

3 LSAT FULL SAMPLE TESTS

Answered with Complete Explanations

LSAT SAMPLE TEST 1 Answered with Complete Explanations.....	2
SECTION I: GAME.....	2
SECTION II: ARGUMENT.....	13
SECTION III: READING.....	31
SECTION IV: ARGUMENT	51
LSAT SAMPLE TEST 2 Answered with Complete Explanations.....	66
SECTION I: READING	66
SECTION II: ARGUMENT.....	85
SECTION III: GAME.....	100
SECTION IV: ARGUMENT	111
LSAT SAMPLE TEST 3 Answered with Complete Explanations.....	126
SECTION I: ARGUMENT	126
SECTION II: READING.....	141
SECTION III: GAME.....	160
SECTION IV: ARGUMENT	171

LSAT SAMPLE TEST 1 Answered with Complete Explanations

SECTION I: GAME

Time ---35 Minutes

24 Questions

Questions 1 to 5

Access to the XRT computer's data sets is obtained by entering job names into the computer. Each job name must consist of a three-word sequence that conforms to the following rules:

Each word must consist of three, five, or seven letters.

The letters R, T, and X must each appear exactly once in each job name, not necessarily in that order.

The third word must contain more letters than the second word.

Each word must begin with a different letter.

1. Which of the following could be a job name for the XRT computer?

- A. AXE DIVER BOAST
- B. BOX ROAM NEVER
- C. CALLS EVERT WINDOWS
- D. EXPECT ONE PICTURE
- E. INCOME TAX RETURNS

Explanation:

The job name in this choice conforms to all of the rules, so the third choice is the correct answer.

The first answer choice could not be a job name because the third word does not contain more letters than the second. The second, fourth, and fifth answer choices violate both the first and the second rules, namely that each word must consist of three, five, or seven letters and that the letters R, T, and X must appear exactly once.

2. If BOXER is the second word in a job name for the XRT computer, which of the following could be the first and third words, respectively?

- A. ARM, RUNNING
- B. BID, TAMES
- C. CAMPS, TRAINER
- D. RID, STEAMED
- E. FOX, RENTED

Explanation:

The words in D conform to all of the rules, so C is the correct answer.

Since X and R appear and T does not appear in the second word, neither the first nor the third word can contain any X's or R's, but T must appear once, either in the first or in the third word. Since the words in the first, third, and last choices contains R's, those three choices can be eliminated. Since BOXER has five letters (words must be three, five, or seven letters long) and since the third word must be longer than the second, the only possible length for the third word is seven letters. The third word in B has five letters, and the third word in the last answer choice has six. Thus, the second and the last can be eliminated. The second answer choice might also be eliminated because two of the words begin with the same letter.

3. If EXTRA is the third answer in a job name for the XRT computer, which of the following CANNOT be the second word?

- A. ACE
- B. BEE
- C. END
- D. FOE
- E. GUM

Explanation:

Since each word must begin with a different letter, the second word cannot begin with E. END, therefore, cannot be the second word. So C is the correct answer.

4. The sequence of words MOTHS, VEX, MAR is not a possible job name for the XRT computer. Which of the following procedures, if performed on the sequence, produces a sequence that could be a job name for the XRT computer?

- A. Reversing the order of the letters in a specific word and removing a specific letter from the longest word
- B. Reversing the order of the letters in a specific word and reversing the order of the three words
- C. Reversing the order of the letters in a specific word
- D. Reversing the order of the three words
- E. Removing a specific letter from the longest word

Explanation:

The given sequence of words violates two of the rules in that two of the words begin with the same letter, and the third word is not longer than the second. Reversing the order of the letters in either MOTHS or MAR would make all of the words begin with a different letter. Reversing the order of the three words would make the third word longer than the second. Thus, B is the correct answer.

The first and last answer choices are incorrect because words must consist of three, five, or seven letters, and removing a letter from the longest word would produce a four-letter word. The third and fourth answer choices are incorrect because each corrects only one of the rule violations in the sequence.

5. How many letters can the second words in job names for the XRT computer have?

- A. Three, but they cannot have five or seven

- B. Five, but they cannot have three or seven
- C. Seven, but they cannot have three or five
- D. Three or five, but they cannot have seven
- E. Five or seven, but they cannot have three

Explanation:

The third word in the job name must be longer than the second; and words must consist of three, five, or seven letters. D is the correct answer choice.

The second word cannot consist of seven letters because, if it did, the third word could not be longer than the second; thus the third and last choices are eliminated. The second word could be either three or five letters because it is possible to have a third word that is longer (e.g., seven letter). Thus, the first and second answer choices are eliminated.

Question 6 to 11

Three women (R, S, and T), two men (U and V), and four children (W, X, Y, and Z) are going to a concert. They have a total of nine seats for the concert, but the seats are in three different sections of the hall; they have a group of three adjacent seats in each section. For the concert, the nine people must divide into groups of three according to the following restrictions:

No adults of the same sex can be together in any group.

W cannot be in R's group.

X must be in a group with S or U or both.

6. If R is the only adult in one group, the other members of her group must be

- A. W and X
- B. W and Y
- C. X and Y
- D. X and Z
- E. Y and Z

Explanation:

R cannot be in a group with W, so the first choice and the second choice can be eliminated. X can only be in a group with S or U or both. Since R is the only adult, neither S nor U can be in the group. Therefore, since the third choice and the fourth choice both contain X, they can be eliminated. The fifth choice is the correct answer because the only two children remaining to fill out the group with R are Y and Z.

The first choice and the second choice are incorrect because R cannot be in a group with W. The third choice and the fourth choice are not correct because they both contain X.

7. If R and U are two of the three people in the first group, who can be in the second and third groups, respectively?

- A. S, T, W; V, Y, Z
- B. S, W, Z; T, V, X
- C. S, X, Y; T, W, Z

D. T, V, W; S, Y, Z

E. W, X, Y; S, V, Z

Explanation:

D, consisting of groups R, U, X; T, V, W; and S, Y, Z, meets all of the restrictions and is the correct answer.

The first choice lists two women, S and T, in the second group, while according to the third choice, the first group would contain U and V, both men; thus, both the first choice and the third can be eliminated. Since X must be in a group with S or U, or both, the second choice and the fifth can be eliminated.

8. Which of the following pairs of people can be in the same group as W?

A. R and Y

B. S and U

C. S and V

D. U and V

E. X and Z

Explanation:

S, V, and W could form a group if the other two groups were R, Y, Z, and T, U, X or R, U, X and T, Y, Z. Thus, the third choice is the correct answer.

A is incorrect. W cannot be in R's group. B is incorrect. If S and U are in the same section, X must fill the remaining seat. But this option shows that seat to be taken by W. therefore, it is not an acceptable solution. D is not correct. U and V are both men and cannot be in the same group. E is also not the correct answer choice. X must be in a group with either S or U or both, but there is room for neither in the group W, X, Z.

9. Which of the following must be true?

A. One of the women is in a group with two children

B. One of the two men is in a group with W.

C. R is in a group with a man.

D. T's group includes exactly one child

E. One of the groups includes no children

Explanation:

A is correct. Since no group may have two adults of the same sex, and there are three women, each of the three groups must contain a woman. Since there are more children than groups, some groups must contain two children. That group will include a woman along with the two children.

B is incorrect. S, W, X; R, U, Y; and T, V, Z is one of several possible sets of seating groups in which W is not in the same group as one of the two men. C is incorrect. R, Y, Z; S, U, X; and T, V, W is one of several possible sets of seating groups that include R, Y, Z, a group that includes R but neither of the two men. D is not correct. T, W, Z; R, U, X; and S, V, Y is one of several possible sets of seating groups in which T's group includes more than one child. The last answer choice is also incorrect. Every group must include one child, because a group of three with no children would have to include two adults of the same sex, thereby violating the first restriction.

10. Any of the following pairs of people could be in X's group EXCEPT

- A. R and U
- B. S and T
- C. S and U
- D. S and W
- E. T and U

Explanation:

S and T are both women and cannot be in the same group. Therefore, B is the correct answer.

A is not correct. R, U, X; S, V, W; and T, Y, Z is one of several possible sets of seating groups in which R and U are in X's group. C is incorrect. S, U, X; R, Z, Y; and T, V, W is one of several possible sets of seating groups in which S and U are in X's group. D is also incorrect. S, W, X; R, V, Y; and T, U, Z is one of several possible sets of seating groups in which S and W are in X's group. E, the last answer choice, is also incorrect. T, U, X; R, V, Z; and S, Y, W is one of several possible sets of seating groups in which T and U are in X's group.

11. If T, Y, and Z are in one group, which of the following must be together in one of the other groups?

- A. R, S, V
- B. R, U, W
- C. S, U, W
- D. S, V, W
- E. U, V, X

Explanation:

If T, Y, and Z form one group, the remaining two groups must be chosen from among R, S, U, V, W, and X. R and S must be in different groups since they are both women. W must be in the group with S because W cannot be in the group with R. X must thus be in the group with R, because both U and V are men and cannot both be in R's group. Since X must be in a group with U or S, and S is already in another group, the remaining slot with R and X must be taken by U. This leaves V to fill the remaining slot in S's group. Thus, the fourth choice is the correct answer.

A is incorrect. R and S are both women and cannot be in the same group. B is not the correct answer. R and W cannot be in the same group. C is also incorrect. X is not in the same group with either S or U or both, as required. E is not correct. U and V are both men and cannot be in the same group.

Questions 12-14

A student is planning his class schedule for the fall and spring semesters. He must take exactly three courses each semester. By the end of the spring semester, the student complete at least three courses in Area F, at least one course in Area G, and at least one course in Area H. the only courses available to the student are:

Area F: F102, F201, F202, F203

Area G: G101, G102, G103, G201

Area H: H101, H102, H202

The selection of courses is subject to the following restrictions:

A student can take no more than two courses with the same letter designation per semester.

Courses with a number designation in the 200's are offered only in the spring semester; courses with a number designation in the 100's are offered in both the fall and spring semesters.

No course taken in the fall semester can be repeated in the spring semester.

12. Which of the following is a course that the student must take?

- A. F102
- B. G101
- C. G02
- D. H101
- E. H102

Explanation:

The student must take three courses in Area F, but no more than two of these may be taken in the spring. The only course in Area F available in the fall is F02, so the first answer choice is the correct response.

13. Which of the following is a possible schedule for the spring semester?

- A. F102, G101, and F202
- B. F102, G101, and G102
- C. F201, F202, and H102
- D. G101, G102, and G201
- E. G102, G201, and H101

Explanation:

The student must take three courses in Area F: two courses in one semester and one course in the other semester. Only F102 is offered in the fall, so the student must take it then. In the spring, the student must take two of the following courses: F201, F202, F203. Only option three gives two of these three courses. Taking H102 in the spring is not inconsistent with the given conditions, so C is the correct response.

14. If the student takes G101 and G102 in the fall, his spring schedule must include

- A. F203
- B. F201 and F202
- C. G201
- D. Exactly one course from Area G
- E. Exactly one course from Area H

Explanation:

The student must take three courses in Area F: F102 in the fall and two of the three—F201, F202, and F203—in the spring. Thus, the information given determines that the three fall courses are F102, G101, and G102 and do not include a course from Area H. therefore, the student must take at least one course from Area H in the spring. However, since, in the spring, the student must take two courses in Area F

also, the student must take exactly one course from Area H. Thus, the correct answer is the fifth choice.

The first and second choices are incorrect. The student must take two of the three courses in Area F, but they may be any of the following three combinations: F201 and F202; F201 and F203; or F202 and F203. Thus, these choices represent possible, but not necessary, course combinations for the spring schedule. The third and fourth answer choices are incorrect. The student must take exactly six courses—at least three in Area F, at least one in Area G, and at least one in Area H. The sixth course can be in Area G, meaning that the student could take at most Area G courses. Since the student is already taking two Area G courses in the fall, the student cannot take any courses from Area G in the spring.

Questions 15 to 19

Exactly seven persons—P, Q, R, S, T, U, and V—participate in and finish all of a series of swimming races. There are no ties for any position at the finish of any of the races. The following statements about the races are always true:

V finishes somewhere ahead of P.

P finishes somewhere ahead of Q.

Either R finishes first and T finishes last, or S finishes first and U or Q finishes last.

15. If in a race V finishes fifth, which of the following must be true?

- A. S finishes first.
- B. R finishes second.
- C. T finishes third.
- D. Q finishes fourth.
- E. U finishes last.

Explanation:

Since V always finishes somewhere ahead of P and P always finishes somewhere ahead of Q, if V finishes fifth then P finishes sixth and Q finishes last, S finishes first. Therefore, A is the correct answer.

B is incorrect. Besides second, R can finish third or fourth without violating any of the conditions. C is not the correct answer. Besides third, T can finish second or fourth without violating any of the conditions. D is also incorrect. If V finishes fifth, Q cannot finish fourth since V always finishes somewhere ahead of P and P always finishes somewhere ahead of Q. The last answer choice is incorrect. Because Q finishes last and there are no ties, U cannot finish last.

16. If in a race R finishes first, V can finish no lower than

- A. second
- B. third
- C. fourth
- D. fifth
- E. sixth

Explanation:

The correct answer is C.

17. If in a race S finishes second, which of the following can be true?

- A. P finishes before R.
- B. V finishes before S.
- C. P finishes before V.
- D. T finishes before Q.
- E. U finishes before V.

Explanation:

It is possible that U finishes ahead of V; therefore, the correct answer is E.

If S finishes second, then R finishes first (only R or S ever finish first) and T finishes last. Therefore, these answer choices are incorrect. Since V always finishes somewhere ahead of P, C is also incorrect.

18. If in a race S finishes sixth and Q finishes fifth, which of the following can be true?

- A. V finishes first or fourth.
- B. R finishes second or third.
- C. P finishes second or fifth.
- D. U finishes third or fourth.
- E. T finishes fourth or fifth.

Explanation:

U can finish either third (if V finishes second and P finishes fourth) or fourth (if V and P finish second and third, respectively). Therefore, D is the correct answer.

If S finishes sixth, then, since only R or S ever finishes first, R finishes first and T finishes last. Therefore, B and E are incorrect. Since V always finishes somewhere ahead of P and first, fifth, sixth, and seventh places are taken by others, V finishes second or third, and P finishes third or fourth. Therefore, A and C are also incorrect.

19. If in a race R finishes second and Q finishes fifth, which of the following must be true?

- A. S finishes third.
- B. P finishes third.
- C. V finishes fourth.
- D. T finishes sixth.
- E. U finishes sixth.

Explanation:

If R finishes second and Q finishes fifth, then, since only R or S ever finish first, S finishes first and U finishes last. Since V always finishes somewhere ahead of P and P always finishes somewhere ahead of Q, V and P finish third and fourth, respectively. That leaves only sixth place in which T can finish; therefore, D is the correct answer.

Questions 20 to 24

A woman plans to plant exactly six kinds of herbs: marjoram, oregano, parsley, rosemary, sage, and thyme. She places six pots side by side in a straight line and numbers the pots consecutively from 1 to 6. She will plant only one kind of herb in each pot. The arrangement of the herbs is subject to the following conditions:

Oregano must be planted in a pot with a lower number than the pot in which parsley is planted.

Marjoram must be planted in a pot with a lower number than the pot in which thyme is planted.

Sage cannot be planted in pot 1.

Rosemary must be planted in a pot immediately adjacent to the pot in which oregano is planted.

20. Which of the following arrangements of herbs from pot 1 through 6, respectively, conforms to the conditions above?

- A. Marjoram, sage, thyme, parsley, rosemary, oregano
- B. Oregano, parsley, marjoram, thyme, sage, rosemary
- C. Rosemary, oregano, marjoram, sage, parsley, thyme
- D. Sage, marjoram, thyme, rosemary, oregano, parsley
- E. Thyme, oregano, rosemary, marjoram, parsley, sage

Explanation:

C conforms to all the conditions and is therefore the correct answer.

The first answer choice does not conform to the conditions because the oregano is in a higher-numbered pot than the parsley. B does not conform to the conditions because the rosemary is not next to the oregano. D does not conform to the condition because sage is planted in the first pot. The last answer choice does not conform to the conditions because the marjoram is in a higher-numbered pot than the thyme.

21. If sage is planted in a higher-numbered pot than parsley, which of the following must be true?

- A. Sage is planted in a higher-numbered pot than oregano.
- B. Sage is planted in a higher-numbered pot than marjoram.
- C. Sage is planted in a higher-numbered pot than thyme.
- D. Parsley is planted in a lower-numbered pot than marjoram.
- E. Parsley is planted in a lower-numbered pot than rosemary.

Explanation:

If the sage is planted in a higher-numbered pot than the parsley, it must also be in a lower-numbered pot than the parsley. Thus, A is the correct answer.

B, C, and D are incorrect. Given the conditions, marjoram can be in any pot from 1 through 5 and thyme can be in any pot from 2 through 6, as long as the marjoram is in a lower-numbered pot than the thyme. Thus, these choices can each be true, but need not be true. E is also incorrect. Since the rosemary must be next to the oregano and the oregano must be in a lower-numbered pot than the parsley, the parsley must be in a higher numbered pot than the rosemary, and so this choice cannot be true.

22. If thyme is planted in a lower-numbered pot than oregano, which of the following must be true?

- A. Thyme is planted in a lower-numbered pot than sage.

- B. Thyme is planted in a lower-numbered pot than rosemary.
- C. Oregano is planted in a lower-numbered pot than sage.
- D. Oregano is planted in a lower-numbered pot than rosemary.
- E. Oregano is planted in a lower-numbered pot than marjoram.

Explanation:

If the thyme is planted in a lower-numbered pot than the oregano, the thyme must be planted in a lower-numbered pot than the rosemary. This is because the rosemary and the oregano must be planted next to each other. Thus, B is the correct answer.

A, C, D, and E are incorrect. Marjoram, sage, thyme, rosemary, oregano, parsley is an arrangement of the herbs that conforms to all the conditions and the information given. None of these answer choices is true for this arrangement.

23. If parsley is planted in a lower-numbered pot than marjoram, marjoram could be planted in which of the following pots?

- A. 1
- B. 2
- C. 3
- D. 4
- E. 6

Explanation:

If the parsley is planted in a lower-numbered pot than the marjoram, we know that five of the herbs will be in one of the two following orders and that sage can be in any of the pots except pot 1 or between oregano and rosemary:

Rosemary, oregano, parsley, marjoram, thyme

Oregano, rosemary, parsley, marjoram, thyme

Marjoram could be in pot 4, provided that sage is in either pot 5 or pot 6. So D is the correct answer.

No matter where the sage is placed, marjoram could never be in pots 1, 2, 3, or 6 (eliminating the first, second, third, and last answer choices.)

24. If oregano is planted immediately adjacent to thyme, which of the following must be true?

- A. Marjoram is planted in pot 1.
- B. Sage is planted in pot 2.
- C. Rosemary is planted in pot 3.
- D. Oregano is planted in pot 4.
- E. Thyme is planted in pot 5.

Explanation:

If the oregano is next to the thyme, we know that five of the herbs will be in one of the two following orders and that sage may be in any of the pots except pot 1 or next to the oregano:

Marjoram, rosemary, oregano, thyme, parsley

Marjoram, thyme, oregano, rosemary, parsley

Marjoram must be in pot 1 in order to preserve the order given and because sage cannot be in pot 1. A,

therefore, is the correct answer.

B is incorrect. Sage could be planted in pot 2, 5, or 6, so B can be true but is not necessarily true. C is also incorrect. Rosemary could be planted in pot 3 if sage is in pot 2, but rosemary could also be planted in pots 2, 4, or 5. Thus, C can be true but is not necessarily true. The fourth answer choice is incorrect. Oregano could be planted in pots 3 or 4. Thus, this can be true but is not necessarily true. The last answer choice is incorrect. Thyme could be in pots 2, 3, 4, or 5. Thus, E can be true but is not necessarily true.

SECTION II: ARGUMENT

Time ---35 Minutes

25 Questions

1. One of the truisms of the advertising industry is that it is rarely necessary to say something of substance in an advertisement in order to boost sales. Instead, one only needs to attract the potential customer's attention; memory does the rest, for it is more important for sales that people know of a product than that they know something about it.

Which of the following is assumed by the argument?

- A. People can remember a product without having much information about it.
- B. Advertisements, in their own way, function to improve people's memories.
- C. Attracting a potential customer's attention is a simple matter.
- D. The advertising industry knows little of substance about the products it promotes.
- E. Advertisements seldom tell the truth about a product.

Explanation:

The passage discusses how advertising usually need only draw people's attention to a product and need not provide any substance for people to remember the product. Thus, the passage implies that people can remember a product without having much information about it, and A is the correct answer. B is incorrect. The passage suggests that if advertisements draw people's attention to a product, the people are more apt to remember the product. The advertisement is not said to improve people's memories, only to draw people's attention so they will use their existing memories.

C is also incorrect. The passage says that all one usually needs to do is attract a potential customer's attention. It does not say how easy or difficult that is.

The fourth answer choice is incorrect. The passage says that it is rarely necessary to say something of substance in an advertisement but does not suggest that the advertising industry knows little of substance about the product.

The last answer choice is incorrect. The passage does not suggest that advertisements make false claims about products.

2. Why save endangered species? For the general public, endangered species appear to be little more than biological oddities. A very different perception is gained from considering the issue of extinction in a wider context. The important point is that many major social advances have been made on the basis of life forms whose worth would never have been perceived in advance. Consider the impact of rubber-producing plants on contemporary life and industry: approximately two-thirds of the world's rubber supply comes from rubber producing plants and is made into objects as diverse as rubber washers and rubber boots.

The point of the passage is made chiefly by

- A. acknowledging the validity of two opposing points of view
- B. appealing to the emotions of the audience rather than to their intellects
- C. suggesting a useful perspective for viewing the question raised at the beginning of the passage

- D. trying to discredit the view of an opponent without presenting an alternative hypothesis
- E. generalizing from similar to dissimilar cases.

Explanation:

The passage suggests that considering the possibility of extinction with an eye toward the possible utility of a previously unvalued species will lead to a different answer to the question than considering the possibility of extinction from a more general perspective. C describes the author's procedure of suggesting a new perspective and is thus the correct answer.

The first choice is incorrect. The author argues that it is important to preserve endangered species without endorsing any opposing point of view. The view attributed to the general public is not accepted; rather, an argument is given to show what that view misses. B is incorrect. The author uses an approach that is primarily factual, and does not seek to arouse the emotions of its audience. D is also incorrect. The author tries to undermine an opposing position by presenting an alternative to it. The last answer choice is incorrect. The generalization about the potential value of life forms whose value was not perceived in advance is supported by an example of a similar case, namely that of rubber plants.

3. Only a member of the Regionalist party would oppose the bill for a new recycling law that would protect the environment from industrial interests. Ellen cannot be a member of the Regionalist party because she supports the bill.

Which of the following statements points out why the conclusion is invalidly drawn?

- A. Regionalist party members have organized to oppose industrial interests on several other issues.
- B. Industrial interests need not oppose the protection of the environment.
- C. Past attempts to protect the environment through recycling laws have failed.
- D. It is possible that some Regionalist party members may not oppose the bill for a new recycling law.
- E. Ellen has attended programs and distributed literature prepared by the Regionalist party.

Explanation:

The fact that only a member of the Regionalist party would oppose the bill does not imply that all members of the Regionalist party would oppose the bill. Based on the initial statement, Ellen may or may not be a member of the Regionalist party if she supports the bill. For the conclusion to be valid, the initial statement would have to read, "All members of the Regionalist party would oppose the bill for a new recycling law..." Thus, the choice of D makes the relevant logical point.

The first three answer choices are incorrect. Each presents at best a piece of background information without being specifically related to the question of whether all Regionalist party members would oppose the bill. The last answer choice is also incorrect. Ellen's attending programs and distributing literature prepared by the Regionalist party might appear to make it likely that the conclusion is false. But suggesting that the conclusion might be false does not help show why the conclusion is invalidly drawn.

4. Roberta was born in 1967, and so in 1976 she was nine years old. It is clear from this example that the last two digits of a person's birth year will be the same as the last two digits of the year of that

person's ninth birthday, except that the position of the digits will be reversed.

Which of the following is the best criticism of the assertions made?

- A. The generalization is valid only for those birth years that do not end in two zeroes.
- B. The example does not exhibit the same principle as is expressed in the generalization based on it.
- C. The generalization is valid only for those birth years in which the last digit is one greater than the second-to-last digit.
- D. The example cannot be shown to be correct unless the truth of the generalization is already presupposed.
- E. The generalization is valid only for those birth years in which the last digit is greater than five.

Explanation:

The generalization is only true for some birth years. A good criticism of the generalization would show when the generalization is not true. C does just that and thus is the correct answer.

A is incorrect. It is false that the generalization holds for all years that do not end in two zeros. For example, 1970 is a birth year that does not end in two zeros. However, 1970 plus nine equals 1979, and hence this is a case for which the generalization is not valid. Since this answer choice is false, it cannot be a good criticism of the assertions.

The second answer choice is also incorrect. In the example, the last two digits of the person's birth year-67-are the same as the last two digits of the year of the person's ninth birthday-76-except reversed. Thus, the example does in fact exhibit the same principle as the generalization.

The fourth answer choice is incorrect. The difference between 1976 and 1967 is nine. The correctness of the first statement depends only on this fact and the fact that Roberta was born in 1967 and was still alive in 1976. Thus, the truth of the generalization is not presupposed.

