should be available to both sexes.

The correct answer is E.

53. According to the author, which of the following was true of feminist thought in Western societies before 1890?

(A) Individualist feminist arguments were not found in the thought or writing of non-English-speaking feminists.

(B) Individualist feminism was a strain in feminist thought, but another strain, relational feminism, predominated.

(C) Relational and individualist approaches were equally prevalent in feminist thought and writing.

(D) The predominant view among feminists held that the welfare of women was ultimately less important than the welfare of children.

(E) The predominant view among feminists held that the sexes should

receive equal treatment under the law.

Supporting ideas

To answer this question, look at what the author states in lines 17–24, where the years before and after 1890 are discussed. The second paragraph begins by explaining that the two feminist traditions *coexisted* up until the late nineteenth century, although relational feminism *had been the dominant strain in feminist thought*.

A The passage states that relational feminism was *the dominant strain* of the two views that *coexisted*; thus, the individualist arguments existed before 1890.

B Correct. Lines 20–21 explicitly state that relational feminism *had been the dominant strain in feminist thought* before 1890.

C The passage shows that the two feminist traditions were not equally prevalent; relational feminism predominated.

D No evidence in the passage supports this statement.

E The passage does not show that most feminists before 1890 took this position.

The correct answer is B.

54. The author implies that which of the following was true of most feminist thinkers in England and the United States after 1920?
- (A) They were less concerned with politics than with intellectual issues.
 - (B) They began to reach a broader audience, and their programs began to be adopted by mainstream political parties.
 - (C) They called repeatedly for international cooperation among women's groups to achieve their goals.
 - (D) They moderated their initial criticism of the economic systems that characterized their societies.
 - (E) They did not attempt to unite the two different feminist approaches in their thought.

Inference

Answering this question involves making an inference. Before 1890, the two feminist traditions *coexisted*. After 1920, *the goals of the two approaches began to seem increasingly irreconcilable* (lines 28–30). Lines 30–40 provide details on the differing and even opposing priorities of the relational feminists and individualist feminists. It is reasonable to infer that both feminist traditions pursued their own goals and did not try to reconcile the two different approaches in their work. The

final paragraph reveals that the two feminist traditions continue to remain separate, although the author offers a possibility for their harmonization.

A Individualist feminists advocated a *system with equal rights*, and relational feminists sought *protective legislation*, so it is clear both groups were politically active; the author does not imply that they were more interested in intellectual issues.

B The passage offers no evidence to show broader or growing support for feminist ideas.

C International cooperation is not discussed in the passage.

D No information in the passage supports this statement.

E Correct. As the goals of the two feminist traditions grew *increasingly irreconcilable*, feminists in England and the United States did not try to harmonize the two strains in their thinking.

The correct answer is E.

Questions 55–61 refer to the passage on page 44.

55. According to the passage, all of the following were benefits of privatizing state-owned industries in the United Kingdom EXCEPT:

(A) Privatized industries paid taxes to the government.

(B) The government gained revenue from selling state-owned industries.

(C) The government repaid some of its national debt.

(D) Profits from industries that were still state-owned increased.

(E) Total borrowings and losses of state-owned industries decreased.

Supporting ideas

This question begins with the phrase *according to the passage*, indicating that it can be answered using facts stated in the passage. The first paragraph lists the benefits of privatization. Use the process of elimination and check the five possible answer choices against the benefits described in lines 8–15. The point that is NOT discussed in the passage is the correct answer.

A Lines 11–12 discuss tax revenues.

B Lines 10–11 discuss revenue from the sales.

C Lines 13–15 discuss debt repayment.

D Correct. Profits from state-owned industries are not discussed.

E Lines 9–10 discuss decreased borrowings and losses.

The correct answer is D.

56. According to the passage, which of the following resulted in increased productivity in companies that have been privatized?

- (A) A large number of employees chose to purchase shares in their companies.
- (B) Free shares were widely distributed to individual shareholders.
- (C) The government ceased to regulate major industries.
- (D) Unions conducted wage negotiations for employees.
- (E) Employee-owners agreed to have their wages lowered.

Supporting ideas

This question is based on information explicitly stated in the passage. The second paragraph describes the increased productivity, and the third paragraph begins by stating one reason for it: *employees of privatized industries were given the opportunity to buy shares in their own companies* (lines 28–30). The paragraph also cites the high percentage of employees buying shares in three privatized companies, supporting the idea that many employees bought shares.

A Correct. Productivity increased after employees became shareholders in their companies.

B The theoretical advantages and disadvantages of free shares are discussed (lines 42–51), but the passage does not say that any were given away.

C The passage does not examine governmental regulation.

D Although wages are discussed in lines 38–41, the passage does not analyze the relation between wages and productivity.

E Lines 38–41 cite one example of employee-owner willingness to accept lower wages, but this is not said to have resulted in increased productivity.

The correct answer is A.

57. It can be inferred from the passage that the author considers labor disruptions to be

- (A) an inevitable problem in a weak national economy
- (B) a positive sign of employee concern about a company
- (C) a predictor of employee reactions to a company's offer to sell shares to them
- (D) a phenomenon found more often in state-owned industries than in private companies
- (E) a deterrence to high performance levels in an industry

Inference

This question states that an inference is required; this inference is based on material presented in the second paragraph. To demonstrate that privatization has *raised the level of performance in every area*, the author gives three examples (lines 19–26). One example is the disappearance of labor disruptions, once common. If the absence of labor disruptions raises the level of performance, then the author must believe that the presence of labor disruptions impedes an increase in performance levels.

- A The author does not link labor disruptions with a weak national economy.
- B The author does not present labor disruptions in a positive light.
- C The author does not identify labor disruptions as a predictor of employees' responses to opportunities to buy a company's shares.
- D Labor disruptions in state-owned and private industries are not compared.
- E Correct.** The author implies that labor disruptions interfere with high levels of performance in industry.

The correct answer is E.

58. The passage supports which of the following statements about employees buying shares in their own companies?

- (A) At three different companies, approximately nine out of ten of the workers were eligible to buy shares in their companies.
- (B) Approximately 90 percent of the eligible workers at three different companies chose to buy shares in their companies.
- (C) The opportunity to buy shares was discouraged by at least some labor unions.
- (D) Companies that demonstrated the highest productivity were the first to allow their employees the opportunity to buy shares.
- (E) Eligibility to buy shares was contingent on employees' agreeing to increased work loads.

Supporting ideas

Check each statement by comparing it to the information presented in the passage. Only one statement is supported. The third paragraph presents the percentages of the eligible employees who purchased shares in their companies: 89 percent at one company, 90 percent at a second, and 92 percent at a third (lines 31–34). Thus, it is true that roughly 90 percent of the eligible work force at three different companies bought shares in their companies once they were given the opportunity to do so.

- A The passage cites the percentages of the eligible employees who bought shares, not the percentages of the total workforce that were eligible.

B Correct. The passage shows that roughly 90 percent of the eligible employees at three different companies bought shares in their companies.

C The passage does not address the attitude of labor unions toward employee share buying.

D The passage offers no evidence that companies with high productivity were the first to offer shares to their employees.

E The passage does not show eligibility to be dependent on increased workload.

The correct answer is B.

59. Which of the following statements is most consistent with the principle described in lines 35–37?

(A) A democratic government that decides it is inappropriate to own a particular industry has in no way abdicated its responsibilities as guardian of the public interest.

(B) The ideal way for a government to protect employee interests is to force companies to maintain their share of a competitive market without government subsidies.

(C) The failure to harness the power of self-interest is an important reason that state-owned industries perform poorly.

(D) Governments that want to implement privatization programs must try to eliminate all resistance to the free-market system.

(E) The individual shareholder will reap only a minute share of the gains from whatever sacrifices he or she makes to achieve these gains.

Application

To answer this question, first identify the principle involved, and then find the statement that is most compatible with that principle. Lines 35–37 argue that having *a personal stake* in a business makes employees *work to make it prosper*. When there is no personal stake, or self-interest, involved, employees do not have the same incentive to work hard to make their industry *prosper*. Thus, the poor performance of state-owned industries can be ascribed in part to employees' lack of motivation when they have no personal stake in the business.

A The principle involves a personal, rather than governmental, relationship.

B According to the principle, self-interest may inspire people to do more; government coercion is not consistent with this principle.

C Correct. State-owned industries perform poorly in part because employees do not have the powerful motivation of self-interest.

D The principle has to do with the motivation of individuals, not governments; eliminating all resistance to the free-market system is not discussed.

E Lines 35–37 describe the principle of self-interest, not self-sacrifice.

The correct answer is C.

60. Which of the following can be inferred from the passage about the privatization process in the United Kingdom?

(A) It depends to a potentially dangerous degree on individual ownership of shares.

(B) It conforms in its most general outlines to Thomas Paine's prescription for business ownership.

(C) It was originally conceived to include some giving away of free shares.

(D) It has been successful, even though privatization has failed in other countries.

(E) It is taking place more slowly than some economists suggest is necessary.

Inference

Answering this question requires looking at each possible inference to see if it is supported somewhere in the passage. Support for the inference about the pace of privatization is provided by the suggestion of some economists that *giving away free shares would provide a needed acceleration of the privatization process* (lines 42–44). If some economists think privatization needs to be accelerated, then it must be going too slowly, at least according to these economists.

A The passage does not allude to any danger in individual ownership of shares.

B Paine is quoted only in reference to employees' receiving free shares as opposed to buying shares; also, the process of privatization had occurred before employees bought shares in the newly privatized companies.

C No evidence supports the distribution of free shares as part of the United Kingdom's plan to privatize.

D A phrase in line 4, *one approach that works*, suggests that perhaps there were other approaches that did not work; however, nowhere does the passage indicate that privatization has not worked in other countries.

E Correct. The economists' suggestion comes from what they see as the need to speed up a process that is currently taking too long.

The correct answer is E.

61. The quotation in lines 45–46 is most probably used to

- (A) counter a position that the author of the passage believes is incorrect
- (B) state a solution to a problem described in the previous sentence
- (C) show how opponents of the viewpoint of the author of the passage have supported their arguments
- (D) point out a paradox contained in a controversial viewpoint
- (E) present a historical maxim to challenge the principle introduced in the third paragraph

Logical structure

Looking at the quotation's context leads to an understanding of why the quotation was used. Paine's quotation offers a concise and time-honored counterargument to the view voiced in the preceding sentence. The economists suggest giving away free shares, but the author notes that these economists are forgetting that, according to Paine, people do not value what they get too cheaply. The author uses the quotation to show the basic error in the economists' thinking.

A Correct. The author uses Paine's quotation as an apt counter to the economists' suggestion.

B The quotation challenges the solution posed in the previous sentence.

C The author agrees with Paine, as is evident in the final lines of the passage.

D The author implies that a viewpoint is ill advised but does not say it is controversial.

E Paine's maxim does not challenge the principle of self-interest.

The correct answer is A.

Questions 62–67 refer to the passage on page 46.

62. The primary purpose of the passage is to

- (A) enumerate reasons why both traditional scholarly methods and newer scholarly methods have limitations
- (B) identify a shortcoming in a scholarly approach and describe an alternative approach
- (C) provide empirical data to support a long-held scholarly assumption
- (D) compare two scholarly publications on the basis of their authors' backgrounds
- (E) attempt to provide a partial answer to a long-standing scholarly dilemma

Main idea

To find the primary purpose, look at what the author is doing in the entire passage. In the first paragraph, the author examines two approaches to political history, both of which suffer from the same flaw, the exclusion of women. In the second paragraph, the author reviews an alternative, more inclusive way to understand political history.

A The first paragraph identifies only one reason that the two approaches are flawed; an alternative approach is discussed in the second paragraph.

B Correct. The author points to the flaw in earlier approaches to history and shows an alternative way of thinking about political history.

C No data are offered to support an assumption.

D Only one historian is mentioned by name; her background is not mentioned.

E No long-standing dilemma is discussed.

The correct answer is B.

63. The passage suggests which of the following concerning the techniques used by the new political historians described in the first paragraph of the passage?

(A) They involved the extensive use of the biographies of political party leaders and political theoreticians.

(B) They were conceived by political historians who were reacting against the political climates of the 1960's and 1970's.

(C) They were of more use in analyzing the positions of United States political parties in the nineteenth century than in analyzing the positions of those in the twentieth century.

(D) They were of more use in analyzing the political behavior of nineteenth-century voters than in analyzing the political activities of those who could not vote during that period.

(E) They were devised as a means of tracing the influence of nineteenth-century political trends on twentieth-century political trends.

Inference

The question's use of the verb *suggests* is an indication that an inference must be made. Examine the first paragraph, where the *new school of political history* is discussed. These historians used techniques such as *quantitative analyses of election returns* that the author describes as *useless in analyzing the political activities of women, who were denied the vote until 1920* (lines 9–12). It can, however, be assumed that the same techniques did prove useful in understanding the *mass political behavior* of voters.

A The first sentence explains that these historians *sought to go beyond the traditional focus . . . on leaders and government institutions*.

B The passage does not indicate that the new historians were reacting against the political climate of their own time.

C The new historians examined the *political practices of ordinary citizens* (line 5), not the positions of political parties.

D Correct. Lines 7–12 explicitly state that the new historians’ techniques were *useless* in analyzing the political activities of those not allowed to vote; the same lines imply that the techniques were useful in analyzing the political behavior of voters.

E No information in the passage supports this explanation.

The correct answer is D.

64. It can be inferred that the author of the passage quotes Baker directly in the second paragraph primarily in order to

(A) clarify a position before providing an alternative to that position

(B) differentiate between a novel definition and traditional definitions

(C) provide an example of a point agreed on by different generations of scholars

(D) provide an example of the prose style of an important historian

(E) amplify a definition given in the first paragraph

Logical structure

To analyze why the author uses a direct quotation, look at the logical structure of the passage in relation to the quotation. The historians discussed in the first paragraph define political activity as voting. Paula Baker, however, has a new definition of political activity, one that includes the activities of those who were not allowed to vote. It is reasonable to infer that the author quotes Baker to draw attention to this new definition, which provides an innovative, alternative way of thinking about political history.

A Paula Baker’s is the alternative position offered; no alternative to hers is discussed.

B Correct. Baker is quoted to emphasize that her definition is new and that it differs significantly from the traditional definition used by other historians.

C The contrasting views expressed in the first and second paragraphs show that different generations of scholars have not agreed.

D The author does not comment on Baker’s prose style.

E Baker's definition contrasts with, rather than amplifies, the one offered in the first paragraph.

The correct answer is B.

65. According to the passage, Paula Baker and the new political historians of the 1960s and 1970s shared which of the following?
- (A) A commitment to interest group politics
 - (B) A disregard for political theory and ideology
 - (C) An interest in the ways in which nineteenth-century politics prefigured contemporary politics
 - (D) A reliance on such quantitative techniques as the analysis of election returns
 - (E) An emphasis on the political involvement of ordinary citizens

Supporting ideas

Since the question uses the phrase *according to the passage*, the answer is explicitly stated in the passage. Look for a point on which the new political historians and Baker agree. The first sentence of the passage says that these new historians were interested in the political activities of *ordinary citizens* (line 5). Paula Baker is similarly interested in the political activities of *ordinary citizens* (lines 15–16), especially of female citizens, who were not allowed to vote.

A No mention at all is made of interest group politics, neither in relation to Baker nor in relation to the new historians.

B The passage does not show that they disregarded political theory and ideology.

C The passage only discusses Baker's interest in the way women's political activities in the nineteenth century prefigured twentieth-century trends (lines 16–18).

D The passage explains that new historians relied on such techniques but that Baker did not.

E Correct. Both the new historians and Baker are said to have studied the political activities of *ordinary citizens*.

The correct answer is E.

66. Which of the following best describes the structure of the first paragraph of the passage?
- (A) Two scholarly approaches are compared, and a shortcoming common to both is identified.
 - (B) Two rival schools of thought are contrasted, and a third is alluded to.

- (C) An outmoded scholarly approach is described, and a corrective approach is called for.
- (D) An argument is outlined, and counterarguments are mentioned.
- (E) A historical era is described in terms of its political trends.

Logical structure

To answer this question, analyze the structure of the first paragraph. It compares *the old approach* of studying political history through emphasis on leaders and government institutions with *the new school of political history*, which turned instead to the political practices of ordinary citizens. Both approaches suffered from the same drawback: the failure to include women in their analyses.

- A Correct.** Two approaches to history are discussed, and a flaw shared by both, the exclusion of women, is identified.
- B The first paragraph does not allude to a third school of thought.
- C A corrective approach is not discussed in the first paragraph.
- D The first paragraph does present an argument, but no counterarguments are made.
- E The political trends of an historical era are not detailed in the first paragraph.

The correct answer is A.

67. The information in the passage suggests that a pre- 1960s political historian would have been most likely to undertake which of the following studies?
- (A) An analysis of voting trends among women voters of the 1920s
 - (B) A study of male voters' gradual ideological shift from party politics to issue-oriented politics
 - (C) A biography of an influential nineteenth-century minister of foreign affairs
 - (D) An analysis of narratives written by previously unrecognized women activists
 - (E) A study of voting trends among naturalized immigrant laborers in a nineteenth-century logging camp

Inference

In using *suggests*, this question asks the reader to apply information stated in the passage to make an inference about the methods of historians before the 1960's. These methods are discussed in the first paragraph. Lines 3–4 say that the *traditional focus of political historians* (before the advent of the new school of historians in the 1960's and 1970's) was *on leaders and government institutions*. It

is reasonable to infer that the pre-1960's historian was likely to focus on a leader or government institution.

A Traditional historians did not focus on ordinary citizens, but on their leaders.

B Baker is interested in this group shift, but traditional historians were not.

C Correct. Traditional historians emphasized the work of leaders and government institutions; a biography of a foreign affairs minister fits this focus perfectly.