The last answer choice is also incorrect. Consider birth year 1923. a person born in 1923 would have been nine in 1932 and the generalization holds. So E is false.

5.The greatest chance for the existence of extraterrestrial life is on a planet beyond our solar system. The Milky Way galaxy alone contains 100 billion other suns, many of which could be accompanied by planets similar enough to Earth to make them suitable abodes of life.

The statement presupposes which of the following?

- A. Living creatures on another planet would probably have the same appearance as those on Earth.
- B. Life cannot exist on other planets in our solar system.
- C. If the appropriate physical conditions exist, life is an inevitable consequence.
- D. More than one of the suns in the galaxy is accompanied by an Earth-like planet.
- E. It is likely that life on another planet would require conditions similar to those on Earth.

Explanation:

In stating that planets may exist that are similar enough to Earth to make them suitable for supporting life, the author implicitly rules out planets dissimilar to Earth as likely to support life. The assumption underlying the statement is that life on another planet is likely to require conditions similar to those on Earth. Therefore, E is the correct answer.

A is not correct. The statement presupposes nothing about the appearance of extraterrestrial life. B is incorrect. The statement implies that it is relatively unlikely that life exists on other planets in our

solar system, but it makes no presupposition absolutely ruling out the possibility that such life exists. The answer choice of C is incorrect. Although the statement suggests that there is the greatest chance for life when physical conditions are appropriate, it leaves open the possibility that no life will exist even with appropriate conditions. D is also incorrect. The statement says that it is possible that more than one of the suns in the galaxy is accompanied by an Earth-like planet, but it does not presuppose that there are actually any such suns.

6. The state with the greatest fraction of its population in urban areas, if the urban areas are considered to include the suburbs, is California. The West is highly urbanized, but California is exceptional even in that region: 91 percent of its population lives in urban areas. Geographically, however, California is rural: 96 percent of its land is outside urban areas.

If all of the statements are true, which of the following is best supported on the basis of them?

- A. No state has a smaller fraction of its population in rural areas than California has.
- B. The current rate of population growth in California's urban areas exceeds that current rate of population growth in California's rural areas.
- C. In California 96 percent of the population lives on 9 percent of the land.
- D. No state has a smaller area devoted to urban settlement than California has.
- E. California's population density is among the highest of all states in the United States.

Explanation:

The passage states that of all the states, California has the greatest fraction of its population (91 out of 100) living in urban areas. That means only 9 out of every 100 California residents live in rural areas. The greatest fraction of any other states' population living in urban areas, to be smaller than California's fraction, must be 90 or fewer out of every 100. That means that, in every other state, 10 or more out of every 100 residents live in rural areas. Since 9 out of every 100 is smaller than 10 or more out of every 100, so A is the correct answer.

B is incorrect. In order to decide whether this statement is true, it is necessary to know about rates of population growth. No such information is provided in the passage. The third answer choice is also incorrect. Since 96 percent of the land is outside urban areas, 4 percent is inside urban areas. Thus, 91 percent of the population lives on 4 percent of the land. The fourth answer choice is incorrect. The passage does not provide enough information to determine whether this statement is true or false. No comparison is made between the amount of land area in California devoted to urban settlement and the amount of land area in other states devoted to urban settlement. E is incorrect. The passage does not provide sufficient information to determine whether this statement is true or false. Information on the actual size of the population as compared to total land area of California and other states would be necessary to make a judgment about population density in these states.

7. A ten-year comparison between the countries of Arudia and Cazonia in terms of crop yields per acre revealed that when only planted acreage is compared, Cazonian yields are equal to 68 percent of Arudian yields. When total agricultural acreage (planted acreage plus fallow acreage) is compared, however, Cazonia's yield is 114 percent of Arudia's yield.

From the information above, which of the following can be most reliably inferred about Arudian and

Cazonian agriculture during the ten-year period?

- A. A higher percentage of total agricultural acreage was fallow in Arudia than in Cazonia.
- B. Arudia had more fallow acreage than planted acreage.
- C. Fewer total acres of available agricultural land were fallow in Cazonia than in Arudia.
- D. Cazonia had more planted acreage than fallow acreage.
- E. Cazonia produced a greater volume of crops than Arudia produced.

Explanation:

If crop yield per planted acre was less in Cazonia than it was in Arudia, yet crop yield per total (planted plus fallow) agricultural acreage was greater in Cazonia than it was in Arudia, there must have been a lower percentage of the total acreage that was left fallow in Cazonia than there was in Arudia. Therefore, the correct answer is A.

B is incorrect. From the information in the passage, it is impossible to tell whether Arudia had more or less fallow acreage than planted acreage. C is not correct. Since the comparisons made in the passage are based on crop yields per acre, it is impossible to tell whether there was more or less fallow acreage in Cazonia than in Arudia. D is also incorrect. From the information in the passage, it is impossible to tell whether Cazonia had more or less planted acreage than fallow acreage. The last answer choice is incorrect. Since the comparisons made in the passage are based on crop yields per acre, it is impossible to tell whether Cazonia produced a greater volume of crops than Arudia produced.

8. In the United States between 1850 and 1880, the number of farmers continued to increase, but at a rate lower than that of the general population.

Which of the following statements directly contradicts the information presented above?

- A. The number of farmers in the general population increased slightly in the thirty years between 1850 and 1880.
- B. The rate of growth of the United States labor force and the rate of growth of the general population rose simultaneously in the thirty years between 1850 and 1880.
- C. The proportion of farmers in the United States labor force remained constant in the thirty years between 1850 and 1880.
- D. The proportion of farmers in the United States labor force decreased from 64 percent in 1850 to 49 percent in 1880.
- E. The proportion of farmers in the general population increased from 68 percent in 1850 to 72 percent in 1880.

Explanation:

The passage indicates that the proportion of farmers in the general population decreased from 1850 to 1880. The fifth answer choice says exactly the opposite—that this proportion increased; therefore, it contradicts the passage and is the correct response.

A is incorrect. The passage also indicates that the number of farmers increased between 1850 and 1880, and thus agrees with this choice. B is also incorrect. The passage does not tell us about the rate of growth of the labor force. It can be inferred from the passage that the general population grew, but this choice agrees with, rather than contradicts, this conclusion. The choice of C is not the correct answer. We cannot draw any conclusions about the proportion of farmers in the labor force from the passage

alone. The fourth is also incorrect. We cannot draw any conclusions about the proportion of farmers in the labor force from the passage alone.

9. The 38 corporations that filed United States income tax returns showing a net income of more than \$100 million accounted for 53 percent of the total taxable income from foreign sources reported on all tax returns. Sixty percent of the total taxable income from foreign sources came from the 200 returns reporting income from 10 or more countries.

If the statements above are true, which of the following must also be true?

- A. Most of the total taxable income earned by corporations with net income above \$ 100 million was earned from foreign sources.
- B. Wealthy individuals with large personal incomes reported 47 percent of the total taxable income from foreign sources.
- C. Income from foreign sources amounted to between 53 and 60 percent of all reported taxable income.
- D. Some of the corporations with net income above \$ 100 million reported income from 10 or more countries.
- E. Most of the tax returns showing income from 10 or more countries reported net income of more than \$ 100 million.

Explanation:

If 38 tax returns in one category account for 53 percent of the total taxable income from foreign sources, and if 200 tax returns in another category account for 60 percent of the same amount, then the two categories must overlap to some extent. Only if the two percentages, added together, amounted to 100 percent or less is there not necessarily any overlap. Here, the two percentages add up to 113 percent. The answer choice that expresses an overlap between the category of corporations with a net income of above \$ 100 million and that of corporations with income from 10 or more countries is D, which is thus the correct answer.

A is not correct. Whereas corporations with net incomes of above \$ 100 million account for more than half of the total taxable income from foreign sources, we cannot tell from the information given what proportion of their own total incomes from all sources is derived from incomes from foreign sources. The second answer choice is incorrect. All we can infer is that 47 percent was reported by taxpayers other than corporations with net incomes above \$ 100 million. These taxpayers could be other corporations with somewhat lower incomes. C is not the correct answer choice. The figures of 53 and 60 percent refer to percentages of total taxable income from foreign sources. Neither these nor any other figures in the passage refer to or imply any percentages of all reported taxable income. E, the last choice, is also incorrect. Since there are only 38 corporations with reported net incomes of more than \$ 100 million, but 200 taxpayers with income from 10 or more countries, at the very most somewhat less than 20 percent of those 200 taxpayers could report net incomes of more than \$ 100 million.

10. The greater the division of labor in an economy, the greater the need for coordination. This is because increased division of labor entails a larger number of specialized producers, which results in a greater burden on managers and, potentially, in a greater number of disruptions of supply and

production. There is always more division of labor in market economies than in planned economies.

If all of the statements given are true, the which of the following must also be true?

- A. Disruptions of supply and production are more frequent in planned economies than in market economies.
- B. There are more specialized producers in planned economies than in market economies.
- C. The need for coordination in market economies is greater than in planned economies.
- D. A manager's task is easier in a market economy than in a planned economy.
- E. Division of labor functions more effectively in market economies than in planned economies.

Explanation:

C is the correct answer. If, as the first statement claims, greater division of labor entails a greater need for coordination and if, as the second statement claims, there is always more division of labor in market economies than in planned economies, then it must be true that the need for coordination in market economies is greater than in planned economies.

The first choice is incorrect. If the statements are true, then it is possible, and even expected, that disruptions of supply and production are NOT more frequent in planned economies than in market economies. The statements suggest that since there is always more division of labor in market economies than in planned economies, there is potentially a greater number of disruptions in market economies than in planned economies. B is not correct. One would expect there to be fewer, not more, specialized producers in planned economies than in market economies, other things being equal. This is because, according to the statements, there is always more division of labor in market economies than in planned economies and because increased division of labor entails a larger number of specialized producers. The fourth answer choice is incorrect. The statement lead to the conclusion that a manager's task would be harder, not easier, in a market economy than in a planned economy. This is because the increased division of labor that exists in a market economy entails a larger number of specialized producers. The last answer choice, E is also incorrect. The statement that division of labor functions more effectively in market economies than in planned economies does not follow from the statements given. The statements imply that such effectiveness is dependent on the amount of coordination available, but no information concerning that amount is given.

11. Therapists find that treatment of those people who seek help because they are unable to stop smoking or overeating is rarely successful. From these experiences, therapists have concluded that such habits are intractable, and success in breaking them is rare.

As surveys show, millions of people have dropped the habit of smoking, and many people have successfully managed a substantial weight loss.

If all of the statements are correct, an explanation of their apparent contradiction is provided by the hypothesis that

- A. there have been some successes in therapy, and those successes were counted in the surveys
- B. it is easier to stop smoking than it is to stop overeating
- C. it is easy to break the habits of smoking and overeating by exercising willpower
- D. the group of people selected for the survey did not include those who failed to break their habits even after therapy

- E. those who succeed in curing themselves do not go for treatment and so are not included in the therapists' data

Explanation:

If, as this choice suggests, the very people who would lead the therapists to view such habits as more tractable do not come for treatment, it is quite understandable why therapists persist in their pessimistic view. At the same time, E is consistent with the survey results. Therefore, the last choice is the correct answer.

A is incorrect. Even assuming that this choice is true, no light is shed on why successes should be so rare in therapy, and yet, if the surveys are to be believed, so common overall. B is also incorrect. Since the comparative strength of habits is not an issue in the therapists' findings or the surveys, it cannot have anything to do with the apparent contradiction; consequently, information about it cannot help resolve that contradiction. C is also not the correct answer choice. If C were true, the survey results would appear rather unremarkable, but the therapists' findings would be baffling. The apparent contradiction would not be diminished but underscored. The fourth answer choice is incorrect. The survey results as reported focus on the numbers of people who have successfully fought a habit, not on the proportion of those who tried to break their habits who succeeded. This answer choice pertains only to the latter and so is essentially irrelevant.

12. "On the whole," Ms. Dennis remarked, "engineering students are lazier now than they used to be. I know because fewer and fewer of my students regularly do the work they are assigned."

Which of the following identifies a flaw in Ms. Dennis' reasoning?

- A. Plenty of people besides engineering students do not work as hard as they should.
- B. Ms. Dennis does not consider the excuses her students may have for being lazy.
- C. The argument does not propose any constructive solutions to the problem it identifies.
- D. The argument assumes that Ms. Dennis' students are representative of engineering students in general.
- E. Ms. Dennis does not seem sympathetic to the problems of her students.

Explanation:

Since the constantly decreasing work output of Ms. Dennis' students could stem from causes specific to those students, Ms. Dennis is not logically justified in extending her judgment about her own students to engineering students in general. D is a concise statement of the logically flawed assumption Ms. Dennis must be making in so extending her judgment. Thus, this answer choice is the correct answer.

A is incorrect. Whether or not other groups resemble engineering students has no bearing on whether or not certain conclusions about engineering students follow logically from certain observations about some engineering students. Thus, Ms. Dennis' lack of attention to people who are not engineering students is not a flaw in her reasoning. B is also incorrect. Any excuses offered for laziness do not alter it, though they might help us understand it. Ms. Dennis is only concerned with establishing that the laziness of engineering students is a fact; she does not inquire into possible explanations. It is not a flaw of her reasoning as it stands that it addresses the particular concerns it addresses. C is not the correct answer choice. Ms. Dennis' reasoning is involved in reaching a conclusion on the basis of

certain evidence. It does not go beyond that. This choice concerns itself with matters beyond the ones Ms. Dennis reasons about, and thus cannot be considered a flaw in her reasoning. The last answer choice is also incorrect. The logical merits or flaws of an argument are independent of the emotional attitudes of the person making the argument. Since this choice describes an emotional attitude, it cannot identify a reasoning flaw.

13. The overall operating costs of many small farms are reduced when the farmers of small farms eliminate expensive commercial chemical fertilizers and pesticides in favor of crop rotation and the twice-yearly use of manure as fertilizer. Therefore, farmers of large farms should adopt the same measures. They will then realize even greater total savings than do the small farmers.

The argument assumes that

- A. it is more cost-effective for small farm farmers to eliminate the use of commercial fertilizers and pesticides than it is for large farm farmers to do so
- B. a sufficient amount of manure will be available for the fields of large farm farmers
- C. large farm farmers would not realize similar cost benefits by using treated sewage sludge instead of commercial chemical fertilizers
- D. large farm farmers generally look to small farm farmers for innovative ways of increasing crop yields or reducing operating costs
- E. the smaller the farm, the more control the farmer has over operating costs

Explanation:

B is the correct answer choice.

It would be impossible to argue reasonably that large farmers should use manure as fertilizer because they would realize even greater savings than the small farmers without also assuming that there is a sufficient amount of manure available for the fields of large farmers.

A is not the correct answer choice.

The argument implies that it would be more cost effective for large farmers to eliminate commercial fertilizers and pesticides than it would be for small farmers to do so. The third answer is incorrect. No statements are made in the argument concerning treated sewage sludge and no assumption is made about it. D is not the correct answer choice. This statement is not assumed because if it were false—if large farmers seldom or never looked to small farmers for innovative ways of increasing crop yields or reducing operating costs—this would not affect anything relevant to the argument about the total savings that large farmers might gain by adopting new farming practices. E is also not the correct answer choice. It may well be true that the smaller the farm, the more control the farmer has over operating costs. However, with respect to control, the argument only that large farmers have enough control over their farming methods to adopt the recommended measures.

14. Factory workers in Beltania are guaranteed lifetime jobs, bonuses paid on the basis of productivity and corporate profits, and a wage rate that is not attached to a particular job. Paradoxically, these guarantees do not discourage factory owners from introducing labor-saving machinery. Such innovations are to the factory owners' advantage despite the fact that the owners must protect the wages of their workers.

Which of the following, if true, most helps to explain why the introduction of labor-saving machinery is advantageous to factory owners?

- A. Before a Beltanian Factory worker is hired, he or she must present a record of his or her previous productivity.
- B. Labor-saving machinery increases productivity, thus yielding profits that more than cover the cost of retraining workers for other jobs.
- C. The purchase and maintenance of new machinery adds significantly to the final cost of the goods produced.
- D. Factory workers demand a change of procedure in the routine tasks they perform.
- E. Limited competition exists among Beltanian factories for consumer markets.

Explanation:

If the second answer choice is true, introducing labor-saving machinery results in additional profits even if it also requires the retraining of workers. Hence, this answer choice demonstrates the advantages to the factory owners of labor-saving machinery. Thus, B is the correct answer.

The first answer choice is incorrect. Productivity in a previous job may relate to productivity in the job for which a worker is hired. However, if the worker's job is eliminated by new machinery, the factory owner loses the advantage of having been able to select a highly productive worker for that job. There is no indication in this answer choice of what advantage, if any, the owner gains. C is incorrect. Since increased costs, other things being equal, mean decreased profits, this answer choice suggests the change is disadvantageous to the factory owners. D is also incorrect. Changes of procedure may result for those employees whose jobs are eliminated by the introduction of machinery, but would not necessarily result for a substantial number of factory workers. The owners have an advantage only if a substantial number of workers have been satisfied. Thus, this fourth answer choice cannot explain why the change is advantageous. The last answer choice is incorrect. Limited competition might imply that the factory owners will be able to sell their products, even if the price must be raised to cover new machinery as well as wages. Although this does not harm the factory owners, it does not suggest an advantage either.

15. During the day in Lake Constance, the zooplankton *D. hyaline* departs for the depths where food is scarce and the water cold. *D. galeata* remains near the warm surface where food is abundant. Even though *D. galeata* grows and reproduces much faster, its population is often outnumbered by *D. hyaline*.

Which of the following, if true, most helps to resolve the apparent paradox?

- A. The number of species of zooplankton living at the bottom of the lake is twice that of species living at the surface.
- B. Predators of zooplankton, such as whitefish and perch, live and feed near the surface of the lake during the day.
- C. In order to make the most of scarce food resources, *D. hyaline* matures more slowly than *D. galeata*.
- D. *D. galeata* clusters under vegetation during the hottest part of the day to avoid the Sun's rays.
- E. *D. galeata* produces twice as many offspring per individual in any given period of time as does *D. hyaline*.

hyaline.

Explanation:

The presence of predators of zooplankton, feeding near the surface during the day, would suggest that *D. galeata* is consumed at a higher rate than *D. hyaline*.

Therefore, if this choice were true, it would help resolve the apparent paradox that *D. galeata* grows and reproduces faster than *D. hyaline*, yet *D. hyaline* has the greater population.

A is incorrect. Nothing is said in the paragraph to show the relevance of the presence of other species of zooplankton to the relative population size of the two species. C is not correct. This information explains the slower growth and reproduction of *D. hyaline*, which is one aspect of the paradox; but it does nothing to show how *D. hyaline* can grow and reproduce more slowly and yet have the greater population. D is incorrect. Nothing is said in the paragraph to show the relevance to the paradox of *D. galeata*'s clustering under vegetation. E is also incorrect. More information on the faster reproduction of *D. galeata* does not show how, despite faster growth and reproduction, *D. galeata* has the lesser population.

16. A study attitudes toward prime-time television programs showed that programs with identical rating in terms of number of people watching received highly divergent marks for quality from their viewers. This additional piece of information could prove valuable for advertisers, who might be well advised to spend their advertising dollars for programs that viewers feel are of high quality.

Which of the following, if true, supports the claim that information about viewers' perceptions of the quality of television programs could be valuable to advertisers?

- A. The number of programs judged to be of high quality constituted a high percentage of the total number of programs judged.
- B. Many of the programs judged to be of high quality were shown on noncommercial networks.
- C. Television viewers more frequently remember the sponsors of programs they admire than the sponsors of programs they judge mediocre.
- D. Television viewers tend to watch new programs only when those programs follow old, familiar programs.
- E. Television viewers report that the quality of a television advertisement has little effect on their buying habits.

Explanation:

C is the correct answer, because advertisers are interested in having their products remembered favorably. By linking viewer perception of program quality with this goal, this choice gives advertisers a reason to care about the quality of programs they sponsor.

A is incorrect. That a large portion of programs are judged to be of high quality does not bolster the conclusion that information about viewer perception of program quality will be useful to advertisers. Rather, if a large portion of programs are judged to be of high quality, an advertiser may feel relatively safe in looking only at the ratings. B is incorrect. Programs on noncommercial networks cannot contain ads. Information as to their quality will not help advertisers place ads with programs judged to be of high quality. D is incorrect. This answer makes no mention of either program quality or viewer buying habits and thus neither strengthens nor weakens the connection between the two. The idea

expressed in the answer thus has nothing to do with the importance of program quality to advertisers. The last answer choice is also incorrect. This answer connects the perception of the quality of advertisements to buying habits. It does not determine a connection between perception of the quality of programs and buying habits and thus is irrelevant to any interest advertisers may have in program quality.

17. Each year, fires in the United States cause \$ 12 billion in property losses, insurance costs, fire-fighting expenses, and loss of worker productivity. These fire losses are seven times those in Japan on a per capita basis.

Which of the following, if true, would be LEAST likely to be a factor contributing to the difference between fire losses in Japan and those in the United States?

- A. Significantly more money per capita is spent each year on fire-prevention efforts in the United States than is spent on such efforts in Japan.
- B. The rate of arson, a major contributor to fire statistics in the United States, is almost negligible in Japan.
- C. Most Japanese homes, unlike those in the United States, are equipped with specially designed and effective fire-extinguishing equipment.
- D. Foam-based and plastic furniture, less popular in Japan than in the United States, ignites readily and releases twice the heat energy of equivalent weights of natural fibers.
- E. Japanese fire departments devote proportionately more personnel time to inspection, training, and public education than do United States fire departments.

Explanation:

The fact that more money per capita is spent on fire-prevention in the United States than in Japan would be a factor likely to contribute to greater fire loss in Japan than in the United States. Therefore, this factor would be very unlikely to contribute to lesser fire loss in Japan, and A is the correct answer. B is incorrect. A greater incidence of arson in the United States would indeed be likely to contribute to greater fire loss in the United States. C is also incorrect. More effective fire extinguishing equipment in more Japanese homes would indeed be likely to contribute to lesser fire loss in Japan. D is incorrect. The greater popularity of foam based and plastic furniture in the United States would indeed be likely to be a factor contributing to greater fire loss in the United States, since such furniture is a greater fire hazard than furniture of natural fibers. E is also incorrect. Greater attention to prevention and training by Japanese fire departments would indeed be likely to contribute to lesser fire loss in Japan.

18. Some would have you believe that the economic problems of Western Europe in the 1980s were caused by the Organization of Petroleum Exporting Countries (OPEC) oil cartel. This is nonsense. After all, Great Britain was not dependent on OPEC oil and yet Great Britain suffered from the same economic problems that afflicted France and West Germany.

The author's point is made primarily by

- A. offering Great Britain as a counterexample
- B. analyzing the economic difficulties of France and West Germany
- C. pointing out a misconception in reasoning

- D. proposing an alternative Explanation
- E. drawing an analogy between France and West Germany

Explanation:

The author argues that the economic problems of Western Europe are not caused by the Organization of Petroleum Exporting Countries (OPEC) oil cartel. This point is made by using Great Britain as an example of a Western European country that is not dependent on OPEC oil but has the same economic problems as France and West Germany. Thus, the first answer choice is the correct answer.

B is incorrect. The author's point (that the economic problems of Western Europe are not caused by the OPEC oil cartel) is made by stating that the economic problems of France and West Germany are the same as those of Great Britain and by pointing out that Great Britain does not depend on OPEC oil as France and West Germany do. This in no way implies what the nature of the economic problems of France and West Germany is. C is also incorrect. The author does not present or discuss the reasoning used to arrive at the conclusion that the OPEC oil cartel has caused the economic problems of Western Europe. Rather, the author presents evidence suggesting that the conclusion cannot be true. The fourth answer choice is not the correct answer. The author presents evidence that the economic problems of Western Europe are not caused by the OPEC oil cartel, but no suggestion is given about the true cause of those economic problems. This last answer choice is also incorrect. The author's point is made by comparing Great Britain with France and West Germany.

19. Why save endangered species? For the general public, endangered species appear to be little more than biological oddities. A very different perception is gained from considering the issue of extinction in a wider context. The important point is that many major social advances have been made on the basis of life forms whose worth would never have been perceived in advance. Consider the impact of rubber-producing plants on contemporary life and industry: approximately two-thirds of the world's rubber supply comes from rubber-producing plants and is made into objects as diverse as rubber washers and rubber boots.

Any of the following facts could be used as illustrative examples in addition to the example of rubber-producing plants EXCEPT:

- A. The discovery of the vaccine for smallpox resulted from observing the effect of the cowpox virus on the hands of dairy workers.
- B. The major source of our pharmaceutical supplies is plants, some of them commonly thought of as weeds.
- C. Certain antibiotics were originally derived from mold growing on cantaloupes.
- D. Plastic is a unique product derived from petroleum and petroleum by-products.
- E. Hamsters and other rodents have played an important role in laboratory tests of medicine for use on humans.

Explanation:

Examples that would serve the same function as rubber producing plants must involve a situation in which an organism previously thought to be useless is seen to be extremely beneficial for some human endeavor. Petroleum is not an organism and is useful itself and thus is not such an example. Thus, the fourth choice is the correct answer.

Responses one, two, three and five are incorrect. They are examples of situations in which an organism previously thought to be useless is seen to be extremely beneficial for some human endeavor.

20. Superficially, college graduates in 1982 resembled college graduates of 1964; they were fairly conservative, well dressed, and interested in tradition; they respected their parents. But there was a deep-seated difference: a majority of the members of the class of 1982 who were surveyed in their freshman year stated that making a good income was an important reason for their decision to go to college.

The statements in the passage, if true, best support which of the following conclusions?

- A. The concerns of college graduates of 1964 were superficial compared to the financial worries of college graduates of 1982.
- B. Fewer than half the students of the class of 1964 declared as freshmen that they entered college in order to increase their earning potential.
- C. Educational background did not play as significant a part in determining income in 1964 as it did in 1982.
- D. A majority of the members of the class of 1964 revised their reasons for attending college between their freshman year and college graduation.
- E. College graduates of 1964 were actually less conservative than college graduates of 1982.

Explanation:

The passage claims that 1982 and 1964 college graduates were similar except that a majority of the 1982 graduates stated during their freshman year that making a good income was an important reason for going to college. This implies that fewer than half of the 1964 class, as freshmen, stated that making a good income was an important reason for going to college. B states a consequence of this implication and is the correct answer.

A is incorrect. The passage discusses differences in financial reasons for attending college, as expressed by freshmen in the two classes. Nothing is stated about the financial worries of either class as graduates. Neither is it clear from the passage that financial worries are necessarily implied by the desire to make a good income. C is also incorrect. The passage implies that desire for a good income was a more important reason for the members of the class of 1982 to decide to go to college than for the members of the class of 1964. However, the passage does not provide information on whether a college education provides more, less, or the same impact on income for the 1964 graduates as compared to the 1982 graduates. This fourth choice is incorrect. The passage does not describe or imply any difference in the reasons for attending college between freshman year and college graduation for either class. The last answer choice is also incorrect. The passage states that the 1964 and 1982 college graduates were both firmly conservative. Thus, the passage does not support any conclusion that the two classes differed in degree of conservatism.

21. The Supreme Court is no longer able to keep pace with the tremendous number of cases it agrees to decide. The Court schedules and hears 160 hours of oral argument each year, and 108 hours of next year's term will be taken up by cases left over from this year. Certainly the Court cannot be asked to

increase its already burdensome hours. The most reasonable long-range solution to this problem is to allow the Court to decide many cases without hearing oral argument; in this way the Court might eventually increase dramatically the number of cases it decides each year.

Which of the following, if true, could best be used to argue against the feasibility of the solution suggested?

- A. The time the Court spends hearing oral argument is only a small part of the total time it spends deciding a case.
- B. The Court cannot legitimately avoid hearing oral argument in any case left over from last year.
- C. Most authorities agree that 160 hours of oral argument is the maximum number that the Court can handle per year.
- D. Even now the Court decides a small number of cases without hearing oral argument.
- E. In many cases, the delay of a hearing for a full year can be extremely expensive to the parties involved.

Explanation:

The passage suggests that the number of cases heard by the Supreme Court each year might eventually be increased dramatically if the Supreme Court were allowed to decide many cases without the customary oral argument. If A is true, however, then the number of cases decided by the Supreme Court is primarily determined by time other than the time spent hearing oral argument. Thus, the time spent hearing oral argument does not constitute a significant bottleneck. So this choice could be used rather well to argue against the proposal made in the passage.

B is incorrect. This argues not against the feasibility of the proposed solution; it merely warns that the benefits from it would be delayed. The fact that, in view of this answer choice, there would probably not be any significant immediate relief from the burdens of hearing oral argument is irrelevant: the passage expressly concerns itself with finding a long-range solution. C is also incorrect. The thrust of the proposal is to make the 160 hours available for hearing oral argument go farther. The person making the proposal accepts the 160 hours as an upper limit. Thus, this statement supports rather than argues against the proposed solution. The fourth answer choice is incorrect. From a knowledge of the information in this answer choice no further conclusions regarding the proposal follow. This information is simply part of the current state of affairs that the proposal is designed to improve. The last choice is also incorrect. The concern of the choice—the cost to the parties involved—plays no part whatever in the argument developed in the passage; the passage is concerned solely with time-related limitations on the number of cases the Supreme Court is able to decide.

22. Some insects are able to feed on the leaves of milkweed, a toxic plant, by first cutting and draining the vein that secretes the toxin. This method of detoxification guarantees that some insects will always be able to eat milkweed, because the plant could never evolve to produce a toxin that is lethal in the trace amounts left after the vein is cut.

The argument depends on which of the following assumptions?

- A. The insects that successfully detoxify milkweed are not able to undergo the evolutionary changes necessary to allow them to detoxify other plants.
- B. Unlike milkweed, other kinds of toxic plants would be able to overcome their vulnerabilities to

predators through evolutionary changes.

- C. The toxin-carrying veins of the mildewed plant can never evolve in such a way that insects cannot cut through.
- D. The method of detoxification used by insect predators of mildewed would not successfully detoxify other kinds of toxic plants.
- E. There are insects that use means other than draining the toxin in order to feed on toxic plants.

Explanation:

C is the correct answer. It is impossible to argue logically that the insects' method of detoxification by cutting and draining guarantees that some insects will always be able to eat milkweed without assuming that for some reason that toxin-carrying veins of the milkweed can never evolve to become so strong that they would thwart the insects' attempts to cut through them.

A is incorrect. The passage does not make any claims about plants other than mildewed. The insects that detoxify mildewed by cutting veins might evolve an ability to detoxify other plants without this affecting anything relevant to the argument offered about their ability to eat mildewed. The second answer choice is incorrect. The passage is not concerned with other types of toxic plants and makes no assumption about them. The fourth answer choice is also incorrect. The method of detoxification used by the insects on milkweed might also be used to detoxify other plants without this affecting anything relevant to the argument offered about the insects' ability to eat milkweed. The fifth answer choice is incorrect. It may be true that there are insects that use means other than draining toxins in order to feed on toxic plants, but the conclusion drawn in the passage does not depend on there being any such insects.

23. "On the whole," Ms. Dennis remarked, "engineering students are lazier now than they used to be. I know because fewer and fewer of my students regularly do the work they are assigned."

Ms. Dennis' conclusion depends on which of the following assumptions?

- A. Engineering students are working less because, in a booming market, they are spending more and more time investigating different job opportunities.
- B. Whether or not students do the work they are assigned is a good indication of how lazy they are.
- C. Engineering students should work harder than students in less demanding fields.
- D. Ms. Dennis' students are doing less work because Ms. Dennis is not as effective a teacher as she once was.
- E. Laziness is something most people do not outgrow.

Explanation:

The conclusion that engineering students are lazier now than they used to be does not follow from the stated observation that fewer and fewer of Ms. Dennis' students regularly do the work they are assigned. In fact, the conclusion is not in any way supported by the reported observation unless it is also true that failure to do the assigned work indicates laziness. That latter proposition must therefore be one of the tacit assumptions underlying the conclusion. B best expresses this assumption and is thus the correct answer.

A is incorrect. Ms. Dennis concludes that her students are lazy on the basis of what she sees as a consequence of that laziness. This choice suggests a cause of that laziness. But Ms. Dennis does not

have to make any assumptions about the causes of that laziness in order to draw her conclusion. C is also incorrect. This comparison between the work demands on engineering students and those on other students is irrelevant to the question of whether the work habits of engineering students have changed over time. The fourth answer choice is incorrect. If Ms. Dennis believed that the reason for her own students' decreasing performance was her own declining effectiveness, she would not think of her students as exemplifying trends among engineering students in general. The last answer choice is also incorrect. Whether laziness is outgrown is irrelevant to the question of whether work habits of engineering students have changed over time.

24. In recent years shrimp harvests by commercial fishermen in the South Atlantic have declined dramatically in total weight. The decline is due primarily to competition from a growing number of recreational fishermen, how are able to net young shrimp in the estuaries where they mature. Which of the following regulatory actions would most help increase the weight of shrimp harvests by commercial fishermen?

- A. Requiring commercial fishermen to fish in estuaries
- B. Limiting the total number of excursions per season for commercial fishermen
- C. Requiring recreational fishermen to use large-mesh nets in their fishing
- D. Putting an upper limit on the size of the shrimp recreational fishermen are allowed to catch
- E. Allowing recreational fishermen to move out of estuaries into the South Atlantic

Explanation:

If recreational fishermen were required to use large-mesh nets when fishing, fewer young shrimp would be trapped in those nets (making the reasonable assumptions, of course, that young, immature shrimp are smaller than mature shrimp and that by "large-mesh nets" is meant net with spaces big enough for young shrimp to pass through them). Thus, there is a strong likelihood that such a requirement would help increase commercial shrimp harvests. This makes C the best answer, and thus the correct answer.

A is incorrect. This requirement is most unlikely to bring relief; if anything, it will exacerbate the problem if commercial fishermen, too, start netting young shrimp. The second answer choice is also incorrect. This requirement would presumably make sense if the problem were caused by commercial fishermen catching too many mature shrimp. But the passage clearly indicates that the main problem is that too many young shrimp are netted before they reach maturity. D is not the correct answer choice. Since the problem lies mainly in the numbers of immature, and thus presumably small, shrimp that recreational fishermen catch, preventing those fishermen from catching large shrimp above a certain size is unlikely to provide an effective solution. The last answer choice is also incorrect. Nothing in the passage suggests that recreational fishermen are not already free to move into the open ocean if they own ocean-going craft. And if they are not already free to move into the open ocean, there is still nothing to suggest that they are interested in doing so in large enough numbers to relieve the over-fishing of young shrimp in estuaries.

25. Veteran screenwriters, aiming at creating a 120-page screenplay for a film, usually turn in 1 135-page first draft. As one screenwriter put it, "That gives those in charge of the movie a chance to be

creative when they get the script: at the very least, they can cut 15 pages.”

The screenwriter’s statement cited above conveys which of the following propositions?

- A. Screenwriters for a film are generally not involved in any aspects of filmmaking besides providing the script.
- B. Seasoned screenwriters are resigned to, and make allowance for, draft scripts being altered by those evaluating them.
- C. Truly creative screenwriters are too temperamental to adhere to page limits set for their work.
- D. It takes a special kind of creativity to recognize what is best left out of a film script.
- E. Even experienced screenwriters cannot be expected to write scripts of consistently high quality throughout.

Explanation:

The screenwriter’s statement implies an acknowledgement that those evaluating screenplays will want to alter them, and it implies that screenwriters adjust the length of a first draft in order to allow evaluators to make alterations. The second answer choice restates these implications and is the correct answer.

A is incorrect. The statement says nothing about whether screenwriters do more than provide a script. C is not correct. The statement says nothing about the temperament of screenwriters, and it gives a reason other than temperament for the length of first drafts. D is incorrect. The statement does not imply that the cuts made by evaluators are always the best cuts that could have been made. The last answer choice is also incorrect. The statement says nothing about the quality of first draft and so does not imply that they are of uneven quality.

SECTION III: READING

Time ---35 Minutes

27 Questions

- The evolution of intelligence among early large mammals of the grasslands was due in great measure to the interaction between two ecologically
- (5) synchronized groups of these animals, the hunting carnivores and the herbivores that they hunted. The interaction resulting from the differences between predator and prey
- (10) led to a general improvement in brain functions; however, certain components of intelligence were improved far more than others.

- The kind of intelligence favored by
- (15) the interplay of increasingly smarter catchers and increasingly keener escapers is defined by attention-that aspect of mind carrying consciousness forward from one moment to the next. It
- (20) ranges from a passive, free-floating awareness to a highly focused, active fixation. The range through these states is mediated by the arousal system, a network of tracts converging from
- (25) sensory systems to integrating centers in the brain stem. From the more relaxed to the more vigorous levels, sensitivity to novelty is increased. The organism is more awake, more vigilant; this
- (30) increased vigilance results in the apprehension of ever more subtle signals as the organism becomes more sensitive to its surroundings. The processes of arousal and concentration give attention
- (35) its direction. Arousal is at first general, with a flooding of impulses in

the brain stem; then gradually the activation is channeled. Thus begins concentration, the holding of consistent (40) images. One meaning of intelligence is the way in which these images and other alertly searched information are used in the context of previous experience.

Consciousness links past attention to (45) the present and permits the integration of details with perceived ends and purposes.

The elements of intelligence and consciousness come together marvelously (50) to produce different styles in predator and prey. Herbivores and carnivores develop different kinds of attention related to escaping or chasing. Although in both kinds of animal, arousal (55) stimulates the production of adrenaline and norepinephrine by the adrenal glands, the effect in herbivores is primarily fear, whereas in carnivores the effect is primarily aggression. For (60) both, arousal attunes the animal to what is ahead. Perhaps it does not experience forethought as we know it, but the animal does experience something like it.

The predator is searchingly aggressive, (65) innerdirected, tuned by the nervous system and the adrenal hormones, but aware in a sense closer to human consciousness than, say, a hungry lizard's instinctive snap at a passing (70) beetle. Using past events as a framework, the large mammal predator is working out a relationship between movement and food, sensitive to possibilities in cold trails and distant (75) sounds-and yesterday's unforgotten lessons. The herbivore prey is of a different mind. Its mood of wariness

rather than searching and its attitude
of general expectancy instead of
(80) anticipating are silk-thin veils of
tranquility over an explosive endocrine
system.

1. The author is primarily concerned with

- (A) disproving the view that herbivores are less intelligent than carnivores
- (B) describing a relationship between animals' intelligence and their ecological roles
- (C) establishing a direct link between early large mammals and their modern counterparts
- (D) analyzing the ecological basis for the dominance of some carnivores over other carnivores
- (E) demonstrating the importance of hormones in mental activity

Answer: (B)

Explanation:

This question asks you identify the author's primary concern. The author makes a number of different points, but all of them are focused on a single main concern. The primary concern of the passage is introduced in the first paragraph, and the rest of the passage presents additional information about the relationship described in that paragraph.

2. The author refers to a hungry lizard (lines 68-69) primarily in order to

- (A) demonstrate the similarity between the hunting methods of mammals and those of nonmammals
- (B) broaden the application of his argument by including an insectivore as an example
- (C) make a distinction between higher and lower levels of consciousness
- (D) provide an additional illustration of the brutality characteristic of predators
- (E) offer an objection to suggestions that all animals lack consciousness

Answer: (C)

Explanation:

This question refers you to a specific element in the passage. You are to identify the role this element plays in the passage, specifically its role in furthering the author's argument. The "hungry lizard's instinctive snap" is contrasted with the mammal's awareness. The purpose of the contrast is to make a distinction between higher and lower levels of consciousness.

3. It can be inferred from the passage that in animals less intelligent than the mammals discussed in the passage

- (A) past experience is less helpful in ensuring survival
- (B) attention is more highly focused
- (C) muscular coordination is less highly developed
- (D) there is less need for competition among species
- (E) environment is more important in establishing the proper ratio of prey to predator

Answer: (A)

Explanation:

This question asks you to draw a conclusion from the information in the passage about animals, not discussed in the passage, that are less intelligent than the animals that are discussed. In lines 40-44, the author defines intelligence in terms of an animal's use of past experience. In the context of the entire passage, it can be inferred that more intelligent animals, such as the grassland mammals discussed, are better able to use past experience to help them survive than are less intelligent animals.

4. The sensitivity described in lines 70-76 is most clearly an example of

- (A) "free-floating awareness" (lines 20-21)
- (B) "flooding of impulses in the brain stem" (lines 36-37)
- (C) "the holding of consistent images" (lines 39-40)
- (D) "integration of details with perceived ends and purposes" (lines 45-47)
- (E) "silk-thin veils of tranquility" (lines 80-81)

Answer: (D)

Explanation:

To answer this question, you must determine the meaning of the word quoted from the passage in each answer, and then determine which quotation is most clearly illustrated by the words quoted in lines 70-76. In lines 70-76, the animal's sensitivity connects "details" such as cold trails and distant sounds with food, the perceived end.

5. The author's attitude toward the mammals discussed in the passage is best described as

- (A) superior and condescending
- (B) lighthearted and jocular
- (C) apologetic and conciliatory
- (D) wistful and tender
- (E) respectful and admiring

Answer: (E)

Explanation:

This question asks you to use information in the passage to judge the author's attitude toward the main subject, intelligent mammals. The author's description of the animals' intelligence and ability to focus attention, as well as the statement that these elements come together "marvelously" (lines 49-50), suggests that the author respects and admires at least some of their characteristics.

6. The author provides information that would answer which of the following questions?

- I. Why is an aroused herbivore usually fearful?
- II. What are some of the degrees of attention in large mammals?
- III. What occurs when the stimulus that causes arousal of a mammal is removed?

- (A) I only
- (B) III only
- (C) I and II only
- (D) II and III only
- (E) I, II and III

Answer: (C)

Explanation:

To answer this question, you must first determine which of the three questions (I, II, and III) can be answered using the information in the passage. Then you must determine which of the given answer choices includes the Roman numerals of those questions. I can be answered. An aroused herbivore is fearful because it must be ready for what is ahead, including escaping from a predator. II can be answered. Lines 19-21 describe two degrees of attention in large mammals, the highest degree and the lowest. III cannot be answered. The author discusses only animals' reactions to the presence of stimuli, not their reaction to the removal of a stimulus. Both I and II can be answered using information provided in the passage.

7. According to the passage, improvement in brain function among early large mammals resulted primarily from which of the following?

- (A) Interplay of predator and prey
- (B) Persistence of free-floating awareness in animals of the grasslands
- (C) Gradual dominance of warm-blooded mammals over cold-blooded reptiles
- (D) Interaction of early large mammals with less intelligent species
- (E) Improvement of the capacity for memory among herbivores and carnivores

Answer: (A)

Explanation:

This question asks you to identify a reason given in the passage for improved brain function among early large mammals. A directly paraphrases the statement in lines 7-10, which describes the author's view of the development of improved brain function in early mammals.

In his 1976 study of slavery in
the United States, Herbert Gutman,
like Fogel, Engerman, and Genovese,
has rightly stressed the slaves'

- (5) achievements. But unlike these
historians, Gutman gives plantation
owners little credit for these achieve-
ments. Rather, Gutman argues that
one must look to the Black family and

(10) the slaves' extended kinship system to understand how crucial achievements, such as the maintenance of a cultural heritage and the development of a communal consciousness, were possible.

(15) His findings compel attention.

Gutman recreates the family and extended kinship structure mainly through an ingenious use of what any historian should draw upon, quantifiable

(20) data, derived in this case mostly from plantation birth registers. He also uses accounts of ex-slaves to probe the human reality behind his statistics. These sources indicate that the two-parent

(25) household predominated in slave quarters just as it did among freed slaves after emancipation. Although Gutman admits that forced separation by sale was frequent, he shows that the slaves'

(30) preference, revealed most clearly on plantations where sale was infrequent, was very much for stable monogamy. In less conclusive fashion Fogel, Engerman, and Genovese had already indicated the

(35) predominance of two-parent households; however, only Gutman emphasizes the preference for stable monogamy and points out what stable monogamy meant for the slaves' cultural heritage.

(40) Gutman argues convincingly that the stability of the Black family encouraged the transmission of-and so was crucial in sustaining-the Black heritage of folklore, music, and religious

(45) expression from one generation to another, a heritage that slaves were continually fashioning out of their African and American experiences.

Gutman's examination of other facets
(50) of kinship also produces important

findings. Gutman discovers that cousins rarely married, an exogamous tendency that contrasted sharply with the endogamy practiced by the plantation owners. This preference for exogamy, Gutman suggests, may have derived from West African rules governing marriage, which, though they differed from one tribal group to another, all involved some kind of prohibition against unions with close kin. This taboo against cousins' marrying is important, argues Gutman, because it is one of many indications of a strong awareness among slaves of an extended kinship network. The fact that distantly related kin would care for children separated from their families also suggests this awareness. When blood relationships were few, as in newly created plantations in the South-west, "fictive" kinship arrangements took their place until a new pattern of consanguinity developed. Gutman presents convincing evidence that this extended kinship structure-which he believes developed by the mid-to-late eighteenth century-provided the foundations for the strong communal consciousness that existed among slaves.

In sum, Gutman's study is significant because it offers a closely reasoned and original explanation of some of the slaves' achievements, one that correctly emphasizes the resources that slaves themselves possessed.

8. According to the passage, Fogel, Engerman, Genovese, and Gutman have all done which of the following?

- I. Discounted the influence of plantation owners on slaves' achievements.
- II. Emphasized the achievements of slaves.

III. Pointed out the prevalence of the two-parent household among slaves.

IV. Showed the connection between stable monogamy and slaves' cultural heritage.

- (A) I and II only
- (B) I and IV only
- (C) II and III only
- (D) I, III, and IV only
- (E) II, III, and IV only

Answer: (C)

Explanation:

This question asks you to compare Gutman's work with the work of other historians mentioned in the passage. The historians Fogel, Engerman, and Genovese are mentioned in line 3, and again in lines 34-35. I is not an answer. According to lines 6-7, Gutman is unlike the other historians in that he discounts the influence of plantation owners on slaves' achievements. II is an answer. According to lines 2-5, Gutman, like the other historians, stressed slaves' achievements. III is an answer. According to lines 24-27, Fogel, Engerman, and Genovese pointed out the prevalence of two parent households among slaves. Lines 16-23 describe Gutman's citing of sources to document the prevalence of two parent households. IV is not an answer. According to lines 28-33, only Gutman shows the relationship between stable monogamy and the slaves' cultural heritage. C is the correct answer. II and III both describe something that all the historians have done. I and IV do not.

9. With which of the following statements regarding the resources that historians ought to use would the author of the passage be most likely to agree?

- (A) Historians ought to make use of written rather than oral accounts.
- (B) Historians should rely primarily on birth registers.
- (C) Historians should rely exclusively on data that can be quantified.
- (D) Historians ought to make use of data that can be quantified.
- (E) Historians ought to draw on earlier historical research but they should do so in order to refute it.

Answer: (D)

Explanation:

This question asks you to infer something about the author's beliefs concerning historians' resources. In lines 18-19, the author mentions, "what any historian should draw upon," that is, the resources that historians ought to use. D is the correct answer. Lines 18-20 indicate the author's belief that historians should make use of quantifiable data.

10. Which of the following statements about the formation of the Black heritage of folklore, music, and religious expression is best supported by the information presented in the passage?

- (A) The heritage was formed primarily out of the experiences of those slaves who attempted to preserve the stability of their families.
- (B) The heritage was not formed out of the experiences of those slaves who married their cousins.

- (C) The heritage was formed more out of the African than out of the American experiences of slaves.
- (D) The heritage was not formed out of the experiences of only a single generation of slaves.
- (E) The heritage was formed primarily out of slaves' experiences of interdependence on newly created plantations in the Southwest.

Answer: (D)

Explanation:

This question asks you to make an inference about the formation of black cultural heritage. The answer is not necessarily stated in the passage, but information in the passage permits you to make an inference. D is the correct answer. According to the passage, Black culture was passed from one generation to another and was being continually fashioned out of both African and American experiences. These two factors suggest that the heritage grew out of the experience of more than one generation.

11. It can be inferred from the passage that, of the following, the most probable reason why a historian of slavery might be interested in studying the type of plantations mentioned in line 31 is that this type would

- (A) give the historian access to the most complete plantation birth registers
- (B) permit the historian to observe the kinship patterns that had been most popular among West African tribes
- (C) provide the historian with evidence concerning the preference of freed slaves for stable monogamy
- (D) furnish the historian with the opportunity to discover the kind of marital commitment that slaves themselves chose to have
- (E) allow the historian to examine the influence of slaves' preferences on the actions of plantation owners

Answer: (D)

Explanation:

This question asks you to identify the most likely reason for a historian's interest in plantations where the sale of slaves was infrequent. The answer can be inferred from the information found in lines 30-33, where it is mentioned that on these plantations the slaves' preference for stable monogamy was revealed most clearly. D is the best answer. It can be inferred that, because sale was infrequent on the plantations mentioned in lines 31-32, families were not separated against their wishes, and so the marital commitments they themselves chose were more likely to be evident.

12. According to the passage, all of the following are true of the West African rules governing marriage mentioned in lines (57-61) EXCEPT:

- (A) The rules were derived from rules governing fictive kinship arrangements.
- (B) The rules forbade marriages between close kin.
- (C) The rules are mentioned in Herbert Gutman's study.

- (D) The rules were not uniform in all respects from one West African tribe to another.
- (E) The rules have been considered to be a possible source of slaves' marriage preferences.

Answer: (A)

Explanation:

This question refers you to a specific portion of the passage. Lines 59-63 describe West African rules governing marriage. You are to determine, from the information in these lines or in other parts of the passage, which statement is NOT true of these rules. A is the correct answer. Fictive kinship arrangements are mentioned later in the passage. These arrangements resulted from a set of circumstances peculiar to the settlement of new plantations and did not give rise to the marriage rules of West Africa.

13. Which of the following statements concerning the marriage practices of plantation owners during the period of Black slavery in the United States can most logically be inferred from the information in the passage.

- (A) These practices began to alter sometime around the mid-eighteenth century.
- (B) These practices varied markedly from one region of the country to another.
- (C) Plantation owners usually based their choice of marriage partners on economic considerations.
- (D) Plantation owners often married earlier than slaves.
- (E) Plantation owners often married their cousins.

Answer: (E)

Explanation:

This question asks you to draw a logical conclusion from the information in the passage about the marriage practices of plantation owners. (Marriage practices of plantation owners are mentioned only in lines 56-57.) E is the correct answer. According to lines 54-57, slaves rarely married their own cousins. This contrasted sharply with the endogamy (marriage within the same family) practiced by the plantation owners. It can be inferred, therefore, that plantation owners did marry their own cousins.