D Such an analysis would be of interest to Baker but not to traditional historians focusing on leaders and government.

E The new historians would be interested in such a study, but not traditional historians, who did not look at the activities of ordinary citizens.

The correct answer is C.

Questions 68–73 refer to the passage on page 48.

68. The primary function of the passage as a whole is to

(A) account for the popularity of a practice

(B) evaluate the utility of a practice

(C) demonstrate how to institute a practice

(D) weigh the ethics of using a strategy

(E) explain the reasons for pursuing a strategy

Main idea

This question explicitly requires looking at the passage as a whole in order to determine the author's purpose. The first paragraph explains the practice of offering guarantees and lists circumstances in which an unconditional guarantee may be an appropriate marketing tool. The second paragraph begins with *However*, implying that a contradiction is about to follow. The serious drawbacks to guarantees are examined, and the passage closes with a warning.

A The passage does not discuss the popularity of guarantees.

B Correct. The passage examines and judges the advantages and disadvantages of a business practice.

C The passage does not show how to put guarantees into place.

D The passage does not discuss ethics.

E The first paragraph does explain the reasons for offering guarantees, but that is only a portion of the passage, not the passage as a whole.

The correct answer is B.

69. All of the following are mentioned in the passage as circumstances in which professional service firms can benefit from offering an unconditional guarantee EXCEPT:
- (A) The firm is having difficulty retaining its clients of long standing.
 - (B) The firm is having difficulty getting business through client recommendations.
 - (C) The firm charges substantial fees for its services.
 - (D) The adverse effects of poor performance by the firm are significant for the client.
 - (E) The client is reluctant to incur risk.

Supporting ideas

The phrase *mentioned in the passage* indicates that the necessary information is explicitly stated. To answer this question, use the process of elimination to find the one example that is NOT mentioned in the passage. The question refers to lines 8–13, where the circumstances in which an unconditional guarantee might be beneficial to a firm are listed. Check each of the responses to the question against the list; the one that does not appear in the list is the correct answer.

A Correct. The sentence begins by noting that unconditional guarantees are particularly important with new clients; clients of long standing are not discussed.

B Lines 12–13 include the difficulty of getting business through referrals and word-of-mouth.

C Line 10 cites high fees as such a circumstance.

D Lines 10–11 include the severe repercussions of bad service.

E Lines 9–10 cite the cautiousness of the client.

The correct answer is A.

70. Which of the following is cited in the passage as a goal of some professional service firms in offering unconditional guarantees of satisfaction?
- (A) A limit on the firm's liability
 - (B) Successful competition against other firms
 - (C) Ability to justify fee increases
 - (D) Attainment of an outstanding reputation in a field
 - (E) Improvement in the quality of the firm's service

Supporting ideas

When the question says to find an answer *cited* in the passage, the answer will be explicitly stated information. The passage opens with an explanation of why some firms want to offer unconditional guarantees: *Seeking a competitive advantage* explains their rationale. Firms offer the guarantees to compete more effectively against firms that do not offer guarantees.

A The passage does not mention liability limits.

B Correct. Some firms offer unconditional guarantees as a way to compete successfully against firms that do not offer them.

C Line 10 mentions that high fees would be a reason to offer guarantees, but fee increases are not discussed.

D The second paragraph suggests the reverse: offering a guarantee may hurt a firm's reputation.

E Improving the quality of service is not mentioned as a reason to offer guarantees.

The correct answer is B.

71. The passage's description of the issue raised by unconditional guarantees for health care or legal services most clearly implies that which of the following is true?

(A) The legal and medical professions have standards of practice that would be violated by attempts to fulfill such unconditional guarantees.

(B) The result of a lawsuit or medical procedure cannot necessarily be determined in advance by the professionals handling a client's case.

(C) The dignity of the legal and medical professions is undermined by any attempts at marketing of professional services, including unconditional guarantees.

(D) Clients whose lawsuits or medical procedures have unsatisfactory outcomes cannot be adequately compensated by financial settlements alone.

(E) Predicting the monetary cost of legal or health care services is more difficult than predicting the monetary cost of other types of professional services.

Inference

The question's use of the word *implies* means that the answer depends on making an inference. This question refers to one sentence in the passage (lines 21–24), so it is essential to review what that sentence says in order to understand what it implies. An unconditional guarantee of satisfaction may have a particular disadvantage in the case of health care and legal services because clients may be

misled into believing that lawsuits or medical procedures have guaranteed outcomes when they do not. Since an inference may be drawn only from explicitly stated information, the correct response must be about the problem of guarantees and outcomes.

A Although this statement may be true, it cannot be derived from the cited reference.

B Correct. Legal and medical professionals cannot guarantee the outcomes of their work.

C This statement cannot be drawn from the description of the issue.

D Compensation is not discussed in the reference.

E Predicting costs is not discussed in the reference.

The correct answer is B.

72. Which of the following hypothetical situations best exemplifies the potential problem noted in the second sentence of the second paragraph (lines 15–19)?

(A) A physician's unconditional guarantee of satisfaction encourages patients to sue for malpractice if they are unhappy with the treatment they receive.

(B) A lawyer's unconditional guarantee of satisfaction makes clients suspect that the lawyer needs to find new clients quickly to increase the firm's income.

(C) A business consultant's unconditional guarantee of satisfaction is undermined when the consultant fails to provide all of the services that are promised.

(D) An architect's unconditional guarantee of satisfaction makes clients wonder how often the architect's buildings fail to please clients.

(E) An accountant's unconditional guarantee of satisfaction leads clients to believe that tax returns prepared by the accountant are certain to be accurate.

Application

This question involves taking the problem identified in lines 15–19 and applying it to the hypothetical situation that best fits it. Offering an unconditional guarantee may not work as a marketing strategy because potential clients may *doubt* the *firm's ability to deliver the promised level of service*. This strategy may actually introduce doubts or reservations on the part of potential clients and in fact discourage them from ever hiring the firm or the individual providing the service.

A In this case, the problem occurs after, not before, the service is rendered.

B This situation exemplifies another problem of unconditional guarantees, the suggestion that a *firm is begging for business* (line 21).

C The problem occurs after, not before, the service is rendered.

D Correct. The architect's apparent need to offer an unconditional guarantee makes potential clients question the outcome of the architect's work by suggesting the likelihood of their dissatisfaction with the architectural services.

E This situation contradicts the problem.

The correct answer is D.

73. The passage most clearly implies which of the following about the professional service firms mentioned in lines 24–27?

(A) They are unlikely to have offered unconditional guarantees of satisfaction in the past.

(B) They are usually profitable enough to be able to compensate clients according to the terms of an unconditional guarantee.

(C) They usually practice in fields in which the outcomes are predictable.

(D) Their fees are usually more affordable than those charged by other professional service firms.

(E) Their clients are usually already satisfied with the quality of service that is delivered.

Inference

The question asks for the implications of the statement in lines 24–27:

professional service firms with outstanding reputations and performance to match have little to gain from offering unconditional guarantees. Why is it logical to infer that these firms have little to gain from this strategy? If their performance and reputation are both outstanding, it is likely that their clients are already satisfied with the quality of the work they provide and that offering such guarantees would provide no competitive advantage.

A The statement in the passage concerns the present; nothing is implied about what may have been true in the past.

B The statement includes no information about profitability, so no inference may be drawn.

C No information is provided about specific fields or likely outcomes.

D Fees are not discussed in this statement.

E Correct. No guarantee is needed when clients are already satisfied with the quality of work provided.

The correct answer is E.

Questions 74–78 refer to the passage on page 50.

74. The passage is primarily concerned with

- (A) identifying historical circumstances that led Du Bois to alter his long-term goals
- (B) defining “accommodationism” and showing how Du Bois used this strategy to achieve certain goals
- (C) accounting for a particular position adopted by Du Bois during the First World War
- (D) contesting the view that Du Bois was significantly influenced by either Washington or Trotter
- (E) assessing the effectiveness of a strategy that Du Bois urged African Americans to adopt

Main idea

This question asks what the passage as a whole is attempting to do. The passage opens by indicating that many African Americans were surprised by a political position taken by Du Bois in 1918, which seemed more accommodationist than expected. The passage then goes on to demonstrate that Du Bois often *shifted positions* (line 9) and states that Du Bois’s 1918 position was pragmatic in that it responded to real social pressure. The passage then indicates that Du Bois’s accommodationist stance *did not last* (line 31), and that he returned to a more confrontationist stance upon learning of the treatment of African Americans in the military.

A The passage indicates that Du Bois did not change his long-term goals (lines 22–24).

B *Accommodationism* is not defined in the passage but is associated with certain actions (community improvement), ideologies (solidarity), and leaders (Washington); the passage does not indicate if Du Bois was successful in achieving the accommodationist goals of 1895 (lines 11–15).

C Correct. The passage explains why Du Bois took his accommodationist position and why he eventually rejected it.

D The passage offers no judgment as to how much Du Bois was influenced by Washington or Trotter.

E The passage does not indicate that there was widespread adoption of any of the strategies Du Bois recommended.