14. Which of the following best describes the organization of the passage?

- (A) The author compares and contrasts the work of several historians and then discusses areas for possible new research.
- (B) The author presents his thesis, draws on the work of several historians for evidence to support his thesis, and concludes by reiterating his thesis.
- (C) The author describes some features of a historical study and then uses those features to put forth his own argument.
- (D) The author summarizes a historical study, examines two main arguments from the study, and then shows how the arguments are potentially in conflict with one another.
- (E) The author presents the general argument of a historical study, describes the study in more detail, and concludes with a brief judgments of the study's value.

Answer: (E)

Explanation:

This question asks you to identify the best description of the organization of the passage, that is, the relationship of the parts of the passage to one another. E is the correct answer choice. The author describes the general argument of Gutman's study in lines 8-14. He then describes the details of Gutman's study and, in lines 84-87, states the significance of the study.

- "I want to criticize the social system,
and to show it at work, at its most
intense." Virginia Woolf's provocative
statement about her intentions in
(5) writing *Mrs. Dalloway* has regularly been
ignored by the critics, since it
highlights an aspect of her literary
interests very different from the
traditional picture of the "poetic"
(10) novelist concerned with examining states
of reverie and vision and with following
the intricate pathways of individual
consciousness. But Virginia Woolf was a
realistic as well as a poetic novelist,
(15) a satirist and social critic as well as
a visionary: literary critics' cavalier
dismissal of Woolf's social vision will
not withstand scrutiny.

- In her novels, Woolf is deeply engaged
(20) by the questions of how individuals are
shaped (or deformed) by their social
environments, how historical forces
impinge on people's lives, how class,
wealth, and gender help to determine
(25) people's fates. Most of her novels are
rooted in a realistically rendered social
setting and in a precise historical time.

- Woolf's focus on society has not been
generally recognized because of her
(30) intense antipathy to propaganda in art.
The pictures of reformers in her novels
are usually satiric or sharply critical.

- Even when Woolf is fundamentally sympathetic to their causes, she portrays
- (35) people anxious to reform their society and possessed of a message or program as arrogant or dishonest, unaware of how their political ideas serve their own psychological needs. (Her Writer's
- (40) Diary notes: "the only honest people are the artists," whereas "these social reformers and philanthropists...harbor...discreditable desires under the disguise of loving their kind....") Woolf detested
- (45) what she called "preaching" in fiction, too, and criticized novelist D.H.Lawrence (among others) for working by this method.

- Woolf's own social criticism is expressed in the language of observation
- (50) rather than in direct commentary, since for her, fiction is a contemplative, not an active art. She describes phenomena and provides materials for a judgment about society and social issues; it is
- (55) the reader's work to put the observations together and understand the coherent point of view behind them. As a moralist, Woolf works by indirection, subtly undermining officially accepted mores, mocking,
- (60) suggesting, calling into question, rather than asserting, advocating, bearing witness: hers is the satirist's art.

- Woolf's literary models were acute social observers like Chekhov and
- (65) Chaucer. As she put it in *The Common Reader*. "It is safe to say that not a single law has been framed or one stone set upon another because of anything Chaucer said or wrote; and yet, as we
- (70) read him, we are absorbing morality at every pore." Like Chaucer, Woolf chose to understand as well as to judge, to know her society root and branch-a

decision curcial in order to produce art
(75) rather than polemic.

15. Which of the following would be the most appropriate title for the passage?
- (A) Poetry and Satire as Influences on the Novels of Virginia Woolf
 - (B) Virginia Woolf: Critic and Commentator on the Twentieth-Century Novel
 - (C) Trends in Contemporary Reform Movements as a Key to Understanding Virginia Woolf's Novels
 - (D) Society as Allegory for the Individual in the Novels of Virginia Woolf
 - (E) Virginia Woolf's Novels: Critical Reflections on the Individual and on Society

Answer: (E)

Explanation:

This question asks you to identify the most appropriate title for the passage. You should consider the passage as a self-contained unit, not as part of a larger work. E is the correct answer. The topics of the passage is Woolf's novels, and the author emphasizes that the novels contain observations concerning "how individuals are shaped (or deformed) by their social environments" (lines 20-22).

16. In the first paragraph of the passage, the author's attitude toward the literary critics mentioned can best be described as
- (A) disparaging
 - (B) ironic
 - (C) factious
 - (D) skeptical but resigned
 - (E) disappointed but hopeful

Answer: (A)

Explanation:

The literary critics discussed in the first paragraph ignored Woolf's intention to criticize society and saw her as a "poetic" novelist unconcerned with the real world. This question asks you to identify the tone of the remarks made by the author of the passage concerning this assessment of Woolf's work. A is the correct choice. The author's characterization of the critics' assessment as "cavalier"(line 16) can be described as "disparaging"

17. It can be inferred from the passage that Woolf chose Chaucer as a literary model because she believed that
- (A) Chaucer was the first English author to focus on society as a whole as well as on individual characters
 - (B) Chaucer was an honest and forthright author, whereas novelists like D, H, Lawrence did not sincerely wish to change society
 - (C) Chaucer was more concerned with understanding his society than with calling its accepted mores into question

- (D) Chaucer's writing was greatly, if subtly, effective in influencing the moral attitudes of his readers
- (E) her own novels would be more widely read if, like Chaucer, she did not overtly and vehemently criticize contemporary society

Answer: (D)

Explanation:

The author discusses Woolf's literary models, emphasizing Chaucer, in the last paragraph. The reason why Woolf chose Chaucer as her model is not directly stated in the passage but must be inferred from the information there. D is the correct answer. Line 61 indicates that Woolf's work as a moralist is subtle and done 'by indirection.' Woolf's statement that readers absorb morality at every pore despite the fact that no laws were changed because of Chaucer indicates that she believed Chaucer's influence to be subtle. Therefore, it is likely that it was Chaucer's subtle effectiveness that led Woolf to choose him as a model.

18. It can be inferred from the passage that the most probable reason Woolf realistically described the social setting in the majority of her novels was that she

- (A) was aware that contemporary literary critics considered the novel to be the most realistic of literary genres
- (B) was interested in the effect of a person's social milieu on his or her character and actions
- (C) needed to be as attentive to detail as possible in her novels in order to support the arguments she advanced in them
- (D) wanted to show that a painstaking fidelity in the representation of reality did not in any way hamper the artist
- (E) wished to prevent critics from charging that her novels were written in an ambiguous and inexact style

Answer: (B)

Explanation:

In lines 25-28, the author states that Woolf's novels presented social settings realistically. The question asks why Woolf did so. B is the best answer. In lines 19-22, Woolf's interest in the effect of social environment on the individual is described. The juxtaposition of these lines with the statement in lines 25-28 strongly suggests that Woolf realistically described social settings because she was interested in their effect on character.

19. Which of the following phrases best expresses the sense of the word "contemplative" as it is used in line 51 of the passage?

- (A) Gradually elucidating the rational structures underlying accepted mores
- (B) Reflecting on issues in society without prejudice or emotional commitment
- (C) Avoiding the aggressive assertion of the author's perspective to the exclusion of the reader's judgment
- (D) Conveying a broad view of society as a whole rather than focusing on an isolated individual

consciousness

- (E) Appreciating the world as the artist sees it rather than judging it in moral terms

Answer: (C)

Explanation:

This question refers you to line 54 of the passage so that you can evaluate the context in which the author uses the word “contemplative.” You are to choose the definition of “contemplative” that is closest in meaning to the use of the word in that context. C is the best answer. Lines 51-55 suggest that a contemplative art is expressed indirectly, rather than by “aggressive assertion.” Lines 57-60 point out that Woolf, as a contemplative novelist, encourages readers to make their own judgements.

20. The author implies that a major element of the satirist's art is the satirist's

- (A) consistent adherence to a position of lofty disdain when viewing the foibles of humanity
- (B) insistence on the helplessness of individuals against the social forces that seek to determine an individual's fate
- (C) cynical disbelief that visionaries can either enlighten or improve their societies
- (D) fundamental assumption that some ambiguity must remain in a work of art in order for it to reflect society and social mores accurately
- (E) refusal to indulge in polemic when presenting social mores to readers for their scrutiny

Answer: (E)

Explanation:

This question asks you to identify an element that the author thinks is important in the satirist's art. The colon in line 65 indicates that the information in lines 61-65 describing Woolf's work leads to the statement, “hers is the satirist's art.” This statement indicates that conclusions about Woolf's work as a satirist can lead you to conclusions about the art of satirists in general. E is the correct answer. Lines 61-65 describe Woolf's satirical art as providing the materials for judgments about mores in an indirect, subtle, and nonassertive way, that is, in a nonpolemical way.

21. The passage supplies information for answering which of the following questions?

- (A) Have literary critics ignored the social criticism inherent in the work of Chekhov and Chaucer?
- (B) Does the author believe that Woolf is solely an introspective and visionary novelist?
- (C) What are the social causes with which Woolf shows herself to be sympathetic in her writings?
- (D) Was D. H. Lawrence as concerned as Woolf was with creating realistic settings for his novels?
- (E) Does Woolf attribute more power to social environment or to historical forces as shapers of a person's life?

Answer: (B)

Explanation:

This question asks you to determine which of the questions given can be answered using the information in the passage. To make this determination, you must first attempt to answer each question

using only the information presented by the author. B is the correct answer. The answer to the question is “No”. In lines 13-15, the author characterizes Woolf as realistic and satirical as well as introspective and visionary.

It has long been known that the rate of oxidative metabolism (the process that uses oxygen to convert food into energy) in any animal has a
(5) profound effect on its living patterns.

The high metabolic rate of small animals, for example, gives them sustained power and activity per unit of weight, but at the cost of requiring
(10) constant consumption of food and water.

Very large animals, with their relatively low metabolic rates, can survive well on a sporadic food supply, but can generate little metabolic energy
(15) per gram of body weight. If only oxidative metabolic rate is considered, therefore, one might assume that smaller, more active, animals could prey on larger ones, at least if they
(20) attacked in groups. Perhaps they could if it were not for anaerobic glycolysis, the great equalizer.

Anaerobic glycolysis is a process in which energy is produced, without
(25) oxygen, through the breakdown of muscle glycogen into lactic acid and adenosine tri-phosphate (ATP), the energy provider. The amount of energy that can be produced anaerobically is a function
(30) of the amount of glycogen present-in all vertebrates about 0.5 percent of their muscles' wet weight. Thus the anaerobic energy reserves of a vertebrate are proportional to the size of the animal.
(35) If, for example, some predators had attacked a 100-ton dinosaur, normally torpid, the dinosaur would have been

able to generate almost instantaneously,
via anaerobic glycolysis, the energy of
(40) 3,000 humans at maximum oxidative
metabolic energy production. This
explains how many large species have
managed to compete with their more
active neighbor: the compensation for
(45) a low oxidative metabolic rate is
glycolysis.

There are limitations, however, to this
compensation. The glycogen reserves
of any animal are good, at most, for
(50) only about two minutes at maximum
effort, after which only the normal
oxidative metabolic source of energy
remains. With the conclusion of a burst
of activity, the lactic acid level is
(55) high in the body fluids, leaving the
large animal vulnerable to attack until
the acid is reconverted, via oxidative
metabolism, by the liver into glucose,
which is then sent (in part) back to the
(60) muscles for glycogen resynthesis. During
this process the enormous energy debt
that the animal has run up through
anaerobic glycolysis must be repaid, a
debt that is proportionally much greater
(65) for the larger vertebrates than for the
smaller ones. Whereas the tiny shrew can
replace in minutes the glycogen used
for maximum effort, for example, the
gigantic dinosaur would have required
(70) more than three weeks. It might seem
that this interminably long recovery
time in a large vertebrate would prove
a grave disadvantage for survival.

Fortunately, muscle glycogen is used
(75) only when needed and even then only in
whatever quantity is necessary. Only in
times of panic or during mortal combat
would the entire reserves be consumed.

22. The primary purpose of the passage is to
- (A) refute a misconception about anaerobic glycolysis
 - (B) introduce a new hypothesis about anaerobic glycolysis
 - (C) describe the limitations of anaerobic glycolysis
 - (D) analyze the chemistry of anaerobic glycolysis and its similarity to oxidative metabolism
 - (E) explain anaerobic glycolysis and its effects on animal survival

Answer: (E)

Explanation:

This question asks you to identify the primary purpose of the passage. In order to do this, you must consider all the parts of the passage. E is the correct answer. The passage provides information about the nature, chemistry, and limitations of anaerobic glycolysis in order to describe how the process affects animal survival.

23. According to the author, glycogen is crucial to the process of anaerobic glycolysis because glycogen
- (A) increases the organism's need for ATP
 - (B) reduces the amount of ATP in the tissues
 - (C) is an inhibitor of the oxidative metabolic production of ATP
 - (D) ensures that the synthesis of ATP will occur speedily
 - (E) is the material from which ATP is derived

Answer: (E)

Explanation:

The process of anaerobic glycolysis is described in the second paragraph. You are to determine the role of glycogen in the process. E is the correct answer. According to the first sentence in the second paragraph, glycogen is broken down into APT and lactic acid. It is the material from which ATP is derived, and therefore is crucial to anaerobic glycolysis.

24. According to the author, a major limitation of anaerobic glycolysis is that it can
- (A) produce in large animals more lactic acid than the liver can safely reconvert
 - (B) necessitate a dangerously long recovery period in large animals
 - (C) produce energy more slowly than it can be used by large animals
 - (D) consume all of the available glycogen regardless of need
 - (E) reduce significantly the rate at which energy is produced by oxidative metabolism

Answer: (B)

Explanation:

The limitations of anaerobic glycolysis as a compensation for slow oxidative metabolism are discussed in the third paragraph. To answer this question, you must identify a limitation that the author

mentions. B is the best answer. The author describes the recovery period in large animals as “interminably long.” Though he denies that it is a “grave disadvantage,” he does state that the recovery period leaves the animal vulnerable to attack.

25. The passage suggests that the total anaerobic energy reserves of a vertebrate are proportional to the vertebrate's size because

- (A) larger vertebrates conserve more energy than smaller vertebrates
- (B) larger vertebrates use less oxygen per unit weight than smaller vertebrates
- (C) the ability of a vertebrate to consume food is a function of its size
- (D) the amount of muscle tissue in a vertebrate is directly related to its size
- (E) the size of a vertebrate is proportional to the quantity of energy it can utilize

Answer: (D)

Explanation:

This question asks you why anaerobic energy reserves are proportional to a vertebrate's size. The author discusses the relationship of size to anaerobic energy reserves in the second paragraph. The second paragraph states that “The amount of energy that can be produced anaerobically is a function of the amount of glycogen present—in all vertebrates about 0.5 percent of their muscles' wet weight.” D is the correct answer. The passage states that the amount of glycogen is a fixed proportion of the vertebrate's muscle weight. If the amount of muscle tissue in a vertebrate is related to its size, then the amount of glycogen must increase with size. Therefore, since the amount of energy that can be produced is a function of the amount of glycogen present, the animal's energy reserves are proportional to its size.

26. The author suggests that, on the basis of energy production, a 100-ton dinosaur would have been markedly vulnerable to which of the following?

- I. Repeated attacks by a single smaller, more active adversary
 - II. Sustained attack by numerous smaller, more active adversaries
 - III. An attack by an individual adversary of similar size
- (A) II only
 - (B) I and II only
 - (C) I and III only
 - (D) II and III only
 - (E) I, II, and III

Answer: (A)

Explanation:

This question is concerned with the vulnerability of a 100-ton dinosaur to different kinds of attacks. You are to recognize the situation or situations in which the dinosaur's method of energy production would have made it particularly vulnerable to attack. The author discusses a 100-ton dinosaur in the second paragraph. In the third paragraph the author continues the discussion of how energy production

helps the dinosaur and what price the animal's body must pay for this help. I is not an answer. The author's statement in the first paragraph that smaller, more active animals might be able to prey on larger ones "at least if they attacked in groups" suggests that a single smaller, more active adversary would not be a marked threat to a large animal. II is an answer. In the first paragraph, the author states that it is possible that smaller, more active animals could prey on a larger one if they attacked as a group. In the third paragraph, the author states that the energy generated by anaerobic glycolysis lasts only about two minutes when the animal puts forth maximum effort. After that, the animal is vulnerable to attack until the lactic acid in its body fluids is converted back to glycogen. For the dinosaur, this process takes about three weeks. III is not an answer. The information in the passage suggests that a 100-ton dinosaur and an adversary of similar size would have available similar amounts of energy. Thus, the dinosaur's method of energy production would not have disadvantaged it in this situation by making it particularly vulnerable to attack. A is the correct answer. II is an answer to the question posed; I and III are not answers.

27. It can be inferred from the passage that the time required to replenish muscle glycogen following anaerobic glycolysis is determined by which of the following factors?

- I. Rate of oxidative metabolism
 - II. Quantity of lactic acid in the body fluids
 - III. Percentage of glucose that is returned to the muscles
- (A) I only
(B) III only
(C) I and II only
(D) I and III only
(E) I, II, and III

Answer: (E)

Explanation:

To answer this question, you must infer from the information given in the third paragraph what factors influence the amount of time it will take an animal to replace the muscle glycogen it used during the production of energy by means of anaerobic glycolysis. I is an answer. The lactic acid left in the muscles following anaerobic glycolysis is reconverted, by means of oxidative metabolism, into glucose for use in muscle glycogen resynthesis. Therefore, the rate at which oxidative metabolism takes place is a factor in determining how quickly the reversion takes place. II is an answer. Muscle glycogen is replenished by the reversion of lactic acid into glucose. If the rate of reversion is held constant, a larger quantity of lactic acid will take more time to reconvert than will a smaller amount. III is an answer. After lactic acid is reconverted to glucose, part of it is sent to the muscles for glycogen resynthesis. Sending a greater proportion to the muscles will decrease the time required to repay the animal's energy debt. E is the correct answer. I, II and III are all factors.

SECTION IV: ARGUMENT

Time ---35 Minutes

25 Questions

1. The attitude that it is all right to do what harms no one but oneself is usually accompanied by a disregard for the actual interdependence of people. Destroying one's own life or health means not being available to help family members or the community; it means, instead, absorbing the limited resources of the community for food, health services, and education without contributing fully to the community.

Which of the following, if true, most strongly supports the view expressed?

- A. The cost of avoidable accidents and illnesses raises health insurance rates for everyone.
- B. Harm to one person can result in an indirect benefit, such as the availability of work in health-related fields, to others.
- C. Life would be dull if it were necessary to abstain from all of the minor pleasures that entail some risk of harm to a person who indulges in them.
- D. The contribution a person makes to the community cannot be measured by that person's degree of health.
- E. The primary damage caused by the consumption of alcohol, tobacco, and unauthorized drugs is done to the person who uses those substances.

Explanation:

The passage presents a view that harming oneself can harm other people as well. This answer presents a situation that illustrates how harming oneself through an avoidable accident or illness can create a cost for everyone else. Thus, the answer choice of A supports the passage.

B is incorrect. Support for the view expressed consists in showing that harm to oneself also harms others. This answer choice gives an example of a way that harm to one person can benefit others, and thus the choice weakens the passage.

The third answer choice is incorrect. This statement does not support the view that harming oneself can harm others. Rather, this choice addresses another issue that might be involved in deciding whether persons should risk harm—namely, how pleasurable the activities involved in taking such risks might be. Thus, the answer choice is neutral with respect to the implicit argument in the passage. D is also an incorrect answer choice. Support for the view expressed consists in showing that harm to oneself also harms others. The fourth choice implies that two persons might be the same in degree of health and yet differ in their contribution to the community. This claim is neutral with respect to the issue of whether a decline in a person's health would leave that person's contribution to the community unaffected. The last answer choice is incorrect. This statement does not support or argue against the passage's view that harming oneself can harm others. Rather, this statement only describes different ways of harming oneself.

2. A person who agrees to serve as mediator between two factions at the request of both abandons, by so agreeing, the right later to take sides. To take sides at a later point would be to suggest that the

earlier presumptive impartiality was a sham.

The passage emphasizes which of the following points about mediators?

- A. They should try to form no opinions of their own about any issue that is related to the dispute.
- B. They should not agree to serve unless they are committed to maintaining a stance of impartiality.
- C. They should not agree to serve unless they are equally acceptable to all parties to a dispute.
- D. They should feel free to take sides in the dispute right from the start, provided that they make their biases publicly known.
- E. They should reserve the right to abandon their impartiality so as not to be open to the charge of having been deceitful.

Explanation:

B is the correct answer because the passage asserts that a later absence of impartiality calls into question an earlier seemingly impartial attitude. Thus, the passage stresses the importance of impartiality of mediators at all times, a point also emphasized in the second answer choice. A is incorrect. The first choice goes further than anything asserted in the passage. The passage does not rule out the possibility that one can have an opinion about issues related to a disputed without taking sides in the actual dispute. C is not correct since it is a presupposition on which the passage is based rather than the point of the passage; that is, the fact that the mediator is acceptable to both parties is a given, since they both ask the mediator to serve. The fourth answer choice is incorrect. This choice contradicts the assumption behind the second sentence of the passage, that mediators start out impartial. The last answer choice is also incorrect. This choice contradicts the main point of the passage, the importance of impartiality at all times.

3. A small dose of a widely used tranquilizer allows people to lie during lie detector tests without being discovered. The stress responses that lie detector tests measure can be inhibited by the drug without noticeable side effects. One of the implications of this fact is that the drug can also be effective in reducing stress in everyday situations.

An assumption of the passage is that

- A. Tranquilizers are always an effective treatment for stress
- B. The inhibition of stress responses increases subjective stress
- C. Stress as measured by a lie detector is similar to everyday stress
- D. Persons who lie during a lie detector test always display signs of stress
- E. It is not desirable to reduce stress in everyday situations

Explanation:

To show the implication from the facts presented, that the tranquilizer can be effective in reducing stress in everyday situations one must assume that the stress in the everyday situation is treatable in the same way as the stress responses measured by the lie detector. The third response most closely describes this assumption and is the correct answer.

A is incorrect. The passage discusses one situation where a specific tranquilizer is effective in inhibiting stress responses. However, there is no implication or assumption that tranquilizers in general are always an effective treatment for all kinds of stress. The second answer choice is incorrect. The passage presupposes that the inhibition of stress responses indicates a reduction in stress. Thus,

there is no assumption in the passage that an inhibition of the response increases subjective stress. D is also incorrect. The passage leaves open the possibility that there are people who display no signs of stress when lying. In addition, the passage states that tranquilizers will allow a person to lie without displaying signs of stress. The last answer choice is incorrect. The passage deals with the effects of a mild tranquilizer on stress. For the statements in the passage to be true, it is not necessary to make assumptions about whether or not it is desirable to reduce stress in everyday situations.

4. Experienced pilots often have more trouble than novice pilots in learning to fly the newly developed ultra-light airplanes. Being accustomed to heavier aircraft, experienced pilots, when flying ultra-light craft, seem not to respect the wind as much they should.

The passage implies that the heavier aircraft mentioned above are

- A. harder to land than ultra-light aircraft
- B. not as popular with pilots as ultra-light aircraft
- C. not as safe as ultra-light aircraft
- D. more fuel-efficient than ultra-light aircraft
- E. easier to handle in wind than ultra-light aircraft

Explanation:

The second sentence of the passage suggests that the wind is more of a factor in flying ultra-light aircraft than in flying heavier. This implies that heavier aircraft would be easier to fly in wind than ultra-light aircraft, so the fifth choice is the correct answer.

The passage does not discuss landing, popularity, or fuel efficiency, so choices one, two, and four are incorrect. The passage does not discuss safety directly; however, if it implies anything about safety, it is that heavier planes are safer, not less safe, than ultra-light aircraft. Choice three, therefore, is incorrect.

5. Many researchers believe that the presence of RNA in brain cells is the biochemical basis of memory; that is, the presence of RNA enables us to remember. Because certain chemicals are known to inhibit the synthesis of RNA in the body, we can test this hypothesis. Animals that have learned particular responses can be injected with an RNA inhibitor and then tested for memory of the learned responses. Which of the following test results would most seriously weaken the case for the presence of RNA as the basis of memory?

- A. After an injection of RNA inhibitor, a wide range of behaviors in addition to the learned responses were affected.
- B. After an injection of RNA inhibitor, animals that had not consistently been giving the learned responses were able to give them consistently.
- C. After injections of RNA inhibitor, some animals lost memory of the learned responses totally but others lost it only partially.
- D. After a small injection of RNA inhibitor, animals responded well, but as the size of the injection increased, they gave fewer of the learned responses.
- E. After an injection of RNA inhibitor, animals could not learn a new response.

Explanation:

The researchers believe that the presence of RNA enables us to remember. However, if, after an injection of RNA inhibitor, animals gave learned responses more consistently than before, it would appear that the absence of RNA facilitates memory. Therefore, the correct answer is B.

A is incorrect. These results would suggest that RNA is the basis of other abilities in addition to that of memory, but there is nothing in them that would weaken the case for RNA as the basis of memory. C is not correct. These results support the case that RNA is the basis of memory, although they suggest that the degree of effectiveness of either RNA or RNA inhibitor may vary. D is incorrect. These results would suggest that RNA must be strongly inhibited in order to impair memory, but still support the case for RNA as the basis of memory. The last answer choice is also incorrect. These results would suggest that RNA is necessary for new learning, and as the learning would require memory, the results would support the case for RNA as the basis of memory.

6. The once widely held perception of intellectuals as the clarifiers of fundamental moral issues is no longer valid today. Intellectuals no longer act as advocates for oppressed groups. Instead of applying their insights and analyses to the problems of these groups, they leave the debate to the politicians.

The logical structure of the passage depends upon closely linking the clarification of fundamental moral issues with

- A. intellectualism
- B. advocacy on behalf of oppressed groups
- C. insight and analysis
- D. debate on contemporary practical issues
- E. the role of politicians

Explanation:

The passage suggests that in the past intellectuals clarified fundamental moral issues by acting as advocates for oppressed groups. The logical structure of the passage links clarification of fundamental moral issues with advocacy on behalf of oppressed groups, making the second choice the correct answer.

The first choice is incorrect. The passage discusses not intellectualisms, but the active role of intellectuals in society. The logical structure of the passage depends on linking two different functions of intellectuals—clarification and advocacy. The third answer choice is incorrect. Intellectuals may apply insight and analysis to clarification of moral issues. However, the logical structure of the passage depends on a specific link between clarification of fundamental moral issues and advocacy on behalf of oppressed groups. D is also incorrect. Although the passage mentions that politicians debate issues related to the problems of oppressed groups, the politicians' debating of these issues is not directly linked to clarification of fundamental moral issues. The logical structure of the passage links the role intellectuals play as clarifiers of fundamental moral issues to their role as advocates of oppressed groups. The last answer choice is incorrect. The passage does state that intellectuals no longer serve as advocates of oppressed groups and leave the debate to the politicians. However, the logical structure does not directly link the role of politicians and the clarification of fundamental moral issues.

7. Nineteenth-century art critics judged art by the realism of its method of representation. It was assumed that the realistic method developed from primitive beginnings to the perfection of formal realism. It is one of the permanent gains of the artistic revolution of the twentieth century that we are rid of this type of aesthetics.

It can be inferred from the information given that the artistic revolution of the twentieth century had which of the following effects?

- A. It de-emphasized realistic representation as an evaluative consideration for judging works of art.
- B. It permitted modern critics to appreciate the simplicity of primitive art.
- C. It repudiated the realistic representation found in art before the nineteenth century.
- D. It reinforced traditional ways of looking at and judging great art.
- E. It allowed art critics to understand the evolution and nature of art.

Explanation:

The first two sentences of the passage focus on realism as the standard used in past art criticism. The final sentence says that the twentieth century artistic revolution got rid of aesthetics of the kind that was defined by this standard. Thus, the first choice is the correct answer because it states this inference.

B is incorrect. The passage does not imply that primitive art was simple and hence could not imply anything about critics' attitudes toward such simplicity. C is incorrect. The passage says that realism was rejected as the standard by which all art should be judged, not as a form of artistic representation. D is also incorrect. If it could be assumed that the nineteenth century standards include the traditional standards in their entirety, the passage would imply that the tradition is challenged rather than, as this choice states, reinforced. The last answer choice is incorrect. The passage does not imply that twentieth century critics understand the evolution or nature of art, only that they are free of a previous misconception.

8. Private ownership of services traditionally considered to be the responsibility of the government will typically improve those services. The turnpike system in the United States of the nineteenth century demonstrates the truth of this principle; the system, which had previously been controlled by the government, became a more reliable system when taken over by private organizations.

Which of the following describes a significant flaw in the argument?

- A. The author defends the conclusion by appealing to a person of authority.
- B. The author distorts an opposing view in trying to show its weaknesses.
- C. The author attacks what the author perceives as a wrong action by pointing out another perceived wrong action.
- D. The author generalizes from a sample not representative enough to establish the conclusion.
- E. The author attributes two very different meanings to the same word.

Explanation:

D is the correct answer. One instance where private ownership of services traditionally controlled by the government leads to a more reliable system constitutes insufficient evidence to demonstrate the truth of the general principle that private ownership of such services typically improves those services. No reason is given to believe that what was true of the turnpike system must also be true of such

governmental services in general.

A is not the correct answer. The author makes no reference to a person of authority in the argument. B is incorrect. The author mentions no other opposing point of view in the argument. A generalization is expressed in the first sentence, and an attempt is made to support that generalization in second sentence. The third choice is incorrect. The author makes no judgment of right or wrong actions in the argument. The author only attempts to support a point of view concerning the improvement of services usually thought to be the responsibility of the government. E is also incorrect. There is no evidence within the argument that the author is attributing two different meanings to the same word.

9. Athletic director: "Members of our sports team included, for the fall season, 80 football player and 40 cross-country runners; for the winter season, 20 wrestlers and 40 swimmers; for the spring season, 50 track-team members and 20 lacrosse players. Each tea athlete participates in his or her sports five days a week for the whole three-month season, and no athlete is on two teams during any one season. Therefore, adding these figures, we find our team sports program serves 250 different individual athletes."

In drawing the conclusion, the athletic director fails to consider the relevant possibility that

- A. athletes can be on more than one team in a single season
- B. athletes can be on teams in more than on season
- C. some of the team sports require a larger number of athletes on the team than do others
- D. more athletes participate in team sports during one season than during another
- E. an athlete might not participate in every one of the practice sessions and athletic contests in his or her sport

Explanation:

The athletic director has clearly added up the 120 athletes active in the fall, the 60 athletes active in the winter, and the 70 athletes active in the spring. But while we know that the total of athletes for each season is composed of different individuals, there is nothing in the rules cited that would prevent athletes from being active in two or in all three seasons. So, the sum of 250 may include athletes that have been counted twice or three times. This is the possibility that has not been considered. Thus, B is the correct answer.

A is incorrect. The athletic director has specifically ruled this out as a possibility. C is not the correct answer choice. This possibility is reflected adequately in the different numbers of athletes active in each sport. No oversight seems likely here. D is incorrect. Not only does the athletic director not overlook this, he or she has the figures to prove it. The last answer choice is also incorrect. The athletic director could say that the program has served an athlete even if that athlete has not participated to the fullest extent possible.

10. Popular culture in the United States has become Europeanized to an extent unimaginable twenty-five years ago. Not many people then drank wine with meals, and no one drank imported mineral water. No idea would have been more astonishing that that Americans would pay to watch soccer games. Such thoughts arise because of a report that the American Association of State Highway and Transportation Officials has just adopted a proposal to develop the country's first comprehensive

interstate system of routes for bicycles.

The information given, if true, best supports which of the following?

- A. Long-distance bicycle routes are used in Europe.
- B. Drinking imported mineral water is a greater luxury than drinking imported wine.
- C. United States culture has benefited from exposure to foreign ideas.
- D. Most Europeans make regular use of bicycles.
- E. The influence of the United States on European culture has assumed unprecedented proportions in the last twenty-five years.

Explanation:

When the author learns that an interstate system of bicycle routes is being planned, case after case of European customs becoming accepted in the United States comes to his or her mind. This mental association would be a natural one if the system of bicycle routes were itself yet another case of a European phenomenon being brought to the United States. This in turn presupposes that long-distance bicycle routes are indeed a European phenomenon, an idea expressed by A, which is thus the correct answer.

B is incorrect. The passage does not support any inference that the European practices in question are luxuries, let alone which of them are more or less of a luxury than the others. C is not the correct answer. The passage is completely neutral on whether “Europeanization” has been beneficial, detrimental, or neither. Although many people might regard activities such as the drinking of wine and mineral water as beneficial, the passage itself does not support the statement of benefit. D is also incorrect. The passage can be taken to suggest that bicycles are indeed used fairly widely in Europe, but nothing the passage supports the inference that the majority of Europeans are regular users of bicycles. The last answer choice is incorrect. The passage is concerned solely with the influence of Europe on popular culture in the United States and not at all with any influence going the other way, however strong that influence might in fact be.

11. The sense of delayed gratification, of working now for later pleasure, has helped shape the economic behavior of our society. However, that sense is no longer nurtured as consistently in our children as it once was. For example, it used to take a bit of patience to put together the toys that children got the cereal boxes; now the toys come from the boxes whole.

Which of the following is an assumption made by the argument?

- A. The toys in cereal boxes have changed partly because the economic conditions of our society have improved.
- B. The influence of promotion gimmicks on the economic behavior of our society has increased over the years.
- C. The toys that used to come in cereal boxes were put together by the same children who played with them.
- D. Part of the pleasure of any toy lies in putting the toy together before playing with it.
- E. Today’s children do not expect a single toy to provide pleasure for a long period of time.

Explanation:

The phrases “delayed gratification” and “working now for later pleasure” clearly refer to somebody’s

effort or sacrifice at an earlier time which is designed to yield, for that same person, pleasure at a later time. If toy components packed in cereal boxes are to provide this experience for children, then C has to be true. Therefore, C is the correct answer.

A is not the correct answer. The argument indicates nothing about the reasons for the change from packing components to packing complete toys. B is incorrect. This choice may or may not be true as far as the argument goes. The argument suggests only that the influence of promotional gimmicks has changed in character, not necessarily that it has increased. The fourth answer choice is also incorrect. The argument strongly suggests that the pleasure comes after the effort or the work involved in assembling it, not that it accompanies the effort or work. So while this choice may be true, there is no indication that it is an assumption made by the argument. The last choice is incorrect. The references to the passage of time found in the argument (“delayed” and “now...later” in the first sentence; “patience” in the third sentence) concern the time from the receipt of unassembled toys to the completion of assembly. The argument neither says nor presumes anything about the length of time for which pleasure from a given toy will persist.

12. Guitar strings often go “dead”—become less responsive and bright in tone—after a few weeks of intense use. A researcher whose son is a classical guitarist hypothesized that dirt and oil, rather than changes in the material properties of the string, were responsible.

Which of the following investigations is most likely to yield significant information that would help to evaluate the researcher’s hypothesis?

- A. Determining if a metal alloy is used to make the strings used by classical guitarists
- B. Determining whether classical guitarists make their strings go dead faster than do folk guitarists
- C. Determining whether identical lengths of string, of the same gauge, go dead at different rates when strung on various brands of guitars.
- D. Determining whether a dead string and a new string produce different qualities of sound
- E. Determining whether smearing various substances on new guitar strings causes them to go dead

Explanation:

Choices B and C present faulty comparisons: in B, Jackie Robinson’s courage is compared to Rosa Parks herself, not to her courage, and in C it is compared to both Rosa Parks and her refusal. Choice D does not make clear whether it was Jackie Robinson or Rosa Parks who showed courage in refusing to move to the back of the bus; in fact, saying *for refusing* rather than *who refused* makes it sound as if *courage* moved to the back of the bus. Choice E incorrectly uses *as* rather than *like* to compare two noun phrases. Choice A is best.

13. Most consumers do not get much use out of the sports equipment they purchase. For example, seventeen percent of the adults in the United States own jogging shoes, but only forty-five percent of the owners jog more than once a year, and only seventeen percent jog more than once a week.

Which of the following, if true, casts most doubt on the claim that most consumers get little use out of the sports equipment they purchase?

- A. Joggers are most susceptible to sports injuries during the first six months in which they jog.
- B. Joggers often exaggerate the frequency with which they jog in surveys designed to elicit such

information.

- C. Many consumers purchase jogging shoes for use in activities other than jogging.
- D. Consumers who take up jogging often purchase an athletic shoe that can be used in other sports.
- E. Joggers who jog more than once a week are often active participants in other sports as well.

Explanation:

C is the best choice. In choice A, *The rising of costs* is unidiomatic, and in B *costs... has* lacks subject-verb agreement. Choices D and E produce sentence fragments since *Because* makes the clause subordinate rather than independent.

14. Two decades after the Emerald River Dam was built, none of the eight fish species native to the Emerald River was still reproducing adequately in the river below the dam. Since the dam reduced the annual range of water temperature in the river below the dam from 50 degrees to 6 degrees, scientists have hypothesized that sharply rising water temperatures must be involved in signaling the native species to begin the reproductive cycle.

Which of the following statements, if true, would most strengthen the scientists' hypothesis?

- A. The native fish species were still able to reproduce only in side streams of the river below the dam where the annual temperature range remains approximately 50 degrees.
- B. Before the dam was built, the Emerald River annually overflowed its banks, creating backwaters that were critical breeding areas for the native species of fish.
- C. The lowest recorded temperature of the Emerald River before the dam was built was 34 degrees, whereas the lowest recorded temperature of the river after the dam was built has been 43 degrees.
- D. Nonnative species of fish, introduced into the Emerald River after the dam was built, have begun competing with the declining native fish species for food and space.
- E. Five of the fish species native to the Emerald River are not native to any other river in North America.

Explanation:

The corrected sentence must make clear that both *damaging* and *slowing the growth of* refer to forests. E is the only choice that does so without introducing errors. In choice A, *o/is* required after *growth*. In choices B and C, the use of *the damage* instead of *damaging* produces awkward and wordy constructions, and without *to* after *damage*, B is grammatically incomplete. In C, *the slowness o/does* not convey the original sense that the rate of growth has been slowed by acid rain. Choice D also changes the meaning of the sentence by making both *damaged* and *slowed* refer to *growth*.

15. It is true that it is against international law to sell plutonium to countries that do not yet have nuclear weapons. But if United States companies do not do so, companies in other countries will.

Which of the following is most like the argument above in its logical structure?

- A. It is true that it is against the police department's policy to negotiate with kidnappers. But if the police want to prevent loss of life, they must negotiate in some cases.
- B. It is true that it is illegal to refuse to register for military service. But there is a long tradition in the United States of conscientious objection to serving in the armed forces.

- C. It is true that it is illegal for a government official to participate in a transaction in which there is an apparent conflict of interest. But if the facts are examined carefully, it will clearly be seen that there was no actual conflict of interest in the defendant's case.
- D. It is true that it is against the law to burglarize people's homes. But someone else certainly would have burglarized that house if the defendant had not done so first.
- E. It is true that company policy forbids supervisors to fire employees without two written warnings. But there have been many supervisors who have disobeyed this policy.

Explanation:

B, the best choice, uses the idiomatic and grammatically parallel form *the same to X as to Y*. Because A lacks the preposition *to*, it seems to compare the appearance of natural phenomena to that of a person standing on land. C and D unnecessarily repeat *would* and wrongly use the singular *it* to refer to the plural *phenomena*. C and E each contain a faulty semicolon and produce errors in idiom, *the same to X just as [it would] to*. D and E use the definite article *the* where the indefinite article *a* is needed to refer to an unspecified person.

16. In recent years many cabinetmakers have been winning acclaim as artists. But since furniture must be useful, cabinetmakers must exercise their craft with an eye to the practical utility of their product. For this reason, cabinetmaking is not art.

Which of the following is an assumption that supports drawing the conclusion above from the reason given for that conclusion?

- A. Some furniture is made to be placed in museums, where it will not be used by anyone.
- B. Some cabinetmakers are more concerned than others with the practical utility of the products they produce.
- C. Cabinetmakers should be more concerned with the practical utility of their products than they currently are.
- D. An object is not an art object if its maker pays attention to the object's practical utility.
- E. Artists are not concerned with the monetary value of their products.

Explanation:

Because the sentence describes a situation that continues into the present, choices A and B are incorrect in using the past perfect *had elected*, which denotes an action completed at a specific time in the past. Also, alternatives presented in the expressions *x rather than y* and *x Instead of y* should be parallel in form, but A and B mismatch the noun *retirement* with the verb forms *ace* and *facing*. C is faulty because *have elected*, which is correct in tense, cannot idiomatically be followed by a participle such as *retiring*. D correctly follows *have elected* with an infinitive, *to retire*, but, like A and B, fails to maintain parallelism. Only E, the best choice, uses the correct tense, observes parallelism, and is idiomatic.

17. Although custom prosthetic bone replacements produced through a new computer-aided design process will cost more than twice as much as ordinary replacements, custom replacements should still be cost-effective. Not only will surgery and recovery time be reduced, but custom replacements should last longer, thereby reducing the need for further hospital stays.

Which of the following must be studied in order to evaluate the argument presented above?

- A. The amount of time a patient spends in surgery versus the amount of time spent recovering from surgery
- B. The amount by which the cost of producing custom replacements has declined with the introduction of the new technique for producing them
- C. The degree to which the use of custom replacements is likely to reduce the need for repeat surgery when compared with the use of ordinary replacements
- D. The degree to which custom replacements produced with the new technique are more carefully manufactured than are ordinary replacements
- E. The amount by which custom replacements produced with the new technique will drop in cost as the production procedures become standardized and applicable on a larger scale

Explanation:

A, B, and D illogically suggest that the *palace and temple clusters* were architects and stonemasons. For the modification to be logical, *Architects and stonemasons* must immediately precede *the Maya*, the noun phrase it is meant to modify. A, B, and D also use the passive verb form *were built*, which produces unnecessary awkwardness and wordiness. E is awkwardly phrased and produces a sentence fragment, because the appositive noun phrase *Architects and stonemasons* cannot serve as the subject of *were the Maya*. C, the best answer, places *the Maya* immediately after its modifier and uses the active verb form *built*.

18. Extinction is a process that can depend on a variety of ecological, geographical, and physiological variables. These variables affect different species of organisms in different ways, and should, therefore, yield a random pattern of extinctions. However, the fossil record shows that extinction occurs in a surprisingly definite pattern, with many species vanishing at the same time.

Which of the following, if true, forms the best basis for at least a partial explanation of the patterned extinctions revealed by the fossil record?

- A. Major episodes of extinction can result from widespread environmental disturbances that affect numerous different species.
- B. Certain extinction episodes selectively affect organisms with particular sets of characteristics unique to their species.
- C. Some species become extinct because of accumulated gradual changes in their local environments.
- D. In geologically recent times, for which there is no fossil record, human intervention has changed the pattern of extinctions.
- E. Species that are widely dispersed are the least likely to become extinct.

Explanation:

Choice A is best because it is idiomatic and because its passive verb construction, *has been shifted*, clearly indicates that the *light* has been acted upon by *the rapid motion*. In B, the active verb *has shifted* suggests that the light, not the motion, is the agency of action, but such a construction leaves the phrase *by the rapid motion of the galaxy away from the Earth* without any logical or grammatical

function. In C, the construction *the extent that light* is ungrammatical; *denotes the extent* must be completed by *to which*. D incorrectly employs an active verb, *shifting*, and *extent of light* is imprecise and awkward. E is faulty because it contains no verb to express the action performed by the *rapid motion*.

19. Neither a rising standard of living nor balanced trade, by itself, establishes a country's ability to compete in the international marketplace. Both are required simultaneously since standards of living can rise because of growing trade deficits and trade can be balanced by means of a decline in a country's standard of living.

If the facts stated in the passage above are true, a proper test of a country's ability to be competitive is its ability to

- A. balance its trade while its standard of living rises
- B. balance its trade while its standard of living falls
- C. increase trade deficits while its standard of living rises
- D. decrease trade deficits while its standard of living falls
- E. keep its standard of living constant while trade deficits rise.

Explanation:

The construction *range from x* must be completed by *to y*, as in choice B, the best answer: Johnson's paintings *range from... portraits ... to... views*. Each of the other choices produces an unidiomatic construction.

20. Certain messenger molecules fight damage to the lungs from noxious air by telling the muscle cells encircling the lungs' airways to contract. This partially seals off the lungs. An asthma attack occurs when the messenger molecules are activated unnecessarily, in response to harmless things like pollen or household dust.

Which of the following, if true, points to the most serious flaw of a plan to develop a medication that would prevent asthma attacks by blocking receipt of any messages sent by the messenger molecules referred to above?

- A. Researchers do not yet know how the body produces the messenger molecules that trigger asthma attacks.
- B. Researchers do not yet know what makes one person's messenger molecules more easily activated than another's.
- C. Such a medication would not become available for several years, because of long lead times in both development and manufacture.
- D. Such a medication would be unable to distinguish between messages triggered by pollen and household dust and messages triggered by noxious air.
- E. Such a medication would be a preventative only and would be unable to alleviate an asthma attack once it had started.

Explanation:

D, the best choice, is idiomatic, clear, and concise. Both A and B incorrectly use *much* rather than

many to describe the countable noun *others*; *much* should be used with uncountable nouns such as "joy" and "labor." Even if this error were corrected, though, A and B would still be wrong. Because *more than x* necessarily includes the sense of *at least as many as x*, it is redundant and confusing to use elements of both expressions to refer to the same number of women. In A and C, *not any support agreements is* wordy and awkward. Like A and B, E redundantly uses both *at least* and *more*, and it incorrectly links the singular verb *was* with the plural subject *others*.

21. Since the routine use of antibiotics can give rise to resistant bacteria capable of surviving antibiotic environments, the presence of resistant bacteria in people could be due to the human use of prescription antibiotics. Some scientists, however, believe that most resistant bacteria in people derive from human consumption of bacterially infected meat.

Which of the following statements, if true, would most significantly strengthen the hypothesis of the scientists?

- A. Antibiotics are routinely included in livestock feed so that livestock producers can increase the rate of growth of their animals.
- B. Most people who develop food poisoning from bacterially infected meat are treated with prescription antibiotics.
- C. The incidence of resistant bacteria in people has tended to be much higher in urban areas than in rural areas where meat is of comparable quality.
- D. People who have never taken prescription antibiotics are those least likely to develop resistant bacteria.
- E. Livestock producers claim that resistant bacteria in animals cannot be transmitted to people through infected meat.

Explanation:

The intended comparison should be completed by a clause beginning with *as* and containing a subject and verb that correspond to the subject and verb of the main clause. In E, the best choice, *it* refers unambiguously to the phrasal subject *owning ... land*, the verb *was* corresponds to *is*, and today's *young adults* are appropriately compared to *earlier generations*. Choices A and B lack a verb corresponding to *is* and a clear referent for *that*. Choices C and D are confusing and illogical because their verbs, *did* and *have*, cannot substitute for *is* in the main clause.

22. The recent decline in the value of the dollar was triggered by a prediction of slower economic growth in the coming year. But that prediction would not have adversely affected the dollar had it not been for the government's huge budget deficit, which must therefore be decreased to prevent future currency declines.

Which of the following, if true, would most seriously weaken the conclusion about how to prevent future currency declines?

- A. The government has made little attempt to reduce the budget deficit.
- B. The budget deficit has not caused a slowdown in economic growth.
- C. The value of the dollar declined several times in the year prior to the recent prediction of slower economic growth.

- D. Before there was a large budget deficit, predictions of slower economic growth frequently caused declines in the dollar's value.
- E. When there is a large budget deficit, other events in addition to predictions of slower economic growth sometimes trigger declines in currency value.

Explanation:

Choice C is best. In A and B, the plural pronouns *their* and *they* do not agree with the singular noun *bank*. B, like D and E, illogically shifts from the plural *customers and funds* to the singular *check*, as if the customers were jointly depositing only one check. In D, *requires a bank that it should is* is ungrammatical; *requires that a bank is* is the appropriate idiom. In E, the use of the passive construction *is to be delayed* is less informative than the active voice because the passive does not explicitly identify the bank as the agent responsible for the delay.

23. Which of the following best completes the passage below?

At a recent conference on environmental threats to the North Sea, most participating countries favored uniform controls on the quality of effluents, whether or not specific environmental damage could be attributed to a particular source of effluent. What must, of course, be shown, in order to avoid excessively restrictive controls, is that _____.

- A. any uniform controls that are adopted are likely to be implemented without delay
- B. any substance to be made subject to controls can actually cause environmental damage
- C. the countries favoring uniform controls are those generating the largest quantities of effluents
- D. all of any given pollutant that is to be controlled actually reaches the North Sea at present
- E. environmental damage already inflicted on the North Sea is reversible

Explanation:

D, the best choice, describes *the warning signs* in parallel phrases. Despite surface appearances, the nouns *changes* and *variations* are parallel with *tilting*, but the verbal forms *changing* and *varying* in A, B, and C are not: *tilting*, one of the *deformations of the Earth's crust*, is used here as a noun that is parallel to *fluctuations*, whereas *changing* and *varying* are used as verbs indicating some action undertaken. Moreover, these verbs are used incorrectly because the sentence mentions no subject that is performing these actions. B and E illogically state that it is not the *strain* but the *measurements* that portend danger, and *among* in E wrongly suggests a comparison of different electrical properties rather than of different behaviors of the same properties.

24. Traditionally, decision-making by managers that is reasoned step-by-step has been considered preferable to intuitive decision-making. However, a recent study found that top managers used intuition significantly more than did most middle-or lower-level managers. This confirms the alternative view that intuition is actually more effective than careful, methodical reasoning.

The conclusion above is based on which of the following assumptions?

- A. Methodical, step-by-step reasoning is inappropriate for making many real-life management decisions.
- B. Top managers have the ability to use either intuitive reasoning or methodical, step-by-step reasoning in making decisions.

- C. The decisions made by middle-and lower-level managers can be made as easily by using methodical reasoning as by using intuitive reasoning.
- D. Top managers use intuitive reasoning in making the majority of their decisions.
- E. Top managers are more effective at decision-making than middle-or lower-level managers

Explanation:

Choice A, which is both idiomatic and concise, is best. In choice B, *to contract* is wrong because the phrase *are in danger* must be followed by *of*, not by an infinitive. The phrase *have a danger* is unidiomatic in C. In D, the phrase *by contraction trypanosomiasis* requires *of* after *contraction*; even if this correction were made, though, the passive construction in D would be unnecessarily wordy and also imprecise, because it is the disease more than the act of contracting it that poses the danger. In E, *have a danger* is again unidiomatic, and the *to that* clause following the phrase is, within the structure of the sentence, ungrammatical and awkward.