The correct answer is C.

75. The passage indicates which of the following about Du Bois's attitude toward Washington?
- (A) It underwent a shift during the First World War as Du Bois became more sympathetic with Trotter's views.
 - (B) It underwent a shift in 1903 for reasons other than Du Bois's disagreement with Washington's accommodationist views.
 - (C) It underwent a shift as Du Bois made a long-term commitment to the strategy of accommodation.
 - (D) It remained consistently positive even though Du Bois disagreed with Washington's efforts to control the African American press.
 - (E) It was shaped primarily by Du Bois's appreciation of Washington's pragmatic approach to the advancement of the interests of African Americans.

Supporting ideas

Answering this question involves recognizing what the passage indicates about a particular point of view it describes. In line 15, the passage indicates that Du Bois praised Washington's ideas, but that in 1903 Du Bois aligned himself with *Washington's militant opponent* (lines 16–17), a shift the passage describes as being due less to *ideological reasons* (lines 17–21) than to political reasons.

A The passage indicates that the shift described occurred in 1903, not during the First World War.

B Correct. The passage indicates Du Bois's shift was not due to differences he had with Washington's ideas or views.

C The passage indicates that Du Bois accommodationist stance *did not last* (lines 30–31) and therefore was not a long-term commitment.

D The passage indicates in lines 16–17 that Du Bois at one point aligned himself with Washington's militant opponent.

E The passage indicates that Du Bois eventually rejected the accommodationist views of Washington.

The correct answer is B.

76. The passage suggests which of the following about the contributions of African Americans to the United States war effort during the First World War?
- (A) The contributions were made largely in response to Du Bois's 1918 editorial.
 - (B) The contributions had much the same effect as African Americans' contributions to previous wars.

(C) The contributions did not end discrimination against African Americans in the military.

(D) The contributions were made in protest against Trotter's confrontationist tactics.

(E) The contributions were made primarily by civil rights activists who returned to activism after the war.

Inference

This question requires making an inference from information given in the passage. The passage begins by indicating that Du Bois called on African Americans to suspend their fight for equality and to help with the war effort during the First World War. The final sentence of the passage, however, indicates that Du Bois learned that African Americans were experiencing *systematic discrimination* in the military during this time.

A The passage does not indicate how African Americans responded to Du Bois's editorial other than that many African Americans were surprised by it.

B The passage indicates that African Americans' participation in previous wars brought legal and political advances but that African Americans experienced discrimination in the First World War.

C Correct. The passage indicates that African Americans experienced systematic discrimination in the military during the First World War.

D The passage does not describe how African Americans responded to Trotter's tactics during the First World War.

E The passage does not indicate whether African Americans involved in the war effort were primarily civil rights activists.

The correct answer is C.

77. The author of the passage refers to Washington's call to African Americans in 1895 primarily in order to

(A) identify Du Bois's characteristic position on the continuum between accommodationism and confrontationism

(B) explain why Du Bois was sympathetic with Washington's views in 1895

(C) clarify how Trotter's views differed from those of Washington in 1895

(D) support an assertion about Du Bois's tendency to shift his political positions

(E) dismiss the claim that Du Bois's position in his 1918 editorial was consistent with his previous views

Evaluation

This question requires understanding how a part of the passage functions within the passage as a whole. The passage begins by indicating that many African Americans were surprised by Du Bois's views in his 1918 editorial. The passage then explains that Du Bois *often shifted positions along the continuum* (lines 9–10). To demonstrate this, the passage indicates that Du Bois praised Washington's 1895 speech directed to African Americans, but that by 1903, Du Bois had aligned himself with Washington's *militant opponent* (lines 16–17).

A The passage indicates that Du Bois *shifted positions* (line 9) along the accommodationist-confrontationist continuum.

B The passage does not indicate why Du Bois praised Washington's 1895 speech.

C The passage does not indicate what Trotter's views of Washington's 1895 speech were.

D Correct. The passage uses Du Bois's praise for Washington's 1895 speech and subsequent support of Trotter to illustrate Du Bois's tendency to shift positions.

E The passage does not include any claims that Du Bois's 1918 editorial was consistent with his previous views.

The correct answer is D.

78. According to the passage, which of the following is true of the strategy that Du Bois's 1918 editorial urged African Americans to adopt during the First World War?

(A) It was a strategy that Du Bois had consistently rejected in the past.

(B) It represented a compromise between Du Bois's own views and those of Trotter.

(C) It represented a significant redefinition of the long-term goals Du Bois held prior to the war.

(D) It was advocated by Du Bois in response to his recognition of the discrimination faced by African Americans during the war.

(E) It was advocated by Du Bois in part because of his historical knowledge of gains African Americans had made during past wars.

Supporting ideas

This question requires recognizing how a part of the passage functions within the passage as a whole. The passage begins by indicating that Du Bois's 1918 editorial called on African Americans to abandon political and social activism and help with the war effort in the First World War. In the second paragraph, the passage indicates that Du Bois's wartime position, expressed in his 1918 speech, was at

least partly motivated by his belief that *African Americans' contributions to past war efforts had brought them some legal and political advances* (lines 28–30).

A The passage does not discuss whether Du Bois recommended this strategy prior to 1918.

B The passage does not indicate that Du Bois consciously compromised with Trotter's views.

C The passage indicates that his 1918 wartime views were *not a change in his long-term goals* (lines 22–23).

D The passage indicates that Du Bois's recognition of discrimination in the military caused him to reject his own 1918 wartime views.

E Correct. The passage indicates that Du Bois's 1918 views were influenced partly by a belief that past war efforts helped African Americans both legally and politically.

The correct answer is E.

Questions 79–84 refer to the passage on page 52.

79. The primary purpose of the passage is to

(A) contrast possible outcomes of a type of business investment

(B) suggest more careful evaluation of a type of business investment

(C) illustrate various ways in which a type of business investment could fail to enhance revenues

(D) trace the general problems of a company to a certain type of business investment

(E) criticize the way in which managers tend to analyze the costs and benefits of business investments

Main idea

Look at the passage as a whole to find the primary purpose. This passage uses an example, described in the second paragraph, to illustrate the principle of business practice explained in the first paragraph. The author begins by saying that efforts to improve service do not always result in a *competitive advantage* for a company. Thus, an investment in service must be carefully evaluated to determine if it will reduce costs or increase revenues (lines 4–8).

A Only one outcome, failure to gain a competitive advantage, is examined.

B Correct. Investments in service must be carefully evaluated for the returns they will bring.

C Only one way, an unnecessary investment in improved service, is discussed.

D The example of the bank is used only to illustrate a general business principle; the bank itself is not the focus of the passage.

E The passage criticizes the absence of such an analysis, not the way it is conducted.

The correct answer is B.

80. According to the passage, investments in service are comparable to investments in production and distribution in terms of the

(A) tangibility of the benefits that they tend to confer

(B) increased revenues that they ultimately produce

(C) basis on which they need to be weighed

(D) insufficient analysis that managers devote to them

(E) degree of competitive advantage that they are likely to provide

Supporting ideas

The phrase *according to the passage* indicates that the question covers material that is explicitly stated in the passage. The answer to this question demands a careful reading of the second sentence (lines 4–8). Investments in service are like investments in production and distribution because they *must be balanced against other types of investments on the basis of direct, tangible benefits*. Thus, these investments should be weighed on the same basis.

A The author is not equating the tangible benefits the different kinds of investments reap but rather the basis on which decisions to make investments are made.

B Revenues generated from investing in service are not said to be comparable to revenues generated from investing in production and distribution.

C Correct. An evaluation of whether or not to make these investments must be made on the same basis.

D How managers analyze investments in production and distribution is not discussed.

E The competitive advantage of superior service is acknowledged, but not the degree of it; it is not mentioned at all in the context of production and distribution.

The correct answer is C.

81. The passage suggests which of the following about service provided by the regional bank prior to its investment in enhancing that service?

(A) It enabled the bank to retain customers at an acceptable rate.

- (B) It threatened to weaken the bank's competitive position with respect to other regional banks.
- (C) It had already been improved after having caused damage to the bank's reputation in the past.
- (D) It was slightly superior to that of the bank's regional competitors.
- (E) It needed to be improved to attain parity with the service provided by competing banks.

Inference

Because the question uses the word *suggests*, finding the answer depends on making an inference about service at the bank. The paragraph that discusses the bank begins with the transitional expression, *this truth*, which refers to the previous sentence (lines 8–15). The *truth* is that investing in improved service is a waste *if a company is already effectively on a par with its competitors because it provides service that avoids a damaging reputation and keeps customers from leaving at an unacceptable rate*. Because of the way the author has linked this generalization to the description of the bank after investment, it is reasonable to infer that the hypothetical company's situation describes the bank prior to its investment in improved service.

A Correct. The bank's service would have been good enough to avoid a damaging reputation and to retain customers at an acceptable rate.

B The passage does not suggest that the bank's service was either poor or deficient to that of its competitors.

C The passage implies that the bank's service avoided *a damaging reputation*.

D The bank would have been *on a par with its competitors*, not superior to them.

E The bank would have been *on a par with its competitors*, not inferior to them.

The correct answer is A.

82. The passage suggests that bank managers failed to consider whether or not the service improvement mentioned in lines 18–20

(A) was too complicated to be easily described to prospective customers

(B) made a measurable change in the experiences of customers in the bank's offices

(C) could be sustained if the number of customers increased significantly

(D) was an innovation that competing banks could have imitated

(E) was adequate to bring the bank's general level of service to a level that was comparable with that of its competitors

Inference

The question's use of the word *suggests* means that the answer depends on making an inference. To answer this question, look at the entire second paragraph. Managers failed to think ahead. Would the service improvement attract new customers because other banks would find it difficult to copy? Or would the service improvement be easily imitated by competitors? The managers should have investigated this area before investing in improved service.

A The passage states the improvement *could easily be described to customers* (lines 28–29).

B No evidence in the passage shows that the managers failed to think about their customers' experience in the bank.

C The passage does not imply that managers failed to consider an increase in clients.

D Correct. The managers did not wonder if other banks would copy their service improvement.

E Lines 8–12 imply that the bank enjoyed a comparable level of service before investing in service improvement.

The correct answer is D.

83. The discussion of the regional bank in the second paragraph serves which of the following functions within the passage as a whole?

(A) It describes an exceptional case in which investment in service actually failed to produce a competitive advantage.

(B) It illustrates the pitfalls of choosing to invest in service at a time when investment is needed more urgently in another area.

(C) It demonstrates the kind of analysis that managers apply when they choose one kind of service investment over another.

(D) It supports the argument that investments in certain aspects of service are more advantageous than investments in other aspects of service.

(E) It provides an example of the point about investment in service made in the first paragraph.

Logical structure

This question requires thinking about what the second paragraph contributes to the whole passage. The first paragraph makes a generalization about investing in improvements in service; in certain conditions, such improvements do not result

in the *competitive advantage* a company hopes for. The second paragraph offers the bank as an example of this generalization.

A The first sentence of the passage explains that improving service does not necessarily bring a *competitive advantage*, so the bank is not exceptional.

B The bank illustrates the pitfall of not evaluating a service improvement on the basis of tangible benefits; other areas of the bank are not mentioned.

C The passage does not discuss how managers analyze and choose different service investments.

D Investments in different aspects of service are not evaluated in the passage.

E Correct. The bank is an example of the position stated in the first paragraph that investing in improved service can be a waste if the investment is not evaluated carefully.

The correct answer is E.

84. The author uses the word “only” in line 27 most likely in order to

(A) highlight the oddity of the service improvement

(B) emphasize the relatively low value of the investment in service improvement

(C) distinguish the primary attribute of the service improvement from secondary attributes

(D) single out a certain merit of the service improvement from other merits

(E) point out the limited duration of the actual service improvement

Logical structure

The question asks you to consider the logic of the author’s word choice. The previous two sentences discuss why the service improvement was a wasted investment. In contrast, the final sentence turns to the sole advantage of the service improvement, which is trivial by comparison. The author uses *only* to modify *merit* in order to emphasize the minimal nature of this advantage.

A The passage does not indicate that the service improvement is somehow strange or peculiar.

B Correct. *Only* emphasizes the low value attached to the single benefit.

C No attributes of the service improvement are mentioned.

D *Only* signifies that there was one sole merit of the service improvement.

E The duration of the benefit is not discussed in the passage.

The correct answer is B.

Questions 85–91 refer to the passage on page 54.

85. The primary purpose of the passage is to

- (A) review research demonstrating the benefits of corporate mergers and acquisitions and examine some of the drawbacks that acquisition behavior entails
- (B) contrast the effects of corporate mergers and acquisitions on acquiring firms and on firms that are acquired
- (C) report findings that raise questions about a reason for corporate mergers and acquisitions and suggest possible alternative reasons
- (D) explain changes in attitude on the part of acquiring firms toward corporate mergers and acquisitions
- (E) account for a recent decline in the rate of corporate mergers and acquisitions

Main idea

This question requires understanding what the passage as a whole is trying to do. The passage begins by citing three studies that demonstrate that when firms acquire other firms, there is not necessarily a worthwhile economic gain. The passage then cites economic interests as the reason given by firms when they acquire other firms but calls into question the veracity of this reasoning. The passage then goes on to speculate as to why mergers and acquisitions occur.

- A The research cited in the passage calls into question whether mergers and acquisitions are beneficial to firms.
- B The passage is not concerned with comparing the relative effects of mergers and acquisitions on the acquired and acquiring firms.
- C Correct.** The passage surveys reports that question the reasons given by firms when they acquire other firms and suggests other reasons for these acquisitions.
- D The passage does not indicate that there has been a change in the attitude of acquiring firms toward mergers and acquisitions.
- E The passage does not indicate that there has been a decline in the rate of mergers and acquisitions.

The correct answer is C.

86. The findings cited in the passage suggest which of the following about the outcomes of corporate mergers and acquisitions with respect to acquiring firms?

- (A) They include a decrease in value of many acquiring firms' stocks.
- (B) They tend to be more beneficial for small firms than for large firms.

(C) They do not fulfill the professed goals of most acquiring firms.

(D) They tend to be beneficial to such firms in the long term even though apparently detrimental in the short term.

(E) They discourage many such firms from attempting to make subsequent bids and acquisitions.

Inference

Answering this question requires recognizing what is inferable from information given in the passage. The passage begins by citing three studies that show that mergers and acquisitions often harm the economic goals of acquiring firms. The passage also indicates that, nonetheless, acquiring firms *continue to assert that their objectives are economic ones* (lines 15–16), suggesting that the goals of these firms are not met by acquiring other firms.

A The passage suggests that the stock of acquiring firms *tends to increase in value* (lines 12–13), albeit less than the firm it acquires.

B The three studies cited in the passage do contrast the effects of corporate mergers on acquiring firms and on acquired firms, but the effects in question are significant only insofar as they contribute to the wider investigation into why mergers take place at all.

C Correct. The passage indicates that even while acquiring firms cite economic goals, the results of the studies indicate that these goals are not being met.

D The passage makes no comparison between the long-term and short-term gains of acquiring firms.

E The passage does not indicate that firms have been affected by the results of the studies cited.

The correct answer is C.

87. It can be inferred from the passage that the author would be most likely to agree with which of the following statements about corporate acquisitions?

(A) Their known benefits to national economies explain their appeal to individual firms during the 1970's and 1980's.

(B) Despite their adverse impact on some firms, they are the best way to channel resources from less to more productive sectors of a nation's economy.

(C) They are as likely to occur because of poor monitoring by boards of directors as to be caused by incentive compensation for managers.

(D) They will be less prevalent in the future, since their actual effects will gain wider recognition.

(E) Factors other than economic benefit to the acquiring firm help to explain the frequency with which they occur.

Inference

This question requires understanding what view the author has about a particular issue. The three studies cited by the passage all suggest that mergers and acquisitions do not necessarily bring economic benefit to the acquiring firms. The author concludes therefore that *factors having little to do with corporate economic interests explain acquisitions* (lines 23–24) and then goes on to speculate as to what the reasons may actually be.

A The passage indicates that while mergers and acquisitions may benefit the national economy, the appeal of mergers and acquisitions must be tied to companies' *private economic interests* (lines 19–22).

B The passage makes no judgment as to the best way for firms to help channel resources from less to more efficient economic sectors.

C The passage makes no comparison between the influence of poor monitoring by boards and that of executive incentives.

D The passage makes no prediction as to future trends in the market for mergers and acquisitions.

E Correct. The passage states that factors other than economic interests drive mergers and acquisitions.

The correct answer is E.

88. The author of the passage mentions the effect of acquisitions on national economies most probably in order to

(A) provide an explanation for the mergers and acquisitions of the 1970's and 1980's overlooked by the findings discussed in the passage

(B) suggest that national economic interests played an important role in the mergers and acquisitions of the 1970's and 1980's

(C) support a noneconomic explanation for the mergers and acquisitions of the 1970s and 1980's that was cited earlier in the passage

(D) cite and point out the inadequacy of one possible explanation for the prevalence of mergers and acquisitions during the 1970's and 1980's

(E) explain how modeling affected the decisions made by managers involved in mergers and acquisitions during the 1970's and 1980's

Evaluation

This question requires understanding why a piece of information is included in the passage. After the passage cites the results of the three studies on mergers and

acquisitions, which call into question the economic benefits of acquisitions, it indicates that firms nonetheless claim that their objectives are economic. The passage then states that while acquisitions *may well have* a desirable effect on national economies (lines 17–19), the results of the studies suggest that factors other than economic interest must drive executives to arrange mergers and acquisitions.

A The passage does not mention national economies as part of an explanation for the occurrence of mergers and acquisitions.

B The passage suggests that the effect of acquisitions on national economies is not tied to any explanations for why acquisitions occur.

C The effect of acquisitions on national economies is not mentioned in the passage as an explanation for why acquisitions occur.