25. The imposition of quotas limiting imported steel will not help the big American steel mills. In fact, the quotas will help “mini-mills” flourish in the United States. Those small domestic mills will take more business from the big American steel mills than would have been taken by the foreign steel mills in the absence of quotas.

Which of the following, if true, would cast the most serious doubt on the claim made in the last sentence above?

- A. Quality rather than price is a major factor in determining the type of steel to be used for a particular application.
- B. Foreign steel mills have long produced grades of steel comparable in quality to the steel produced by the big American mills.
- C. American quotas on imported goods have often induced other countries to impose similar quotas on American goods.
- D. Domestic “mini-mills” consistently produce better grades of steel than do the big American mills.
- E. Domestic “mini-mills” produce low-volume, specialized types of steels that are not produced by the big American steel mills.

Explanation:

In this sentence, the first noun of the main clause grammatically identifies what is being compared with *a funded pension system*; to be logical, the comparison must be made between comparable things. Only E, the best choice, compares one kind of system of providing for retirees, *the funded pension system*, with another such system, *Social Security*. Choices A, C, and D all illogically compare the pension system with the *approach* taken by Social Security itself. In B, the comparison *of pension system with foundation* is similarly flawed.

LSAT SAMPLE TEST 2 Answered with Complete Explanations

SECTION I: READING

Time ---35 Minutes
27 Questions

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

- (5) 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, chemicals
that carry nerve impulses from one neuron to the next.
- (10) Like many other agents that affect neuron firing,
adenosine must first bind to specific receptors on
neuronal membranes. There are at least two classes
of these receptors, which have been designated A₁ and
A₂. Snyder et al propose that caffeine, which is struc-
- (15) turally similar to adenosine, is able to 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 attri-
- (20) buted to its inhibition of the production of phosphodi-
esterase, an enzyme that breaks down the chemical
called cyclic AMP. A number of neurotransmitters exert
their effects by first increasing cyclic AMP concentra-
tions in target neurons. Therefore, prolonged periods at
- (25) the elevated concentrations, as might be brought about
by a phosphodiesterase inhibitor, could lead to a greater
amount of neuron firing and, consequently, to behav-
ioral stimulation. But Snyder et al point out that the
caffeine concentrations needed to inhibit the production

(30) of phosphodiesterase in the brain 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 pre-
(35) venting 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 brains of mice. "In general," they reported, "the ability of the compounds to compete at the receptors
(40) correlates 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 of the most
(45) effective compounds in both regards.

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 (IBMX), which bound very
(50) 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 psychoactive drugs. Even caffeine, which is generally
(55) known only for its stimulatory effects, displays this property, depressing mouse locomotion at very low concentrations and stimulating it at higher ones.

1. 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

Explanation:

D is the best answer. This question requires you to identify the primary concern of the passage as a whole. The first paragraph presents a recent hypothesis about how caffeine affects behavior. The second paragraph describes an earlier and widely accepted hypothesis about how caffeine affects

behavior, and then presents evidence that is not consistent with that hypothesis. The third and fourth paragraphs return to the newer hypothesis introduced in the first paragraph and provide “evidence and arguments” that support this alternative hypothesis.

2. 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

Explanation:

D is the best answer.

Lines 11-23 state that adenosine “depresses neuron firing” by binding to specific receptors on neuronal membranes, which in turn inhibits the release of neurotransmitters. Lines 27-35 describe Snyder et al’s hypothesis about caffeine. They propose that caffeine binds to specific receptors on neuronal membranes, which prevents adenosine from binding to those receptors and “allows the neurons to fire more readily than they otherwise would”. Therefore, according to Snyder et al, caffeine differs from adenosine in that caffeine permits neurotransmitter release when it is bound to adenosine receptors, whereas adenosine inhibits neurotransmitter release.

3. 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

Explanation:

A is the best answer. The effects of IBMX are discussed in the last paragraph of the passage. IBMX apparently binds to adenosine-specific receptors on neuronal membranes, but, in contrast to the other caffeine derivatives that Snyder et al experimented with, IBMX depresses rather than stimulates mouse locomotion. Snyder et al respond to this experimental result by stating that IBMX has “mixed effects in the brain, a not unusual occurrence with psychoactive drugs”(line 104-107)

4. 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

Explanation:

E is the best answer. This question asks you to identify which compound, according to Snyder et al, does NOT bind to specific receptors in the brain. Phosphodiesterase, identified as an “enzyme that breaks down the chemical called cyclic AMP”(lines 40-42), is the only compound that is not identified as one that binds to specific receptors in the brain.

5. 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

Explanation:

B is the best answer.

This question asks you to identify information that is suggested rather than directly stated in the passage. To answer it, first look for the location in the passage of the information specified in the question. The A₁ and A₂ receptors are mentioned in lines 23-26. Lines 27-35 go on to describe Snyder et al’s hypothesis about the effects of caffeine on behavior. They propose that caffeine, “which is structurally similar to adenosine,” is able to bind to A₁ and A₂ receptors in the brain, the same receptors that adenosine normally binds to. Thus, the passage suggests that the structural relationship between caffeine and adenosine may be partially responsible for caffeine’s ability to bind to A₁ and A₂ receptors.

6. The author quotes Snyder et al in lines 38-43 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

Explanation:

B is the best answer.

This question asks you to identify the function of a quotation in the third paragraph of the passage. The third paragraph provides evidence for Snyder et al’s hypothesis by discussing experiments they conducted on mice. The quotation in lines 74-84 “summarizes” the findings of these experiments.

Snyder et al found that a number of caffeine derivatives are able to bind to specific receptors in the brains of mice just as adenosine does, and that the derivatives that are most successful at stimulating locomotion are also the most successful in competing with adenosine in binding at the receptors. This finding is “major” in that it supports their hypothesis that the stimulative effects of caffeine are a result of its ability to compete with adenosine.

Passage 2

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 and preserving the sites (5) 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.

I would like to make an outrageous suggestion that (10) would at one stroke provide funds for archaeology and reduce the amount of illegal digging. I would propose that scientific archaeological expeditions and governmental authorities sell excavated artifacts on the open market. Such sales would provide substantial funds for (15) the excavation and preservation of archaeological sites and the publication of results. At the same time, they would break the illegal excavator’s grip on the market, thereby decreasing the inducement to engage in illegal activities.

(20) You might object that professionals excavate to acquire knowledge, not money. Moreover, ancient artifacts are part of our global cultural heritage, which should be available for all to appreciate, not sold to the highest bidder. I agree. Sell nothing that has unique (25) artistic merit or scientific value. But, you might reply, everything that comes out of the ground has scientific value. Here we part company. Theoretically, you may be correct in claiming that every artifact has potential scientific value. Practically, you are wrong.

(30) I refer to the thousands of pottery vessels and ancient lamps that are essentially duplicates of 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 (35) known as *melekh* handles have been found in abundance---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 (40) catalogue the finds; as a result, they 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 (45) sale, each could be 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 digging (50) 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 stratigraphically by the professional archaeologist who excavated it?

7. 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 cataloguing duplicate artifacts

Explanation:

B is the best answer.

The first paragraph identifies two major problems faced by the archaeological profession: inadequate funding and illegal digging. Lines 12-15 indicate that the author is going to suggest how to remedy both problems, thereby benefiting the archaeological profession. The author proceeds to propose allowing the sale of excavated artifacts (lines 16-19) and to explain how this would solve both problems (lines 19-26). The author then supports the proposal by countering possible objections to it, and in the last paragraph explains how the proposal would curb illegal digging (lines 74-80). Thus, the way information is organized in the passage indicates that the author's purpose is to suggest that allowing the sale of excavated artifacts would provide funds for the archaeological profession and

curb illegal digging.

8. 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 catalogued in museum collections.

Explanation:

E is the best answer. The question requires you to identify the answer choice that CANNOT be inferred from the passage. Nothing in the passage implies that duplicate artifacts exceed museum objects in quality.

9. 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 uncatalogued and thus cannot be located once they are put in storage.

Explanation:

E is the best answer. The disadvantages of storing artifacts in museum basements are discussed in the fifth paragraph. Lines 56-60 state that "There is not enough money...to catalogue the finds" and declare that as a result stored objects cannot be located.

10. The author mentions the excavation in Cyprus (lines 31-34) to emphasize which of the following points?

- (A) Ancient lamps and pottery vessels are less valuable, although more rare, than royal seal impressions.
- (B) Artifacts that are very similar to each other present cataloguing difficulties to archaeologists.
- (C) Artifacts that are not uniquely valuable, and therefore could be sold, are available in large quantities.
- (D) Cyprus is the most important location for unearthing large quantities of salable artifacts.
- (E) Illegal sales of duplicate artifacts are wide-spread, particularly on the island of Cyprus.

Explanation:

C is the best answer. In lines 38-41, the author refutes the assertion that every object excavated has potential scientific value and therefore should not be sold.

In lines 42-44, the author defines those objects that do not have scientific value: "the thousands of pottery vessels...that are essentially duplicates of one another." The Cyprus excavation appears in the next sentence as an example of one location in which such duplicate artifacts have been found in large

quantities.

The reference to “2,000 virtually indistinguishable small jugs” highlights the profusion and uniformity of the Cyprus finds. Thus, the excavation is mentioned in order to emphasize the ready availability of objects that lack unique value and therefore could be sold.

11. The author’s argument concerning the effect of the official sale of duplicate artifacts on illegal excavation is based on which of the following assumptions?

- (A) Prospective purchasers would prefer to buy authenticated artifacts.
- (B) The price of illegally excavated artifacts would rise.
- (C) Computers could be used to trace sold artifacts.
- (D) Illegal excavators would be forced to sell only duplicate artifacts.
- (E) Money gained from selling authenticated artifacts could be used to investigate and prosecute illegal excavators.

Explanation:

A is the best answer. The author’s argument concerning the effect of the official sale of duplicate artifacts on illegal excavation appears in lines 74-75, in which the author predicts that such official sale would reduce demand for “the clandestine product.” The rhetorical question that follows (lines 76-80) indicates that the author finds it unlikely that any purchaser would prefer objects of unknown provenance to objects of known origin, or, to rephrase, the author assumes that most people would prefer to purchase objects of authenticated provenance, as this choice states.

12. The author anticipates which of the following initial objections to the adoption of his proposal?

- (A) Museum officials will become unwilling to store artifacts.
- (B) An oversupply of salable artifacts will result and the demand for them will fall.
- (C) Artifacts that would have been displayed in public places will be sold to private collectors.
- (D) Illegal excavators will have an even larger supply of artifacts for resale.
- (E) Counterfeiting of artifacts will become more commonplace.

Explanation:

C is the best answer. The author begins the third paragraph by saying “you might object...” in order to anticipate possible objections to the adoption of his proposal. In the next sentence the author asserts that “ancient artifacts...should be available for all to appreciate, not sold to the highest bidder” (lines 29-33), acknowledging an opponent’s fear that individuals might be allowed to purchase objects that ought to be displayed in public institutions. This objection is paraphrased in this choice.

Passage 3

Federal efforts to aid minority businesses began in the 1960’s when the Small Business Administration (SBA) began making federally guaranteed loans and government-sponsored management and technical assistance

(5) available to minority business enterprises. While this program enabled many minority entrepreneurs to form new businesses, the results were disappointing, since managerial inexperience, unfavorable locations, and capital shortages led to high failure rates. Even 15 (10) years after the program was implemented, minority business receipts were not quite two percent of the national economy's total receipts.

Recently federal policymakers have adopted an approach intended to accelerate development of the (15) minority business sector by moving away from directly aiding small minority enterprises and toward supporting larger, growth-oriented minority firms through intermediary companies. In this approach, large corporations participate in the development of successful and stable (20) minority businesses by making use of government-sponsored venture capital. The capital is used by a participating company to establish a Minority Enterprise Small Business Investment Company or MESBIC. The MESBIC then provides capital and guidance to minority (25) businesses that have potential to become future suppliers or customers of the sponsoring company.

MESBIC's are the result of the belief that providing established firms with easier access to relevant management techniques and more job-specific experience, as (30) well as substantial amounts of capital, gives those firms a greater opportunity to develop sound business foundations than does simply making general management experience and small amounts of capital available.

Further, since potential markets for the minority businesses already exist through the sponsoring companies, (35) the minority businesses face considerably less risk in terms of location and market fluctuation. Following early financial and operating problems, sponsoring corporations began to capitalize MESBIC's far above (40) the legal minimum of \$500,000 in order to generate sufficient income and to sustain the quality of management needed. MESBIC's are now emerging as increasingly important financing sources for minority enterprises.

- (45) Ironically, MESBIC staffs, which usually consist of Hispanic and Black professionals, tend to approach investments in minority firms more pragmatically than do many MESBIC directors, who are usually senior managers from sponsoring corporations. The latter
- (50) often still think mainly in terms of the “social responsibility approach” and thus seem to prefer deals that are riskier and less attractive than normal investment criteria would warrant. Such differences in viewpoint have produced uneasiness among many minority staff members,
- (55) who feel that minority entrepreneurs and businesses should be judged by established business considerations. These staff members believe their point of view is closer to the original philosophy of MESBIC’s and they are concerned that, unless a more prudent course is followed, MESBIC directors may revert to policies likely to re-create the disappointing results of the original SBA approach.

13. Which of the following best states the central idea of the passage?

- (A) The use of MESBIC’s for aiding minority entrepreneurs seems to have greater potential for success than does the original SBA approach.
- (B) There is a crucial difference in point of view between the staff and directors of some MESBIC’s.
- (C) After initial problems with management and marketing, minority businesses have begun to expand at a steady rate.
- (D) Minority entrepreneurs wishing to form new businesses now have several equally successful federal programs on which to rely.
- (E) For the first time since 1960, large corporations are making significant contributions to the development of minority businesses.

Explanation:

A is the best answer. The passage begins by indicating that the results of the SBA approach to aiding minority entrepreneurs “were disappointing” (line 11). Lines 62-64 state that “MESBIC’s are now emerging as increasingly important financing sources for minority enterprises.” Much of the passage is devoted to supporting the author’s view that MESBIC’s have the greater potential for success, and the last sentence in the passage confirms this view.

14. According to the passage, the MESBIC approach differs from the SBA approach in that MESBIC’s

- (A) seek federal contracts to provide markets for minority businesses
- (B) encourage minority businesses to provide markets for other minority businesses
- (C) attempt to maintain a specified rate of growth in the minority business sector

- (D) rely on the participation of large corporations to finance minority businesses
- (E) select minority businesses on the basis of their location

Explanation:

D is the best answer.

In the second paragraph, the author describes the MESBIC approach as one in which “large corporations participate in the development of successful and stable minority businesses by making use of government-sponsored venture capital”(lines 26-31). There is no indication in the passage that the SBA approach relies on the participation of large corporations.

15. Which of the following does the author cite to support the conclusion that the results of the SBA program were disappointing?

- (A) The small number of new minority enterprises formed as a result of the program
- (B) The small number of minority enterprises that took advantage of the management and technical assistance offered under the program
- (C) The small percentage of the nation’s business receipts earned by minority enterprises following the programs, implementation.
- (D) The small percentage of recipient minority enterprises that were able to repay federally guaranteed loans made under the program
- (E) The small number of minority enterprises that chose to participate in the program

Explanation:

C is the best answer. The author concludes that the results of the SBA approach “were disappointing”(line 11). Then he supports the conclusion by citing the fact that “Even 15 years after the program was implemented, minority business receipts were not quite two percent of the national economy’s total receipts.”(lines 14-18).

16. Which of the following statements about the SBA program can be inferred from the passage?

- (A) The maximum term for loans made to recipient businesses was 15 years.
- (B) Business loans were considered to be more useful to recipient businesses than was management and technical assistance.
- (C) The anticipated failure rate for recipient businesses was significantly lower than the rate that actually resulted.
- (D) Recipient businesses were encouraged to relocate to areas more favorable for business development.
- (E) The capitalization needs of recipient businesses were assessed and then provided for adequately.

Explanation:

C is the best answer. This question asks you to draw an inference about the SBA program. Although the passage does not actually state that the failure rate for SBA recipient businesses was higher than anticipated, in the first paragraph the author does state that the results of the SBA program were disappointing, in part because of the high failure rate among SBA-sponsored businesses. From this it can be inferred that the anticipated failure rate was lower than the actual rate.

17. The author refers to the “financial and operating problems”(line 38) encountered by MESBIC’s primarily in order to

- (A) broaden the scope of the discussion to include the legal considerations of funding MESBIC’S through sponsoring companies
- (B) call attention to the fact that MESBIC’s must receive adequate funding in order to function effectively
- (C) show that sponsoring companies were willing to invest only \$500,000 of government-sponsored venture capital in the original MESBIC’s
- (D) compare SBA and MESBIC limits on minimum funding
- (E) refute suggestions that MESBIC’s have been only marginally successful

Explanation:

B is the best answer.

The reference in lines 56-57 to “financial and operating problems” appears in the context of a discussion of why corporations came to capitalize MESBIC’s “far above the legal minimum of \$ 500,000.” The problems are cited to illustrate the reasons that MESBIC’s need more than the minimum funding required by law, and thus call attention to this need.

18. The author’s primary objective in the passage is to

- (A) disprove the view that federal efforts to aid minority businesses have been ineffective
- (B) explain how federal efforts to aid minority businesses have changed since the 1960’s
- (C) establish a direct link between the federal efforts to aid minority businesses made before the 1960’s and those made in the 1980’s
- (D) analyze the basis for the belief that job-specific experience is more useful to minority businesses than is general management experience
- (E) argue that the “social responsibility approach” to aiding minority businesses is superior to any other approach

Explanation:

B is the best answer. The passage describes efforts undertaken in the 1960’s to aid minority businesses and then describes MESBIC’s , a newer approach to such efforts.

Passage 4

- 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 decision,
- (5) 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 ambiguity, inconsistency,
(10) novelty, and surprise; and to integrate action into the process to thinking.

Generations of writers on management have recognized that some practicing managers rely heavily on intuition. In general, however, such writers display a
(15) 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 managers' intuition is
(20) 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 intuition is not arbitrary or irrational, but is based
(25) 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 an "Aha!" experience. Fourth, some managers use intuition as a check on the results
(30) of more rational analysis. Most senior executives are familiar with the formal decision analysis models and tools, and those who use such systematic methods for reaching decisions are occasionally leery of solutions suggested by these methods which run counter to their
(35) sense of the correct course of action. Finally, managers can use intuition to bypass in-depth analysis and move rapidly to engender a plausible solution. Used in this way, intuition is an almost instantaneous cognitive process in which a manager recognizes familiar patterns.
(40) One of the implications of the intuitive style of executive management is that "thinking" is 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
(45) to action in thinking/acting cycles, in which managers develop thoughts about their 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 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 implementing the solution.

19. According to the passage, senior managers use intuition in all of the following ways EXCEPT to

- (A) speed up of 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

Explanation:

D is the best answer. The question requires you to recognize which of the choices is NOT mentioned in the passage as a way in which senior managers use intuition.

The passage does not mention stipulating goals.

20. 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.

Explanation:

D is the best answer. The author asserts that the writers in question “display a poor grasp of what intuition is” (lines 21-22). The next paragraph presents a view that, according to the author of the passage, characterizes intuition more accurately than the writers on management do. Isenberg’s research is specifically described as showing the ways in which managers use intuition (lines 28-30). Therefore, what Isenberg correctly comprehends, and the writers in question misunderstand, is how managers use intuition, as this choice states.

21. Which of the following best exemplifies “an ‘Aha!’ experience” (line 28) 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.

Explanation:

C is the best answer. An “Aha! Experience” is said in lines 37-41 to result from the synthesizing of “isolated bits of data and practice into an integrated picture.” This choice is the best example of this kind of process. The connecting of seemingly unrelated facts and experiences mentioned in the answer choice is equivalent to synthesizing “isolated bits of data and practice,” and the pattern referred to is comparable to an “integrated picture.”

22. 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

Explanation:

D is the best answer. The question requires you to recognize which of the choices is NOT mentioned in the passage as a component of the classical model of decision analysis. Only this choice, “action undertaken in order to discover more information about a problem,” does not appear in the passage.

23. 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.

Explanation:

C is the best answer. The question requires you to compare behavior based on intuition with behavior based on formal decision analysis. This choice specifies that the manager who uses intuition incorporates action into the decision-making process, but the manager who uses formal analysis does

not. This distinction is made in several places in the passage. Lines 6-7 emphasize that decision-making and action-taking are separate steps in formal decision analysis: “making a decision, and only then taking action.” On the other hand, those who use intuition “integrate action into the process of thinking” (lines 15-16). Again, the author mentions that in the intuitive style of management, “ ‘thinking’ is inseparable from acting” (lines 60-61), and “action is often part of defining the problem” (lines 80-81).

24. 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.

Explanation:

E is the best answer. The question requires you to identify a statement that can be inferred from information in the passage but is not explicitly stated. The author asserts that intuitive managers can “move rapidly to engender a plausible solution” (lines 53-54) and that their intuition is based on “experience that builds skill” (line 37). This implies that the combination of skill and rapidity enables managers to employ their practical experience more efficiently, as this choice states.

Passage 5

Nearly a century ago, biologists found that if they separated an invertebrate animal embryo into two parts at an early stage of its life, it would survive and develop as two normal embryos. This led them to believe that the
(5) cells in the early embryo are undetermined in the sense that each cell has the potential to develop in a variety of different ways. Later biologists found that the situation was not so simple. It matters in which plane the embryo is cut. If it is cut in a plane different from the one used
(10) by the early investigators, it will not form two whole embryos.

A debate arose over what exactly was happening. Which embryo cells are determined, just when do they become irreversibly committed to their fates, and what
(15) are the “morphogenetic determinants” that tell a cell what to become? But the debate could not be resolved because no one was able to ask the crucial questions in a form in which they could be pursued productively.

Recent discoveries in molecular biology, however, have
(20) opened up prospects for a resolution of the debate.

Now investigators think they know at least some of the molecules that act as morphogenetic determinants in early development. They have been able to show that, in a sense, cell determination begins even before an egg
(25) is fertilized.

Studying sea urchins, biologist Paul Gross found that an unfertilized egg contains substances that function as morphogenetic determinants. They are located in the cytoplasm of the egg cell; i.e., in that part of the
(30) cell's protoplasm that lies outside of the nucleus. In the unfertilized egg, the substances are inactive and are not distributed homogeneously. When the egg is fertilized, the substances become active and, presumably, govern the behavior of the genes they interact with. Since the
(35) substances are unevenly distributed in the egg, when the fertilized egg divides, the resulting cells are different from the start and so can be qualitatively different in their own gene activity.

The substances that Gross studied are maternal
(40) messenger RNA's --products of certain of the maternal genes. He and other biologists studying a wide variety of organisms have found that these particular RNA's direct, in large part, the synthesis of histones, a class of proteins that bind to DNA. Once synthesized, the
(45) histones move into the cell nucleus, where sections of DNA wrap around them to form a structure that resembles beads, or knots, on a string. The beads are DNA segments wrapped around the histones; the string is the intervening DNA. And it is the structure of these beaded
(50) DNA strings that guides the fate of the cells in which they are located.

25. It can be inferred from the passage that the morphogenetic determinants present in the early embryo are

- (A) located in the nucleus of the embryo cells
- (B) evenly distributed unless the embryo is not developing normally
- (C) inactive until the embryo cells become irreversibly committed to their final function
- (D) identical to those that were already present in the unfertilized egg

(E) present in larger quantities than is necessary for the development of a single individual

Explanation:

E is the best answer.

The second and third paragraphs of the passage indicate that morphogenetic determinants are substances in the embryo that are activated after the egg has been fertilized and that “tell a cell what to become” (lines 21-23). If, as the author asserts in the first paragraph, biologists have succeeded in dividing an embryo into two parts, each of which survives and develops into a normal embryo, it can be concluded that the quantity of morphogenetic determinants in the early embryo is greater than that required for the development of a single individual.

26. The main topic of the passage is

- (A) the early development of embryos of lower marine organisms
- (B) the main contribution of modern embryology to molecular biology
- (C) the role of molecular biology in disproving older theories of embryonic development
- (D) cell determination as an issue in the study of embryonic development
- (E) scientific dogma as a factor in the recent debate over the value of molecular biology

Explanation:

D is the best answer. In identifying the main topic of the passage, you must consider the passage as a whole. In the first paragraph, the author provides a historical context for the debate described in the second paragraph, concerning when and how the determination of embryo cells takes place. The third and fourth paragraphs provide a specific example of the “Recent discoveries in molecular biology” (lines 28-29) that may lead to the resolution of that debate.

27. According to the passage, when biologists believed that the cells in the early embryo were undetermined, they made which of the following mistakes?

- (A) They did not attempt to replicate the original experiment of separating an embryo into two parts.
- (B) They did not realize that there was a connection between the issue of cell determination and the outcome of the separation experiment.
- (C) They assumed that the results of experiments on embryos did not depend on the particular animal species used for such experiments.
- (D) They assumed that it was crucial to perform the separation experiment at an early stage in the embryo’s life.
- (E) They assumed that different ways of separating an embryo into two parts would be equivalent as far as the fate of the two parts was concerned.

Explanation:

E is the best answer.