D Correct. The passage uses the mention of national economies as part of a larger point questioning the stated motivations behind firms' efforts to acquire other firms.

E In the passage, modeling is unrelated to the idea that acquisitions may have a desirable effect on national economies.

The correct answer is D.

89. According to the passage, during the 1970's and 1980's, bidding firms differed from the firms for which they bid in that bidding firms

(A) tended to be more profitable before a merger than after a merger

(B) were more often concerned about the impact of acquisitions on national economies

(C) were run by managers whose actions were modeled on those of other managers

(D) anticipated greater economic advantages from prospective mergers

(E) experienced less of an increase in stock value when a prospective merger was announced

Supporting ideas

This question requires recognizing information contained in the passage. In lines 10–14, the passage describes the findings of the third study of mergers and acquisitions in the 1970's and 1980's. This study found that, after the announcement of a possible merger, the stock value of an acquiring, or bidding, firm increases much less than the stock value of the firm for which it is in the process of bidding.

A The passage does not indicate whether the profitability of acquiring firms tended to be greater or less after a merger.

B The passage does not indicate that acquiring firms were concerned about the impact of their actions on national economies.

C The passage does not mention the actions of managers at firms that are being acquired.

D The passage does not discuss whether acquiring firms tended to expect greater overall economic gains than actually occurred.

E Correct. The passage indicates that the stock value of acquiring firms grew less than that of the firms they were attempting to acquire.

The correct answer is E.

90. According to the passage, which of the following was true of corporate acquisitions that occurred during the 1970's and 1980's?

(A) Few of the acquisitions that firms made were subsequently divested.

(B) Most such acquisitions produced only small increases in acquired firms' levels of profitability.

(C) Most such acquisitions were based on an overestimation of the value of target firms.

(D) The gains realized by most acquiring firms did not equal the amounts expended in acquiring target firms.

(E) About half of such acquisitions led to long-term increases in the value of acquiring firms' stocks.

Supporting ideas

This question requires recognizing information contained in the passage. The passage reports on three studies of mergers and acquisitions in the 1970's and 1980's. In lines 7–10, the passage indicates that the second study found that the postacquisition gains to most of the acquiring firms did not offset, or at least equal, the price paid to acquire the firms.

A The passage does not discuss post-acquisition divesting.

B The passage indicates that on average, the profitability of acquired firms fell after being acquired (lines 5–7).

C The passage does not indicate whether most acquiring firms overestimated the value of the firms they acquired.

D Correct. The passage states that for most acquiring firms the costs of buying the acquired firm were greater than the gains derived from acquiring it.

E The passage does not indicate what percentage of acquiring firms, if any, experienced long-term gains in their stock value.

The correct answer is D.

91. The author of the passage implies that which of the following is a possible partial explanation for acquisition behavior during the 1970's and 1980's?
- (A) Managers wished to imitate other managers primarily because they saw how financially beneficial other firms' acquisitions were.
 - (B) Managers miscalculated the value of firms that were to be acquired.
 - (C) Lack of consensus within boards of directors resulted in their imposing conflicting goals on managers.
 - (D) Total compensation packages for managers increased during that period.
 - (E) The value of bidding firms' stock increased significantly when prospective mergers were announced.

Inference

This question requires recognizing what can be inferred from the information in the passage. After providing the results of the studies of mergers and acquisitions, the author concludes that even though acquiring firms state that their objectives are economic, factors having little to do with corporate economic interests explain acquisitions (lines 22–24). Among alternative explanations, the author points to managerial error in estimating the value of firms targeted for acquisition (lines 27–28) as possibly contributing to acquisition behavior in the 1970's and 1980's.

A While the passage indicates that managers may have modeled their behavior on other managers, it does not provide a reason for why this would be so.

B Correct. The author states that one explanation for acquisition behavior may be that managers erred when they estimated the value of firms being acquired.

C The author discusses a lack of monitoring by boards of directors but makes no mention of consensus within these boards.

D The author does not discuss compensation packages for managers.

E The passage does not state how significantly the value of the bidding firm's stock increased upon announcing a merger but only that it increased less in value than did the stock of the prospective firm being acquired.

The correct answer is B.

Questions 92–98 refer to the passage on page 56.

92. According to the passage, conventional spiral galaxies differ from low-surface-brightness galaxies in which of the following ways?
- (A) They have fewer stars than do low-surface-brightness galaxies.

- (B) They evolve more quickly than low-surface-brightness galaxies.
- (C) They are more diffuse than low-surface-brightness galaxies.
- (D) They contain less helium than do low-surface-brightness galaxies.
- (E) They are larger than low-surface-brightness galaxies.

Supporting ideas

This question requires recognizing information that is provided in the passage. The first paragraph describes and compares two types of galaxies: conventional galaxies and dim, or low-surface-brightness, galaxies. It states that dim galaxies have the same approximate number of stars as a common type of conventional galaxy but tend to be larger and more diffuse because their mass is spread over wider areas (lines 4–10). The passage also indicates that dim galaxies take longer than conventional galaxies to convert their primordial gases into stars, meaning that dim galaxies evolve much more slowly than conventional galaxies (lines 10–14), which entails that conventional galaxies evolve more quickly than dim galaxies.

A The passage states that dim galaxies have approximately the same numbers of stars as a common type of conventional galaxy.

B Correct. The passage indicates that dim galaxies evolve much more slowly than conventional galaxies, which entails that conventional galaxies evolve more quickly.

C The passage states that dim galaxies are more spread out, and therefore more diffuse, than conventional galaxies.

D The passage does not mention the relative amounts of helium in the two types of galaxies under discussion.

E The passage states that dim galaxies tend to be much larger than conventional galaxies.

The correct answer is B.

93. It can be inferred from the passage that which of the following is an accurate physical description of typical low-surface-brightness galaxies?

- (A) They are large spiral galaxies containing fewer stars than conventional galaxies.
- (B) They are compact but very dim spiral galaxies.
- (C) They are diffuse spiral galaxies that occupy a large volume of space.
- (D) They are small, young spiral galaxies that contain a high proportion of primordial gas.
- (E) They are large, dense spirals with low luminosity.

Inference

This question requires drawing an inference from information given in the passage. The first paragraph compares dim galaxies and conventional galaxies. Dim galaxies are described as having the same general shape (lines 4–5) as a common type of conventional galaxy, the spiral galaxy, suggesting that dim galaxies are, themselves, spiral shaped. The passage also indicates that, although both types of galaxies tend to have approximately the same number of stars, dim galaxies tend to be much larger and spread out over larger areas of space (lines 4–10) than conventional galaxies.

- A The passage states that the two types of galaxies have approximately the same number of stars.
- B The passage indicates that dim galaxies are relatively large and spread out.
- C Correct.** The passage indicates that dim galaxies have the same general shape as spiral galaxies and that their mass is spread out over large areas of space.
- D The passage indicates that dim galaxies are relatively large and spread out.
- E The passage states that dim galaxies have few stars per unit of volume, suggesting that they are not dense but diffuse.

The correct answer is C.

94. It can be inferred from the passage that the “long-standing puzzle” refers to which of the following?
- (A) The difference between the rate at which conventional galaxies evolve and the rate at which low-surface-brightness galaxies evolve
 - (B) The discrepancy between estimates of total baryonic mass derived from measuring helium and estimates based on measuring galactic luminosity
 - (C) The inconsistency between the observed amount of helium in the universe and the number of stars in typical low-surface-brightness galaxies
 - (D) Uncertainties regarding what proportion of baryonic mass is contained in intergalactic space and what proportion in conventional galaxies
 - (E) Difficulties involved in detecting very distant galaxies and in investigating their luminosity

Inference

This question requires drawing an inference from information given in the passage. The second paragraph describes *the long-standing puzzle of the missing baryonic mass in the universe*. The passage states that baryons are the source of galactic luminosity, and so scientists can estimate the amount of baryonic mass in the universe by measuring the luminosity of galaxies (lines 17–21). The puzzle is that spectroscopic measures of helium in the universe suggest that the baryonic

mass in the universe is much higher than measures of luminosity would indicate (21–25).

A The differences between the rates of evolution of the two types of galaxies is not treated as being controversial in the passage.

B Correct. The passage indicates that measurements using spectroscopy and measurements using luminosity result in puzzling differences in estimates of the universe's baryonic mass.

C The passage does not suggest how helium might relate to the numbers of stars in dim galaxies.

D The passage indicates that astronomers have speculated that the missing baryonic mass might be discovered in intergalactic space or hard-to-detect galaxies but does not suggest that these speculations are constituents of the long-standing puzzle.

E The passage does not mention how the distance to galaxies affects scientists' ability to detect these galaxies.

The correct answer is B.

95. The author implies that low-surface-brightness galaxies could constitute an answer to the puzzle discussed in the second paragraph primarily because

(A) they contain baryonic mass that was not taken into account by researchers using galactic luminosity to estimate the number of baryons in the universe

(B) they, like conventional galaxies that contain many baryons, have evolved from massive, primordial gas clouds

(C) they may contain relatively more helium, and hence more baryons, than do galaxies whose helium content has been studied using spectroscopy

(D) they have recently been discovered to contain more baryonic mass than scientists had thought when low-surface-brightness galaxies were first observed

(E) they contain stars that are significantly more luminous than would have been predicted on the basis of initial studies of luminosity in low-surface-brightness galaxies

Inference

This question requires drawing an inference from information given in the passage. The puzzle is that estimates of the baryonic mass of the universe based on luminosity are lower than those based on spectroscopy (lines 21–25). The passage states that astronomers did not notice dim galaxies until recently (lines 2–3) and that these galaxies may help account for the missing baryonic mass in the universe

(lines 15–17). The passage also suggests that astronomers measure the luminosity of specific galaxies (lines 19–21). Thus it can be inferred that, prior to their being noticed by astronomers, the luminosity of these dim galaxies was not measured, and their baryonic mass was not taken into account in the estimates of luminosity that led to the long-standing puzzle.

A Correct. The passage states that the missing baryonic mass in the universe may be discovered in the dim galaxies that have only recently been noticed by astronomers.

B The passage does not suggest that dim and conventional galaxies both originating from primordial gas clouds help solve the long-standing puzzle of the missing baryonic mass in the universe.

C The passage does not suggest that dim galaxies might contain more helium than do conventional galaxies or that measures of baryonic mass using spectroscopy do not take some dim galaxies into account.

D The passage does not suggest that dim galaxies contain more baryonic mass than scientists originally believed upon discovering these galaxies.

E The passage suggests that scientists measured the luminosity of galaxies, not of individual stars.

The correct answer is A.

96. The author mentions the fact that baryons are the source of stars' luminosity primarily in order to explain

(A) how astronomers determine that some galaxies contain fewer stars per unit volume than do others

(B) how astronomers are able to calculate the total luminosity of a galaxy

(C) why astronomers can use galactic luminosity to estimate baryonic mass

(D) why astronomers' estimates of baryonic mass based on galactic luminosity are more reliable than those based on spectroscopic studies of helium

(E) how astronomers know bright galaxies contain more baryons than do dim galaxies

Evaluation

This question requires understanding how one aspect of the passage relates to the reasoning in a larger portion of the passage. The second paragraph explains that scientists have been puzzled over missing baryonic mass in the universe as measured by luminosity (lines 21–25). Given that baryons are the source of luminosity in the galaxy (lines 17–19), astronomers can estimate the baryonic mass of a galaxy by measuring its luminosity.

A The passage discussion of baryons does not address the number of stars in individual galaxies.

B The passage discusses how the luminosity of galaxies can be used to estimate baryonic mass but does not address how total luminosity is measured.

C Correct. The passage indicates that because baryons are the source of galactic luminosity, measuring luminosity can be used to estimate baryonic mass of galaxies.

D The passage suggests that estimates based on luminosity may have been less accurate, not more accurate, than those based on spectroscopy.

E The passage does not indicate that bright galaxies contain more baryons than do dim galaxies.

The correct answer is C.

97. The author of the passage would be most likely to disagree with which of the following statements?

(A) Low-surface-brightness galaxies are more difficult to detect than are conventional galaxies.

(B) Low-surface-brightness galaxies are often spiral in shape.

(C) Astronomers have advanced plausible ideas about where missing baryonic mass might be found.

(D) Astronomers have devised a useful way of estimating the total baryonic mass in the universe.

(E) Astronomers have discovered a substantial amount of baryonic mass in intergalactic space.

Inference

This question involves identifying which answer option potentially conflicts with the information the author has provided in the passage. The second paragraph indicates that astronomers' estimates of the baryonic mass of the universe is lower when measured using luminosity than it is when measured using spectroscopy (lines 21–25). The final sentence states that astronomers have speculated that the missing baryonic mass might be discovered in intergalactic space or in hard-to-detect galaxies (lines 25–29). Although the passage does indicate that the discovery of dim, low-surface-brightness galaxies might help account for the missing baryonic mass (lines 15–17), the passage provides no support for the possibility that baryonic mass has been discovered in intergalactic space.

A The passage indicates that low-surface-brightness galaxies went unnoticed until recently, unlike conventional galaxies.

B The passage indicates that low-surface-brightness galaxies have the same general shape as spiral galaxies.

C The passage describes two possible explanations astronomers have given for the missing baryonic mass, one of which was made more plausible by the discovery of low-surface-brightness galaxies.

D The passage indicates that astronomers have used spectroscopy to estimate baryonic mass and gives no reason to suspect that this method is not useful.

E Correct. The passage does not indicate that astronomers have found any baryonic mass in intergalactic space.

The correct answer is E.

98. The primary purpose of the passage is to

(A) describe a phenomenon and consider its scientific significance

(B) contrast two phenomena and discuss a puzzling difference between them

(C) identify a newly discovered phenomenon and explain its origins

(D) compare two classes of objects and discuss the physical properties of each

(E) discuss a discovery and point out its inconsistency with existing theory

Main idea

This question requires understanding, in broad terms, the purpose of the passage as a whole. The first paragraph describes a phenomenon: the discovery of dim galaxies and some of their general attributes. The second paragraph describes how this discovery may help astronomers to solve a long-standing puzzle about the baryonic mass of the universe.

A Correct. The passage describes the phenomenon of dim galaxies and describes their significance in solving the long-standing puzzle of the missing baryonic mass in the universe.

B Although the passage discusses the puzzling difference between the two estimates of baryonic mass, this option does not account for the broader topic of dim galaxies.

C While the passage identifies the newly discovered phenomenon of dim galaxies, it does not offer a significant explanation for these galaxies' origins.

D Although the passage compares dim and conventional galaxies in the first paragraph, this option does not account for the important detail that dim

galaxies may help solve a long-standing puzzle.

E The discovery of dim galaxies discussed in the passage is not said to be inconsistent with any existing scientific theory.

The correct answer is A.

Questions 99–105 refer to the passage on page 58.

99. According to the passage, Walker and Szalay disagree on which of the following points?

- (A) The structure and composition of australopithecine teeth
- (B) The kinds of conclusions that can be drawn from the micro-wear patterns on australopithecine teeth
- (C) The idea that fruit was a part of the australopithecine diet
- (D) The extent to which seed cracking and bone crunching produce similar micro-wear patterns on teeth
- (E) The function of the heavy enamel on australopithecine teeth

Supporting idea

This question refers to the first paragraph, which states that Walker does not agree with Szalay's idea that *the heavy enamel of australopithecine teeth is an adaptation to bone crunching*.

A According to the passage, Walker and Szalay disagree about the function of heavy enamel on the teeth, not the structure and composition of the teeth.

B The passage does not indicate that Szalay has anything to say about the micro-wear patterns on the teeth.

C Walker does, according to the passage, believe that australopithecines ate fruit, but it gives no evidence about whether Szalay believes that they ate at least some fruit.

D According to the passage, Walker believes that seed cracking and bone crunching produce distinctive micro-wear patterns on teeth, but he does not necessarily believe that they are similar. The passage does not indicate Szalay's position on the difference between micro-wear patterns.

E Correct. The function of the heavy enamel on the teeth is the only idea about which the passage clearly indicates that Walker and Szalay disagree.

The correct answer is E.

100. The passage suggests that Walker's research indicated which of the following about australopithecine teeth?

(A) They had micro-wear characteristics indicating that fruit constituted only a small part of their diet.

(B) They lacked micro-wear characteristics associated with seed eating and bone crunching.

(C) They had micro-wear characteristics that differed in certain ways from the micro-wear patterns of chimpanzees and orangutans.

(D) They had micro-wear characteristics suggesting that the diet of australopithecines varied from one region to another.

(E) They lacked the micro-wear characteristics distinctive of modern frugivores.

Inference

According to the passage, Walker's research focuses on micro-wear patterns on the teeth of australopithecines. He draws several conclusions on the basis of these patterns: first, that australopithecines did not eat hard seeds; next, that they did not crunch bones; and finally, that they ate fruit.

A The passage indicates that Walker's observation of micro-wear patterns led him to conclude that australopithecines ate mostly fruit, not that *fruit constituted only a small part of their diet*.

B Correct. The first paragraph explains that Walker concluded from micro-wear patterns that australopithecines did not eat hard seeds and did not crunch bones; thus, his research must have indicated that they lacked micro-wear characteristics associated with such activities.

C According to the passage, the opposite is true: based on the observation that their micro-wear patterns were indistinguishable from those of chimpanzees and orangutans, Walker concluded that australopithecines ate fruit.

D The second paragraph of the passage complicates Walker's view by suggesting that australopithecines' diet might have varied from one region to another, but the passage says nothing about Walker's research from which to infer that it indicated such variation.

E Chimpanzees and orangutans are assumed to be frugivores, according to the passage, and Walker's research indicated that australopithecine teeth had micro-wear characteristics identical to theirs.

The correct answer is B.

101. The passage suggests that which of the following would be true of studies of tooth micro-wear patterns conducted on modern baboons?