According to the author, early investigators arrived at the conclusion that the cells of the embryo are undetermined because they “found that if they separated an invertebrate animal embryo into two parts at an early stage of its life, it would survive and develop as two normal embryos” (lines 1-6). However, later biologists discovered that when an embryo was cut in places different from the one used by the

early investigators, it did not form two whole embryos. Because the earlier biologists apparently arrived at their conclusion without attempting to cut an embryo in different planes, it would appear that they assumed, erroneously, that different ways of separating the embryos would not affect the fate of the two embryo parts.

SECTION II: ARGUMENT

Time ---35 Minutes

25 Questions

1. Which of the following best completes the passage below?

In a survey of job applicants, two-fifths admitted to being at least a little dishonest. However, the survey may underestimate the proportion of job applicants who are dishonest, because_____.

- A. some dishonest people taking the survey might have claimed on the survey to be honest
- B. some generally honest people taking the survey might have claimed on the survey to be dishonest
- C. some people who claimed on the survey to be at least a little dishonest may be very dishonest
- D. some people who claimed on the survey to be dishonest may have been answering honestly
- E. some people who are not job applicants are probably at least a little dishonest

Explanation:

A is the best answer.

If applicants who are in fact dishonest claimed to be honest, the survey results would show a smaller proportion of dishonest applicants than actually exists. Therefore, this choice is the best answer. B is inappropriate because generally honest applicants who claimed to be dishonest could contribute to the overestimation, but not to the underestimation, of dishonest applicants. D is inappropriate because applicants who admitted their dishonesty would not contribute to an underestimation of the proportion of dishonest applicants. C and E are inappropriate because the argument is concerned neither with degrees of dishonesty nor with the honesty of non-applicants.

2. The average life expectancy for the United States population as a whole is 73.9 years, but children born in Hawaii will live an average of 77 years, and those born in Louisiana, 71.7 years. If a newlywed couple from Louisiana were to begin their family in Hawaii, therefore, their children would be expected to live longer than would be the case if the family remained in Louisiana.

Which of the following, if true, would most seriously weaken the conclusion drawn in the passage?

- A. Insurance company statisticians do not believe that moving to Hawaii will significantly lengthen the average Louisianan's life.
- B. The governor of Louisiana has falsely alleged that statistics for his state are inaccurate.
- C. The longevity ascribed to Hawaii's current population is attributable mostly to genetically determined factors.
- D. Thirty percent of all Louisianans can expect to live longer than 77 years.
- E. Most of the Hawaiian Islands have levels of air pollution well below the national average for the United States.

Explanation:

C is the best answer.

This choice suggests that a significant proportion of Hawaii's population is genetically predisposed to be long lived. Since Louisianans are not necessarily so predisposed, and since the Louisianans' children will acquire their genetic characteristics from their parents, not from their birthplace, this

choice presents a reason to doubt that Hawaiian born children of native Louisianans will have an increased life expectancy. Therefore, this choice is the best answer. Because the conclusion concerns people born in Hawaii, not the average Louisianan, A does not weaken the conclusion. Because the governor's allegation is false, it cannot affect the conclusion. D fails to weaken the conclusion because it is consistent with the information given and the conclusion about life expectancy. By suggesting that Hawaii's environment is in one respect particularly healthy, E supports the conclusion.

3. The average life expectancy for the United States population as a whole is 73.9 years, but children born in Hawaii will live an average of 77 years, and those born in Louisiana, 71.7 years. If a newlywed couple from Louisiana were to begin their family in Hawaii, therefore, their children would be expected to live longer than would be the case if the family remained in Louisiana.

Which of the following statements, if true, would most significantly strengthen the conclusion drawn in the passage?

- A. As population density increases in Hawaii, life expectancy figures for that state are likely to be revised downward.
- B. Environmental factors tending to favor longevity are abundant in Hawaii and less numerous in Louisiana.
- C. Twenty-five percent of all Louisianans who move to Hawaii live longer than 77 years.
- D. Over the last decade, average life expectancy has risen at a higher rate for Louisianans than for Hawaiians.
- E. Studies show that the average life expectancy for Hawaiians who move permanently to Louisiana is roughly equal to that of Hawaiians who remain in Hawaii.

Explanation:

If B is true, the greater abundance of longevity-promoting environmental factors it mentions is probably at least partly responsible for the higher life expectancy in Hawaii. Children born in Hawaii benefit from these factors from birth, and thus Louisianans who have children in Hawaii increase their children's chances of living longer. Therefore, B is the best answer. If life expectancy in Hawaii is likely to be falling, as A says, the argument is weakened rather than strengthened. C and E, in the absence of other relevant information, have no bearing on the conclusion; thus, they are inappropriate. D is irrelevant, because the information it mentions about rates would already have been incorporated into the statistics cited in the passage.

4. Insurance Company X is considering issuing a new policy to cover services required by elderly people who suffer from diseases that afflict the elderly. Premiums for the policy must be low enough to attract customers. Therefore, Company X is concerned that the income from the policies would not be sufficient to pay for the claims that would be made.

Which of the following strategies would be most likely to minimize Company X's losses on the policies?

- A. Attracting middle-aged customers unlikely to submit claims for benefits for many years.
- B. Insuring only those individuals who did not suffer any serious diseases as children
- C. Including a greater number of services in the policy than are included in other policies of lower

cost

- D. Insuring only those individuals who were rejected by other companies for similar policies
- E. Insuring only those individuals who are wealthy enough to pay for the medical services

Explanation:

Insurance companies can improve the ratio of revenues to claims paid, thus minimizing losses, if they insure as many people belonging to low-risk groups as they can. Because the strategy described in A adds a low-risk group to the pool of policyholders, this choice is the best answer. B is irrelevant, since no link is established between childhood diseases and diseases affecting the elderly. C is inappropriate, since increasing the number of services covered is unlikely to minimize losses. D is inappropriate, since it would increase the likelihood that claims against the policy will be made. Because policyholders will file claims against the policy for services covered rather than pay for the cost of the services themselves, E is irrelevant.

5. A program instituted in a particular state allows parents to prepay their children's future college tuition at current rates. The program then pays the tuition annually for the child at any of the state's public colleges in which the child enrolls. Parents should participate in the program as a means of decreasing the cost for their children's college education.

Which of the following, if true, is the most appropriate reason for parents NOT to participate in the program?

- A. the parents are unsure about which public college in the state the child will attend.
- B. The amount of money accumulated by putting the prepayment funds in an interest-bearing account today will be greater than the total cost of tuition for any of the public colleges when the child enrolls.
- C. The annual cost of tuition at the state's public colleges is expected to increase at a faster rate than the annual increase in the cost of living.
- D. Some of the state's public colleges are contemplating large increases in tuition next year.
- E. The prepayment plan would not cover the cost of room and board at any of the state's public colleges.

Explanation:

The passage recommends that parents participate in a tuition prepayment program as a means of decreasing the cost of their children's future college education. If B is true, placing the funds in an interest bearing account would be more cost-effective than participating in the prepayment program. Therefore, B would be a reason for NOT participating and is the best answer. A is not clearly relevant to deciding whether to participate since the program applies to whatever public college the child might attend. C and D, by stating that tuition will increase, provide support for participating in the program. E is not clearly relevant to deciding whether to participate, since the expenses mentioned fall outside the scope of the program.

6. Company Alpha buys free-travel coupons from people who are awarded the coupons by Bravo Airlines for flying frequently on Bravo airplanes. The coupons are sold to people who pay less for the coupons than they would pay by purchasing tickets from Bravo. This making of coupons results in lost

revenue for Bravo.

To discourage the buying and selling of free-travel coupons, it would be best for Bravo Airlines to restrict the

- A. number of coupons that a person can be awarded in a particular year
- B. use of the coupons to those who were awarded the coupons and members of their immediate families
- C. days that the coupons can be used to Monday through Friday
- D. amount of time that the coupons can be used after they are issued
- E. number of routes on which travelers can use the coupons

Explanation:

Restricting use of the coupons to the immediate families of those awarded them, as B suggests, would make the coupons valueless for anyone else, so that marketing the coupons would no longer be possible. The coupons, however, would still allow the people to whom Bravo gives them to enjoy free travel. Thus, awarding coupons would remain a strong incentive to frequent travel on Bravo. Therefore, B is the best answer. A would do nothing to reduce the resale value of the coupons. C, D and E all not only fail to prevent Alpha's coupon sales from competing with Bravo's own ticket sales, but also potentially reduce the usefulness of the coupons to the people to whom they are awarded.

7. The ice on the front windshield of the car had formed when moisture condensed during the night. The ice melted quickly after the car was warmed up the next morning because the defrosting vent, which blows on the front windshield, was turned on full force.

Which of the following, if true, most seriously jeopardizes the validity of the explanation for the speed with which the ice melted?

- A. The side windows had no ice condensation on them
- B. Even though no attempt was made to defrost the back window, the ice there melted at the same rate as did the ice on the front windshield.
- C. The speed at which ice on a window melts increases as the temperature of the air blown on the window increases
- D. The warm air from the defrosting vent for the front windshield cools rapidly as it dissipates throughout the rest of the car.
- E. The defrosting vent operates efficiently even when the heater, which blows warm air toward the feet or faces of the driver and passengers, is on.

Explanation:

The speed with which the ice on the windshield melted is attributed to the air blowing full force from the defrosting vent onto the front windshield. This explanation of B is undermined if, as B states, no attempt was made to defrost the back window and the ice on the back window melted as quickly as did the ice on the windshield. Therefore, B is the best answer. In the absence of other information, the lack of ice condensation on the side windows that is mentioned in A is irrelevant to the validity of the explanation. C might support the explanation, since the air from the defrosting vent was warm. Neither of D and E gives a reason to doubt that air from the vent caused the ice's melting, and thus neither jeopardizes the explanation's validity.

8. To prevent some conflicts of interest, Congress could prohibit high-level government officials from accepting positions as lobbyists for three years after such officials leave government service. One such official concluded, however, that such a prohibition would be unfortunate because it would prevent high-level government officials from earning a livelihood for three years.

The official's conclusion logically depends on which of the following assumptions?

- A. Laws should not restrict the behavior of former government officials.
- B. Lobbyists are typically people who have previously been high-level government officials.
- C. Low-level government officials do not often become lobbyists when they leave government service.
- D. High-level government officials who leave government service are capable of earning a livelihood only as lobbyists.
- E. High-level government officials who leave government service are currently permitted to act as lobbyists for only three years.

Explanation:

The official argues that prohibiting high-level government officials from accepting positions as lobbyists for three years would prevent the officials from earning a livelihood for that period. The reasoning tacitly excludes the possibility of such officials earning a living through work other than lobbying. Therefore, D, which expresses this tacit assumption, is the best answer. The official's argument does not depend on the assumption in A, since the argument would not be invalidated if some restrictions on the behavior of government officials were desirable. The official's argument does not depend on the assumption in B, since the argument would not be invalidated if lobbyists were not typically former high-level government officials. The official's argument does not depend on the assumption in C, since the argument would not be invalidated if former low-level government officials did often become lobbyists. The official's argument does not depend on the assumption in E, since the argument would not be invalidated if former high-level government officials could act as lobbyists indefinitely.

9. A conservation group in the United States is trying to change the long-standing image of bats as frightening creatures. The group contends that bats are feared and persecuted solely because they are shy animals that are active only at night.

Which of the following, if true, would cast the most serious doubt on the accuracy of the group's contention?

- A. Bats are steadily losing natural roosting places such as caves and hollow trees and are thus turning to more developed areas for roosting.
- B. Bats are the chief consumers of nocturnal insects and thus can help make their hunting territory more pleasant for humans.
- C. Bats are regarded as frightening creatures not only in the United States but also in Europe, Africa, and South America.
- D. Raccoons and owls are shy and active only at night; yet they are not generally feared and persecuted.

- E. People know more about the behavior of other greatly feared animal species, such as lions, alligators, and snakes, than they do about the behavior of bats.

Explanation:

The group's contention suggests that animals that are shy and active at night are feared and persecuted for that reason. D establishes that raccoons and owls are shy and active at night, but that they are neither feared nor persecuted. Therefore, D is the best answer. Although an increasing prevalence of bats might explain the importance of addressing people's fear of bats, A does not address the original causes of that fear. B and E, while relevant to the rationality of people's fear of bats, do not affect the assessment of the accuracy of the group's contention. That bats are feared outside the United States, as C states, does not conflict with the group's explanation for fear of bats in the United States.

10. Meteorite explosions in the Earth's atmosphere as large as the one that destroyed forests in Siberia, with approximately the force of a twelve-megaton nuclear blast, occur about once a century.

The response of highly automated systems controlled by complex computer programs to unexpected circumstances is unpredictable.

Which of the following conclusions can most properly be drawn, if the statements above are true, about a highly automated nuclear-missile defense system controlled by a complex computer program?

- A. Within a century after its construction, the system would react inappropriately and might accidentally start a nuclear war.
- B. The system would be destroyed if an explosion of a large meteorite occurred in the Earth's atmosphere.
- C. It would be impossible for the system to distinguish the explosion of a large meteorite from the explosion of a nuclear weapon.
- D. Whether the system would respond inappropriately to the explosion of a large meteorite would depend on the location of the blast.
- E. It is not certain what the system's response to the explosion of a large meteorite would be, if its designers did not plan for such a contingency.

Explanation:

If the defense system designers did not plan for the contingency of large meteorite explosions, such explosions would, from the system's perspective, be unexpected. The system's response to such explosions is consequently unpredictable. E expresses this inference and is thus the best answer. A cannot be inferred since it is consistent with the stated information that no meteorite explosion will occur within a century. B cannot be inferred since there is no information to suggest that meteorite explosions in the atmosphere would destroy the system. C cannot be inferred since it is consistent with the stated information that an appropriately designed nuclear defense system might be able to distinguish nuclear from meteorite explosions. D cannot be inferred since there is no information to suggest that the location of blasts would determine the appropriateness of defense system's response.

11. The fewer restrictions there are on the advertising of legal services, the more lawyers there are who advertise their services, and the lawyers who advertise a specific service usually charge less for that

service than lawyers who do not advertise. Therefore, if the state removes any of its current restrictions, such as the one against advertisements that do not specify fee arrangements, overall consumer legal costs will be lower than if the state retains its current restrictions.

If the statements in the passage are true, which of the following must be true?

- A. Some lawyers who now advertise will charge more for specific services if they do not have to specify fee arrangements in the advertisements.
- B. More consumers will use legal services if there are fewer restrictions on the advertising of legal service.
- C. If the restriction against advertisements that do not specify fee arrangements is removed, more lawyers will advertise their services.
- D. If more lawyers advertise lower prices for specific services, some lawyers who do not advertise will also charge less than they currently charge for those services.
- E. If the only restrictions on the advertising of legal services were those that apply to every type of advertising, most lawyers would advertise their services.

Explanation:

The supposition in c involves reducing by one the number of restrictions on the advertising of legal services. Any such reduction will, if the stated correlation exists, be accompanied by an increase in the number of lawyers advertising their services, as C predicts. Therefore, C is the best answer. A does not follow from the stated information since it is still possible that no lawyers would raise their fees. B does not follow from the stated information since it is still possible that there would be no increase in the number of consumers using legal services. D does not follow the stated information since it is still possible that none of the lawyers who do not advertise would decide to lower their prices. E does not follow the stated information since it is still possible that few lawyers would advertise their legal services.

12. The fewer restrictions there are on the advertising of legal services, the more lawyers there are who advertise their services, and the lawyers who advertise a specific service usually charge less for that service than lawyers who do not advertise. Therefore, if the state removes any of its current restrictions, such as the one against advertisements that do not specify fee arrangements, overall consumer legal costs will be lower than if the state retains its current restrictions.

Which of the following, if true, would most seriously weaken the argument concerning overall consumer legal costs?

- A. The state has recently removed some other restrictions that had limited the advertising of legal services.
- B. The state is unlikely to remove all of the restrictions that apply solely to the advertising of legal services.
- C. Lawyers who do not advertise generally provide legal services of the same quality as those provided by lawyers who do advertise.
- D. Most lawyers who now specify fee arrangements in their advertisements would continue to do so even if the specification were not required.
- E. Most lawyers who advertise specific services do not lower their fees for those services when they

begin to advertise.

Explanation:

If E is true, the lawyers who begin advertising when the restriction is removed might all be among those who do not lower their fees on beginning to advertise, in which case no decrease in consumer legal costs will occur. Therefore, E weakens the argument and is the best answer. Since A does not relate the recent removal of restrictions to changes in consumer legal costs, it alone does not weaken the argument. Since the argument is unconcerned with whatever restrictions remain in effect but focuses only on those that will be removed, B does not weaken the argument. C and D are irrelevant to an evaluation of the argument, which is concerned with cost considerations, not with the quality of legal services or the content of lawyers' advertisements.

13. Defense Department analysts worry that the ability of the United States to wage a prolonged war would be seriously endangered if the machine-tool manufacturing base shrinks further. Before the Defense Department publicly connected this security issue with the import quota issue, however, the machine-tool industry raised the national security issue in its petition for import quotas.

Which of the following, if true, contributes most to an explanation of the machine-tool industry's raising the issue above regarding national security?

- A. When the aircraft industries retooled, they provided a large amount of work for tool builders.
- B. The Defense Department is only marginally concerned with the effects of foreign competition on the machine-tool industry.
- C. The machine-tool industry encountered difficulty in obtaining governmental protection against imports on grounds other than defense.
- D. A few weapons important for defense consist of parts that do not require extensive machining.
- E. Several federal government programs have been designed which will enable domestic machine-tool manufacturing firms to compete successfully with foreign toolmakers.

Explanation:

Since the size of the machine-tool manufacturing base presumably has implications in area beyond national security, one might find it surprising that the industry raised the security issue in its petition. C, the best answer, explains that the industry turned to this issue because others tended to be ineffective in efforts to obtain governmental protection. A explains why the industry might NOT raise the security issue, since it suggests that it might have raised the issue of jobs instead. B explains why the industry might NOT raise the security issue about import quotas, since it suggests that the Defense Department had no interest in import quotas whatsoever. Neither of D and E is relevant to the industry's choice of strategy for securing import quotas.

14. Opponents of laws that require automobile drivers and passengers to wear seat belts argue that in a free society people have the right to take risks as long as the people do not harm others as a result of taking the risks. As a result, they conclude that it should be each person's decision whether or not to wear a seat belt.

Which of the following, if true, most seriously weakens the conclusion drawn above?

- A. Many new cars are built with seat belts that automatically fasten when someone sits in the front

seat.

- B. Automobile insurance rates for all automobile owners are higher because of the need to pay for the increased injuries or deaths of people not wearing seat belts.
- C. Passengers in airplanes are required to wear seat belts during takeoffs and landings.
- D. The rate of automobile fatalities in states that do not have mandatory seat belt laws is greater than the rate of fatalities in states that do have such laws.
- E. In automobile accidents, a greater number of passengers who do not wear seat belts are injured than are passengers who do wear seat belts.

Explanation:

The principle that people are entitled to risk injury provided they do not thereby harm others fails to justify the individual's right to decide not to wear seat belts if it can be shown, as B shows, that that decision does harm others. Therefore, B is the best answer. A suggests that the law may be irrelevant in some cases, but it does not address the issue of the law's legitimacy. C cites a requirement analogous to the one at issue, but its existence alone does not bear on the legitimacy of the one at issue. The argument implicitly concedes that individuals take risks by not wearing seat belts; therefore, D and E, which simply confirm this concession, do not weaken the conclusion.

15. The cost of producing radios in Country Q is ten percent less than the cost of producing radios in Country Y. even after transportation fees and tariff charges are added, it is still cheaper for a company to import radios from Country Q to Country Y than to produce radios in Country Y.

The statements above, if true, best support which of the following assertions?

- A. labor costs in Country Q are ten percent below those in Country Y.
- B. importing radios from Country Q to Country Y will eliminate ten percent of the manufacturing jobs in Country Y.
- C. the tariff on a radio imported from Country Q to Country Y is less than ten percent of the cost of manufacturing the radio in Country Y.
- D. the fee for transporting a radio from Country Q to Country Y is more than ten percent of the cost of manufacturing the radio in Country Q.
- E. it takes ten percent less time to manufacture a radios in Country Q than it does in Country Y.

Explanation:

If the tariff on importing radios from Country Q to Country Y were as high as ten percent or more of the cost of producing radios in Y, then, contrary to what the passage says, the cost of importing radios from Q to Y would be equal to or more than the cost of producing radios in Y. thus, the tariff cannot be that high, and C is the best answer. A and E give possible partial explanations for the cost difference, but neither is supported by the passage because the cost advantage in Q might be attributable to other factors. B and D are both consistent with the information in the passage, but the passage provides no evidence to support them.

16. During the Second World War, about 375,000 civilians died in the United States and about 408,000 members of the United States armed forces died overseas. On the basis the those figures, it can be concluded that it was not much more dangerous to be overseas in the armed forces during the Second

World War than it was to stay at home as a civilian.

Which of the following would reveal most clearly the absurdity of the conclusion drawn above?

- A. Counting deaths among members of the armed forces who served in the United State in addition to deaths among members of the armed forces serving overseas
- B. Expressing the difference between the numbers of deaths among civilians and members of the armed forces as a percentage of the total number of deaths
- C. Separating deaths caused by accidents during service in the armed forces from deaths caused by combat injuries
- D. Comparing death rates per thousand members of each group rather than comparing total numbers of deaths
- E. Comparing deaths caused by accidents in the United States to deaths caused by combat in the armed forces

Explanation:

Concluding from the similar numbers of deaths in two groups that the relative danger of death was similar for both groups is absurd if, as here, one group was far smaller. D exposes this absurdity by pointing out the need to compare death rates of the two groups, which would reveal the higher death rate for the smaller group. Therefore, D is the best answer. Since the conclusion acknowledges the difference between the number of civilian and armed forces deaths, expressing this difference as a percentage, as suggested by B, is beside the point. A is inappropriate because it simply adds a third group to the two being compared. Because cause of death is not at issue, C and E are irrelevant.

17. Toughened hiring standards have not been the primary cause of the present staffing shortage in public schools. The shortage of teachers is primarily caused by the fact that in recent years teachers have not experienced any improvements in working conditions and their salaries have not kept pace with salaries in other professions.

Which of the following, if true, would most support the claims above?

- A. Many teachers already in the profession would not have been hired under the new hiring standards.
- B. Today more teachers are entering the profession with a higher educational level than in the past.
- C. Some teachers have cited higher standards for hiring as a reason for the current staffing shortage.
- D. Many teachers have cited low pay and lack of professional freedom as reasons for their leaving the profession.
- E. Many prospective teachers have cited the new hiring standards as a reason for not entering the profession.

Explanation:

The passage rejects one explanation of the shortage of teachers—that it results from toughened hiring standards—and advances an alternative—that it results from deficiencies in pay and working conditions. D provides corroborative evidence for the latter explanation by suggesting that, for many former teachers, poor pay and working conditions were reasons for their quitting the profession. Therefore, D is the best answer. A, C and E provide evidence that tends to implicate new hiring standards in the staffing shortage, and thus support the explanation that the passage rejects. B describes what may be a

result of the new hiring standards, but it provides no evidence favoring one explanation of the staffing shortage over the other.

18. A proposed ordinance requires the installation in new homes of sprinklers automatically triggered by the presence of a fire. However, a home builder argued that because more than ninety percent of residential fires are extinguished by a household member, residential sprinklers would only marginally decrease property damage caused by residential fires.

Which of the following, if true, would most seriously weaken the home builder's argument?

- A. most individuals have no formal training in how to extinguish fires.
- B. Since new homes are only a tiny percentage of available housing in the city, the new ordinance would be extremely narrow in scope.
- C. The installation of smoke detectors in new residences costs significantly less than the installation of sprinklers.
- D. In the city where the ordinance was proposed, the average time required by the fire department to respond to a fire was less than the national average.
- E. The largest proportion of property damage that results from residential fires is caused by fires that start when no household member is present.

Explanation:

The home builder reasons from evidence about most residential fires to a conclusion about the effectiveness of sprinklers in preventing property damage. But this reasoning is faulty because of the possibility that most of the property damage results from the minority of fires excluded from the builder's evidence. That possibility is realized if E is true. Thus, E is the best answer. Because the builder's argument concerns neither the cost of installing sprinklers nor a comparison with fire department performance in other locations, C and D are irrelevant. The evidence the home builder cites suggests that formal training is not needed in order to extinguish fires. So A is not the correct answer. B supports the builder's view that requiring sprinklers would have a limited effect.

19. Even though most universities retain the royalties from faculty members' inventions, the faculty members retain the royalties from books and articles they write. Therefore, faculty members should retain the royalties from the educational computer software they develop.

The conclusion above would be more reasonably drawn if which of the following were inserted into the argument as an additional premise?

- A. Royalties from inventions are higher than royalties from educational software programs.
- B. Faculty members are more likely to produce educational software programs than inventions.
- C. Inventions bring more prestige to universities than do books and articles.
- D. In the experience of most universities, educational software programs are more marketable than are books and articles.
- E. In terms of the criteria used to award royalties, educational software programs are more nearly comparable to books and articles than to inventions.

Explanation:

The passage concludes that, where royalty retention of faculty members' works is concerned, software

should be treated as books and articles are, not as inventions are. The conclusion requires an additional premise establishing that software is, in relevant respects, more comparable to books and articles than to inventions. E provides this kind of premise and is therefore the best answer. A, B,C and D each describe some difference between software and inventions, or between inventions and books and articles, or between software and books and articles. However, none establishes the required relationship among inventions, software, and books and articles.