(A) They would inaccurately suggest that some baboons eat more soft-

bodied than hard-bodied insects.

(B) They would suggest that insects constitute the largest part of some baboons' diets.

(C) They would reveal that there are no significant differences in tooth micro-wear patterns among baboon populations.

(D) They would inadequately reflect the extent to which some baboons consume certain types of insects.

(E) They would indicate that baboons in certain regions eat only soft-bodied insects, whereas baboons in other regions eat hard-bodied insects.

Inference

The second paragraph states that modern baboons eat *only soft-bodied insects* and so would not exhibit tooth abrasion to indicate that they were insectivores. Thus, it would be difficult to determine exactly which soft-bodied insects they ate.

A The passage states that baboons eat only soft-bodied insects—so it is in fact accurate to suggest that all baboons eat more soft-bodied than hard-bodied insects.

B The passage says that baboons eat only soft-bodied insects. It also suggests that soft-bodied insects do not leave significant enough abrasions on baboons' teeth to provide evidence of this aspect of their diet. Therefore, the tooth-wear patterns would give little or no information regarding what proportion of the baboons' overall diet consists of insects.

C The passage does not provide grounds for inferring anything about the differences, or lack thereof, among baboon populations in terms of tooth micro-wear patterns.

D Correct. Because soft-bodied insects cause little tooth abrasion, micro-wear patterns would most likely not reflect the extent to which baboons consume soft-bodied insects.

E The passage states that baboons eat *only soft-bodied insects*. Nothing in the passage suggests that baboons in certain regions eat hard-bodied insects.

The correct answer is D.

102. The passage suggests which of the following about the micro-wear patterns found on the teeth of omnivorous primates?

(A) The patterns provide information about what kinds of foods are not eaten by the particular species of primate, but not about the foods actually eaten.

(B) The patterns of various primate species living in the same environment resemble one another.

(C) The patterns may not provide information about the extent to which a particular species' diet includes seeds.

(D) The patterns provide more information about these primates' diet than do the tooth micro-wear patterns of primates who are frugivores.

(E) The patterns may differ among groups within a species depending on the environment within which a particular group lives.

Inference

This question focuses mainly on the end of the second paragraph, which states that *the diets of current omnivorous primates vary considerably depending on the environments* in which they live. It goes on to conclude that australopithecines, if they were omnivores, would similarly consume varied diets, depending on environment, and exhibit varied tooth micro-wear patterns as well. Thus, it is reasonable to conclude that any omnivorous primates living in different environments and consuming different diets would exhibit varied micro-wear patterns.

A The passage indicates that the absence of certain types of micro-wear patterns can provide evidence about what foods a species does not eat. It also says that among omnivorous primates, one might expect to find considerable population variation in their tooth micro-wear patterns. Wherever micro-wear patterns are present, they provide evidence about what kinds of foods are eaten.

B The passage suggests that various primate species living in the same environment might consume a variety of different diets, so there is no reason to conclude that their micro-wear patterns would resemble one another.

C The passage indicates that seed-eating produces distinctive micro-wear patterns, so the patterns, or lack thereof, on the teeth of any species would most likely provide information about the extent to which the species' diet includes seeds.

D The end of the first paragraph suggests that frugivores' micro-wear patterns are distinctive; the passage provides no reason to believe that omnivores' diets provide more information.

E Correct. According to the passage, omnivorous primates of a particular species may consume different diets depending on where they live. Thus, their micro-wear patterns may differ on this basis.

The correct answer is E.

103. It can be inferred from the passage that if studies of tooth micro-wear patterns were conducted on modern baboons, which of the following would most likely be

true of the results obtained?

- (A) There would be enough abrasion to allow a determination of whether baboons are frugivorous or insectivorous.
- (B) The results would suggest that insects constitute the largest part of the baboons' diet.
- (C) The results would reveal that there are no significant differences in tooth micro-wear patterns from one regional baboon population to another.
- (D) The results would provide an accurate indication of the absence of some kinds of insects from the baboons' diet.
- (E) The results would be unlikely to provide any indication of what inferences about the australopithecine diet can or cannot be drawn from micro-wear studies.

Inference

The second paragraph states that modern baboons eat soft-bodied insects but not hard-bodied ones—and it is hard-bodied insects, the passage suggests, that would cause particular micro-wear patterns on teeth. So the patterns on modern baboons' teeth most likely do not exhibit the patterns indicating hard-bodied insect consumption.

A The passage states that baboons' consumption of soft-bodied insects would not show up in the patterns on their teeth—so the abrasion would most likely not provide enough information for a determination of whether baboons are frugivorous or insectivorous.

B Since soft-bodied insects do not abrade the teeth significantly, it would be difficult to determine, based on micro-wear patterns, the part such insects play in the baboons' diet. Furthermore, the passage does not suggest that micro-wear patterns can indicate the quantity of food an animal might have eaten.

C There could be differences in tooth micro-wear patterns from one regional baboon population to another if they consumed anything in addition to soft-bodied insects.

D Correct. Studying tooth micro-wear patterns on baboons' teeth would most likely show that their teeth do not exhibit patterns typical of creatures that consume hard-bodied insects.

E The passage suggests that based on results from micro-wear patterns on modern baboons' teeth, one cannot infer from micro-wear studies whether australopithecines ate soft-bodied insects.

The correct answer is D.

104. It can be inferred from the passage that Walker's conclusion about the australopithecine diet would be called into question under which of the following circumstances?
- (A) The tooth enamel of australopithecines is found to be much heavier than that of modern frugivorous primates.
 - (B) The micro-wear patterns of australopithecine teeth from regions other than east Africa are analyzed.
 - (C) Orangutans are found to have a much broader diet than is currently recognized.
 - (D) The environment of east Africa at the time australopithecines lived there is found to have been far more varied than is currently thought.
 - (E) The area in which the australopithecine specimens were found is discovered to have been very rich in soft-bodied insects during the period when australopithecines lived there.

Inference

The passage explains that Walker bases his conclusion about the frugivorous nature of the australopithecine diet on the fact that the micro-wear patterns on australopithecine teeth are indistinguishable from those of chimpanzees and orangutans, both of which are presumed to have frugivorous diets.

A The passage indicates that Walker took into account the fact that australopithecines had relatively heavy tooth enamel and that he rejected the view that this heaviness was evidence against the hypothesis that they were frugivorous. For all we can tell from the information in the passage, the australopithecines' tooth enamel was already known to be much heavier than that of modern frugivorous primates.

B It could be the case that analyzing the micro-wear patterns of australopithecine teeth from other regions would yield the same data as those from east Africa.

C Correct. According to the passage, Walker bases the conclusion that australopithecines were frugivorous on the similarity between their micro-wear patterns and those of modern chimpanzees and orangutans. If orangutans were found to have a diet that included a greater range of non-fruit foods than is currently recognized, then the correspondence between their micro-wear patterns and australopithecines' micro-wear patterns would be consistent with the hypothesis that australopithecines' diet was broader as well.

D Even if the environment of east Africa were more varied, that would not mean the australopithecines necessarily ate a more varied diet. Many

species that live in very varied environments specialize narrowly on particular foods in those environments.

E Just because many soft-bodied insects might have been available to australopithecines does not mean that australopithecines ate them.

The correct answer is C.

105. The author of the passage mentions the diets of baboons and other living primates most likely in order to
- (A) provide evidence that refutes Walker's conclusions about the foods making up the diets of australopithecines
 - (B) suggest that studies of tooth micro-wear patterns are primarily useful for determining the diets of living primates
 - (C) suggest that australopithecines were probably omnivores rather than frugivores
 - (D) illustrate some of the limitations of using tooth micro-wear patterns to draw definitive conclusions about a group's diet
 - (E) suggest that tooth micro-wear patterns are caused by persistent, as opposed to occasional, consumption of particular foods

Evaluation

The passage discusses the diets of baboons and other living primates mainly in the second paragraph, which is concerned with explaining the limited utility of micro-wear studies.

A The author raises some doubts about Walker's conclusions but does not go as far as to try to refute them outright. The author argues only that, as the final sentence of the passage states, they may need to be expanded.

B The author discusses the diets of baboons and other living primates in relation to micro-wear research on extinct primates. Nothing in the discussion suggests that micro-wear studies would be more useful for determining the diets of living primates than for providing evidence regarding the diets of earlier primates or of other types of animals. Furthermore, the mention of baboon diets suggests that micro-wear studies may not be very useful for determining the diets of some living primates.

C The author leaves open the question of whether australopithecines were omnivores or frugivores. The passage suggests that some australopithecines might have been omnivores, if australopithecines' diets varied according to the environments they inhabited. Walker's conclusion regarding east African australopithecines' being frugivores might still hold, however.

D Correct. The author refers to baboons' diets and those of current

omnivorous primates in order to suggest that there might be limitations to Walker's use of tooth micro-wear patterns to determine australopithecines' diet.

E The passage does not make a distinction between persistent and occasional consumption of particular foods.

The correct answer is D.