20. Increase in the level of high-density lipoprotein (HDL) in the human bloodstream lower bloodstream-cholesterol levels by increasing the body's capacity to rid itself of excess cholesterol. Levels of HDL in the bloodstream of some individuals are significantly increased by a program of regular exercise and weight reduction.

Which of the following can be correctly inferred from the statements above?

- A. Individuals who are underweight do not run any risk of developing high levels of cholesterol in the bloodstream.
- B. Individuals who do not exercise regularly have a high risk of developing high levels of cholesterol in the bloodstream late in life.
- C. Exercise and weight reduction are the most effective methods of lowering bloodstream cholesterol levels in humans.
- D. A program of regular exercise and weight reduction lowers cholesterol levels in the bloodstream of some individuals.
- E. Only regular exercise is necessary to decrease cholesterol levels in the bloodstream of individuals of average weight.

Explanation:

If increased HDL levels cause reduced cholesterol levels and if a certain program increases HDL levels in some individuals, it follows that some individuals who undertake that program achieve reduced cholesterol levels. D is thus correctly inferable and the best answer. A cannot be correctly inferred because the statements do not establish any connection between being underweight and levels of cholesterol. Neither of B and E is inferable, since there is no indication that exercise alone is either necessary or sufficient to increase HDL levels or to decrease cholesterol levels. C is inappropriate because other methods of cholesterol reduction are not addressed.

21. When limitations were in effect on nuclear-arms testing, people tended to save more of their money, but when nuclear-arms testing increased, people tended to spend more of their money. The perceived threat of nuclear catastrophe, therefore, decreases the willingness of people to postpone consumption for the sake of saving money.

The argument above assumes that

- A. the perceived threat of nuclear catastrophe has increased over the years.
- B. most people supported the development of nuclear arms
- C. people's perception of the threat of nuclear catastrophe depends on the amount of nuclear-arms testing being done
- D. the people who saved the most money when nuclear-arms testing was limited were the ones who

supported such limitations

E. there are more consumer goods available when nuclear-arms testing increases

Explanation:

On the basis of an observed correlation between arms testing and people's tendency to save money, the argument concludes that there is a causal connection between a perception of threat and the tendency not to save. That connection cannot be made unless C, linking the perception of threat to the amount of testing being done, is assumed to be true. Therefore, C is the best answer. The conclusion does not depend on there having been an increase in the perceived threat over time or on how many people supported the development of nuclear arms. Hence, neither of A and B is assumed. The argument does not deal with those who supported arms limitations or with the availability of consumer goods. Thus, D and E are not assumed.

22. Which of the following best completes the passage below?

People buy prestige when they buy a premium product. They want to be associated with something special. Mass-marketing techniques and price-reduction strategies should not be used because _____.

- A. affluent purchasers currently represent a shrinking portion of the population of all purchasers
- B. continued sales depend directly on the maintenance of an aura of exclusivity
- C. purchasers of premium products are concerned with the quality as well as with the price of the products
- D. expansion of the market niche to include a broader spectrum of consumers will increase profits
- E. manufacturing a premium brand is not necessarily more costly than manufacturing a standard brand of the same product

Explanation:

The incomplete passage calls for an explanation of why price-reduction and mass-marketing methods should not be used for premium products. B, which states that sales of these products require that they appear special, provides such an explanation. Therefore, B is the best answer. No other choice offers an appropriate explanation. The diminishing proportion of affluent buyers cited in A argues for using price reductions to attract buyers of lesser means. C suggests that purchasers of premium products find reduced prices attractive, and it has not been established that the methods affect quality or perception of quality. D argues for, rather than against, using mass marketing. E is inappropriate, since there is no indication that manufacturing costs are relevant.

23. A cost-effective solution to the problem of airport congestion is to provide high-speed ground transportation between major cities lying 200 to 500 miles apart. The successful implementation of this plan would cost far less than expanding existing airports and would also reduce the number of airplanes clogging both airports and airways.

Which of the following, if true, could be proponents of the plan above most appropriately cite as a piece of evidence for the soundness of their plan?

- A. An effective high-speed ground-transportation system would require major repairs to many highways and mass-transit improvements.
- B. One-half of all departing flights in the nation's busiest airport head for a destination in a major

city 225 miles away.

- C. The majority of travelers departing from rural airports are flying to destinations in cities over 600 miles away.
- D. Many new airports are being built in areas that are presently served by high-speed ground-transportation systems.
- E. A large proportion of air travelers are vacationers who are taking long-distance flights.

Explanation:

The plan proposes that high-speed ground transportation would be a less expensive solution to airport congestion than would airport expansion. B indicates that between the cities to be served by the plan there is substantial air travel to which ground transportation would represent an alternative. Therefore, B is the best answer. No other choice could be cited appropriately. A and D both provide some evidence against the plan. A by emphasizing the likely costs of providing high-speed ground transportation is not by itself a solution to airport congestion. D by indicating that such an alternative is not by itself a solution to airport congestion. C and E say that there are many travelers for whom the proposed system would actually provide no alternative.

24. If there is an oil-supply disruption resulting in higher international oil prices, domestic oil prices in open-market countries such as the United States will rise as well, whether such countries import all or none of their oil.

If the statement in the passage concerning oil-supply disruptions is true, which of the following policies in an open-market nation is most likely to reduce the long-term economic impact on that nation of sharp and unexpected increases in international oil prices?

- A. Maintaining the quantity of oil imported at constant yearly levels
- B. Increasing the number of oil tankers in its fleet
- C. Suspending diplomatic relations with major oil-producing nations
- D. Decreasing oil consumption through conservation
- E. Decreasing domestic production of oil

Explanation:

If the statement about oil-supply disruption is true, domestic oil prices in an open-market country will rise when an oil-supply disruption causes increased international oil prices. A reduction in the amount of oil an open-market country consumes could reduce the economic impact of these increases. D gives a way to reduce oil consumption and is thus the best answer. A and E describe policies that could actually increase the long-term impact of increases in international oil prices, so neither of these choices is appropriate. No relationship is established between the economic impact and either the number of oil tankers or diplomatic relations in B and C, so neither of these choices is appropriate.

25. If there is an oil-supply disruption resulting in higher international oil prices, domestic oil prices in open-market countries such as the United States will rise as well, whether such countries import all or none of their oil.

Which of the following conclusions is best supported by the statement in the passage?

- A. Domestic producers of oil in open-market countries are excluded from the international oil market

when there is a disruption in the international oil supply.

- B. International oil-supply disruptions have little, if any, effect on the price of domestic oil as long as an open-market country has domestic supplies capable of meeting domestic demand.
- C. The oil market in an open-market country is actually part of the international oil market, even if most of that country's domestic oil is usually sold to consumers within its borders.
- D. Open-market countries that export little or none of their oil can maintain stable domestic oil prices even when international oil prices rise sharply.
- E. If international oil prices rise, domestic distributors of oil in open-market countries will begin to import more oil than they export.

Explanation:

If the oil market in an open-market country were independent, fluctuations in international oil prices would not affect domestic oil prices. However, if the statement about oil-supply disruption is true, it is evidence that domestic oil prices are dependent on the international market and hence that the domestic oil market is a part of the international oil market. Therefore, C is the best answer. B and D are not supported, since each contradicts the claim that an international oil-supply disruption will lead to rising oil prices in an open-market nation. Nor are A and E supported, since the statement provides information only about the effect of disruption on oil prices, not domestic producers or distributors.

SECTION III: GAME

Time ---35 Minutes

24 Questions

Questions 1 to 7

A mail-order company sells packages of jam, each containing three jars of jam. The available flavors are: grape, orange, strawberry, peach, and quince. Each jar contains exactly one flavor of jam. Each package must conform to the following rules:

Each package must contain either two or three different flavors of jam.

A package containing any orange jam must also contain at least one jar of grape.

A package containing any grape jam must also contain at least one jar of orange.

Peach jam and quince jam cannot be packed in the same package.

A package containing any strawberry jam must also contain at least one jar of quince, but a package containing quince jam need not contain strawberry jam.

1. Which of the following is an acceptable package?

- A. One jar of peach, one jar of strawberry, and one jar of orange
- B. One jar of orange, one jar of strawberry, and one jar of grape
- C. Two jars of strawberry and one jar of quince
- D. Three jars of peach
- E. Three jars of orange

Explanation:

C is the only package that conforms to all the rules.

The first answer choice can be eliminated because it specifies orange jam but no grape jam. The second answer choice can be eliminated because it specifies strawberry jam but no quince jam. The last two choices are not acceptable because they do not specify two or three flavors of jam.

2. An acceptable package CANNOT contain which of the following combinations of jams?

- A. Grape and peach
- B. Peach and quince
- C. Orange and peach
- D. Orange and grape
- E. Strawberry and quince

Explanation:

B is the correct answer because the fourth rule says that peach and quince jam cannot be packed together.

A is incorrect. Since one jar each of grape, peach, and orange makes an acceptable package, it is true that an acceptable package can contain the combination grape and peach. C is incorrect. Since one jar each of orange, peach, and grape makes an acceptable package, it is true that an acceptable package can contain the combination orange and peach. D is incorrect. Since one jar each of orange, grape, and

peach makes an acceptable package, it is true that an acceptable package can contain the combination orange and grape. E is also incorrect. Two jars of either strawberry or quince, along with one jar of the other, form an acceptable package. Thus, the two flavors together can be contained in an acceptable package.

3. Which of the following could be packed with a jar of strawberry to make an acceptable package?

- A. one jar of peach and one of orange
- B. one jar of grape and one jar of orange
- C. two jars of quince
- D. two jars of orange
- E. two jars of grape

Explanation:

The last rule states that a package containing strawberry jam must also contain quince jam. Only the third choice specifies quince jam. Thus, C is the only possible answer.

A, B, D, and E are incorrect because they do not contain quince jam.

4. A jam of which of the following must be packed with a jar of orange and a jar of peach to make an acceptable package?

- A. Grape
- B. Orange
- C. Strawberry
- D. Peach
- E. Quince

Explanation:

Orange jam must be packed with grape thereby eliminating all answer choices except the first choice, grape. Orange, grape, and peach can constitute an acceptable package. Thus, the first answer choice is the correct answer.

The other four choices are incorrect because they do not include grape jam.

5. Which of the following pairs of jars of jam could be packed with a jar of orange to make an acceptable package?

- A. One jar each of orange and strawberry
- B. One jar each of grape and strawberry
- C. Two jars of orange
- D. Two jars of grape
- E. Two jars of strawberry

Explanation:

If orange jam is put in a package, grape jam must also be included in the package. Only the second choice and the fourth choice specify any grape jam. The fourth choice is the correct answer.

A, C, and E are incorrect because they do not include grape jam. The second answer choice must be eliminated because it specifies strawberry but not quince.

6. Which of the following CANNOT be two of the three jars of jam in an acceptable package?

- A. One jar of strawberry and one jar of peach
- B. One jar of grape and one jar of orange
- C. Two jars of orange
- D. Two jars of grape
- E. Two jars of strawberry

Explanation:

Strawberry and peach cannot be packed together since strawberry requires the inclusion of quince and since each requires the exclusion of quince. The first answer choice is therefore the correct answer.

B is incorrect. A jar of grape and a jar of orange, along with a third jar of grape, a third jar of orange, or a third jar of quince would make an acceptable package. C is incorrect. Two jars of orange along with a third jar of grape would make an acceptable package. D is not correct. Two jars of grape along with a third jar of orange would make an acceptable package. The last answer choice is also incorrect. Two jars of strawberry along with a third jar of quince would make an acceptable package.

7. An acceptable package CANNOT contain two jars of

- A. orange
- B. grape
- C. quince
- D. strawberry
- E. peach

Explanation:

Each package must contain at least two kinds of jam, so the package must contain a third jar of some flavor other than the one indicated. Since only three jars make up a package, there must be only one jar of jam in addition to the first two. Two jars of peach, choice five, cannot be included in a package which meets these two requirements because strawberry, grape, or orange cannot be included in the package without another flavor, other than peach, in addition to themselves. Quince cannot be packaged with peach. Thus, E is the correct answer.

A is incorrect. Two jars of orange, along with one of grape, would make an acceptable package. B is incorrect. Two jars of grape, along with one of orange, would make an acceptable package. C is not correct. Two jars of quince, along with one of strawberry, would make an acceptable package. D is also incorrect. Two jars of strawberry, along with one of quince, would make an acceptable package.

Questions 8 to 12

A shopkeeper is preparing gift boxes of candy. Each box will contain exactly two kinds of hard candy to be selected from F, G, and H, and exactly three kinds of soft candy to be selected from P, Q, R, S, and T, with the following restrictions:

G cannot be in the same gift box as T.

P cannot be in the same gift box as S.

Q cannot be in the same gift box as T.

8. If G is included in a gift box, which of the following is a kind of candy that must also be included?

- A. F
- B. H
- C. P
- D. Q
- E. S

Explanation:

If G is in the gift box, T cannot be in the gift box. Therefore, the three kinds of soft candy must be chosen from P, Q, R, and S. P cannot be included with S, so only one of them can, and must, be included, and Q and R must both be included. The correct answer, therefore, is the fourth answer.

The first and second answer choices are incorrect. Either F or H could be the other kind of hard candy selected along with G. The third and last answer choices are also incorrect. Either P or S could be the kind of soft candy selected along with Q and R.

9. If H is NOT included in a particular gift box, any of the following kinds of candies can be included EXCEPT

- A. P
- B. Q
- C. R
- D. S
- E. T

Explanation:

If H is not included in a gift box, both F and G must be included in the box. Since G is included, T cannot be included, and so the last choice is the correct answer.

The first four answer choices are incorrect. Since the gift box must contain three of the four kinds of soft candy (P, Q, R, and S) and since P and S cannot be in the same box, the gift box contains either F, G, P, Q, and R or else F, G, Q, R, and S. Thus, P, Q, R, and S could each be in the gift box, depending on which specific choices the shopkeeper makes.

10. Which of the following kinds of candies must be included in each of the gift boxes?

- A. F
- B. G
- C. H
- D. P
- E. R

Explanation:

Three kinds of soft candy must be selected from P, Q, R, S, and T. due to the restrictions, either P or S, but not both, may be selected and either Q or T, but not both, may be selected. Thus, R must be selected to obtain three of the kinds of candy, and E is the correct response.

A, B, and C are incorrect. Two kinds of hard candy are to be selected from F, G, and H. there are no

restrictions on what combinations may be selected. Therefore, a gift box may include F and G, or F and H, or G and H. Thus, F, G, and H may or may not be included in a gift box. The fourth answer choice is incorrect. Either P or S may appear in a gift box, but P and S cannot be selected for the same gift box. The gift box containing F, G, Q, R, and S meets all the restrictions but does not include P.

11. If T is included in a gift box, the box must also include which of the following kinds candy?

- A. F and G
- B. F and H
- C. G and H
- D. P and R
- E. R and S

Explanation:

Since two kinds of hard candy must be selected from F, G, and H and since G is excluded, F and H must be in the gift box, and B is the correct answer.

If T is included in the gift box, G cannot be included. Thus, the first and third answer choices are incorrect. P and S cannot both be left out of the box, but which of them to include is the shopkeeper's free choice. Thus, the fourth and last answer choices are incorrect.

12. In a gift box that contains an acceptable assortment of candies, which of the following substitutions will always result in another acceptable assortment?

- A. P for S
- B. Q for R
- C. S for R
- D. T for P
- E. T for Q

Explanation:

P and S cannot be in the same gift box with each other. However, P and S can each be in a gift box with any of the other kinds of candy. Thus, replacing P for S in an already acceptable assortment will always result in an acceptable assortment, and A is the correct answer.

B is incorrect. Replacing R with Q will result in an unacceptable assortment if T is already in the assortment, since Q and T cannot be included in same assortment. C is incorrect. Replacing R with S will result in an unacceptable assortment if P is already in the assortment, since P and S cannot be included in the same assortment. D is also incorrect. Replacing P with T will result in an unacceptable assortment if either Q or G is already in the assortment, since T cannot be included in the same assortment with either G or Q. The last answer choice is incorrect. Replacing Q with T will result in an unacceptable assortment if G is already in the assortment, since T and G cannot be included in the same assortment.

Questions 13-17

In a certain target-shooting game, a team must shoot at seven targets. Exactly one shot is allowed for shooting at each target. The targets are numbered in consecutive order from 1 to 7. the game is being

played by a three-member team consisting of players S, T, and U, who must observe the following rules:

The seven targets must be shot at in consecutive order, starting with target 1.

Both S and U can shoot at odd-numbered and even-numbered targets.

T cannot shoot at even-numbered targets.

S and T must each shoot at no fewer than two targets.

U must take exactly one shot.

S cannot take three consecutive shots.

13. If all team members take exactly their required minimum number of shots before any team member takes an additional shot, then the next target to be shot at in the game after the required minimum of shots must be target

- A. 3
- B. 4
- C. 5
- D. 6
- E. 7

Explanation:

The minimum numbers of shots S, T, and U take are two, two, and one, respectively. Since the targets are shot at in consecutive order, the target to be shot at after the required minimum of shots is target 6. Thus, D is the correct answer.

14. If T takes the same total number of shots during the game as one other team member, then which of the following must be true?

- A. S must shoot at even-numbered targets only.
- B. T must shoot at all of the odd-numbered targets.
- C. U must shoot at an odd-numbered target.
- D. S and U must each shoot at exactly one odd-numbered target.
- E. Either S or U, but not both, must shoot at exactly one odd-numbered target.

Explanation:

Since the game consists of seven shots and U takes exactly one shot, the information given entails that S and T must each take three shots. T shoots at only odd targets, so T will shoot at three of the four odd targets leaving one odd target for another team member. Thus, either S or U, but not both, must shoot at exactly one odd-numbered target, and the correct response is the last answer choice.

A is incorrect. S could shoot at even-numbered targets only, but could also shoot at two even targets and one odd target. B is also incorrect. T will have three shots, but there are four odd-numbered targets. Therefore, T cannot shoot at all four of the odd-numbered targets. The third answer choice is incorrect. U will shoot at an odd-numbered target if S shoots at only even-numbered targets. But U will shoot at an even-numbered target if S shoots at two even-numbered targets and one odd-numbered target. The fourth answer choice is incorrect. Since T shoots at three of the four odd-numbered targets, only one odd-numbered target remains. Exactly one shot is allowed per target, so either S or U must shoot at

exactly one odd-numbered target, but not both.

15. If all odd-numbered but no even-numbered targets are hit during the game, then all of the following are possible total numbers of hits for each player at the end of the game EXCEPT

- A. $S=2; T=1; U=1$
- B. $S=1; T=2; U=1$
- C. $S=0; T=3; U=1$
- D. $S=2; T=2; U=0$
- E. $S=1; T=3; U=0$

Explanation:

T must shoot at two odd-numbered targets at least, but can shoot at three or all four of the odd-numbered targets. Since all the odd-numbered targets are hit, T can have two, three, or four hits. Since T CANNOT hit only one target, A is the correct answer.

B, C, D, and E are incorrect. Since U takes exactly one shot and can shoot at either an even- or odd-numbered target, possible hits for U are zero or one. Since, at the very least, T must shoot at two of the odd-numbered targets, S can shoot, at most, at two of the odd-numbered targets. Thus, S can hit zero, one, or two targets. In combination with the previously given Explanation of T's possible hits and the fact that there are a total of 4 hits in the game, this means that these choices all represent possible hits for each of players.

16. If, during the game, S and T each hit exactly half of the targets that each shoots at, then the lowest possible total number of hits that the team could make in the game is

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5

Explanation:

In total, S and T must shoot at six targets since U takes one shot. If S and T each hit exactly half of their targets, then one of S or T must shoot at four targets, and the other must shoot at two targets. Thus, the minimum total number of hits for the team is three, and C is the correct answer.

17. There is one and only one of the seven targets that U can shoot at during the game if the team agrees in advance that

- A. S will shoot at exactly four targets
- B. S will shoot at targets 2, 4, and 6 only
- C. T will take exactly three shots
- D. T will shoot at targets 1 and 7 only
- E. T will shoot at targets 3 and 5 only

Explanation:

If T shoots at targets 1 and 7 only, then S must shoot at four of the remaining targets. (U shoots at

exactly one target.) Since S cannot take three consecutive shots, S must shoot at targets 2, 3, 5, and 6, and U must shoot at target 4. therefore, D is the correct response.

A is incorrect. If it is agreed that S will shoot at exactly four targets, the following are some of the possible sequences of team members shooting at targets 1 through 7 respectively:

T S S U S S T

U S T S T S S

S S T S T U S

Since U can shoot at one of several targets under this condition, A is not the correct answer.

B is also incorrect. If S shoots at targets 2, 4, and 6 only, some of the possible sequences of team members shooting at targets 1 through 7 respectively are as follows:

T S T S T S U

U S T S T S T

T S U S T S T

Since U can shoot at one of several targets under this condition, B is not the correct answer.

The third answer choice is incorrect. If T takes exactly three shots, some of the possible sequences of team members shooting at targets 1 through 7, respectively, are as follows:

T S T S T S U

U S T S T S T

T U S S T S T

Since U can shoot at one of several targets under this condition, C is not the correct answer.

The last answer choice is incorrect. If T shoots at targets 3 and 5 only, some of the possible sequences of team members shooting at targets 1 through 7, respectively, are as follows:

S S T S T S U

S S T U T S S

S U T S T S S

Since U can shoot at one of several targets under this condition, E is not the correct answer.

Questions 18 to 21

At a cooking school, six classes—F, G, H, J, K, and L—are to be scheduled to meet for one demonstration each during an all-day seminar. Each demonstration is 45 minutes long, and the only possible starting times for the class meetings are 9 a.m., 10 a.m., 11 a.m., 2 p.m., and 4 p.m. The schedule of class meetings is to be established in accordance with the following conditions:

F cannot meet at the same time that G meets.

H must meet earlier in the day than F.

J must meet in the afternoon.

None of the other classes can meet at the time that K meets.

L can meet in the morning or in the afternoon.

18. Any of the following could meet at 4 p.m. EXCEPT

A. F

B. G

- C. H
- D. J
- E. K

Explanation:

Four p.m. is the latest possible meeting time. Each of the classes F, G, J, or K could meet at 4 p.m. Therefore, C is the correct answer. Since H must meet earlier in the day than F, H cannot meet at 4 p.m.

19. If J meets at some time before K meets, which of the following could be true?

- A. F meets at some time after J meets
- B. G meets at 4 p.m.
- C. K meets at 2 p.m.
- D. L meets at 2 p.m.
- E. L meets at some time after K meets

Explanation:

L can meet at 2 p.m., when J meets; therefore, D is the correct answer.

If J meets sometime before K meets, then, since J must meet in the afternoon, J must meet at 2 p.m. and K must meet at 4 p.m. Therefore, C is incorrect. Since no class meets when K meets and 4 p.m. is the latest possible meeting time, A, B, and E ruled out.

20. If F meets at 10 a.m. and none of the classes meets at 4 p.m., which of the following must be true?

- A. H meets at some time before L meets.
- B. H meets at some time before K meets.
- C. K meets at some time before G meets.
- D. L meets at the same time that G meets.
- E. L meets at the same time that J meets.

Explanation:

Since H must meet earlier in the day than F, H must meet at 9 a.m. if F meets at 10 a.m. Since J must meet in the afternoon, J must meet at 2 p.m. if no class meets at 4 p.m. Since no other class can meet when K meets, and other classes are meeting at 9 a.m., 10 a.m., and 2 p.m., K must meet at 11 a.m. Thus, H must meet before K meets, and B is the correct answer.

A is incorrect. Both H and L can meet at 9 a.m. without violating any of the conditions. C is not correct. G can meet at 9 a.m. and K can meet at 11 a.m. without violating any of the conditions. D is not the correct answer. L can meet at 2 p.m. and G can meet at 9 a.m. without violating any of the conditions. The last answer choice is incorrect. L can meet at 9 a.m. and J can meet at 2 p.m. without violating any of the conditions.

21. If H meets at 2 p.m., which of the following must be true?

- A. F meets later in the day than L.
- B. G meets at 2 p.m.
- C. G meets in the morning.

- D. J meets at 2 p.m.
- E. K meets in the morning.

Explanation:

Since H must meet earlier than F, F must meet at 4 p.m. if H meets at 2 p.m. Then, since no other class can meet when K meets, K cannot meet later than 11 a.m. Therefore, E is the correct answer.

A is not correct. F and L can both meet at 4 p.m. without violating any of the conditions. B is incorrect. Besides 2 p.m., G can meet at 9 a.m., 10 a.m., or 11 a.m. without violating any of the conditions. C is not the correct answer. Besides the morning, G can meet at 2 p.m. without violating any of the conditions. D is also not the correct answer choice. Besides 2 p.m., J can meet at 4 p.m. without violating any of the conditions.

Questions 22 to 24

Six campers—Alice, Betty, Carmen, Dora, Gina, and Harriet—are arranging a dishwashing schedule for the six days of their camping trip so that each of them will wash dishes on only one day.

Betty washes either on day 2 or on day 6.

If Alice washes on day 1, Carmen washes on day 4; Carmen does not wash on day 4 unless Alice washes on day 1.

If Alice washes on day 1, Harriet washes on day 5; Harriet does not wash on day 5 unless Alice washes on day 1.

If Gina does not wash on day 3, Alice washes on day 3.

If Alice washes on day 4, Dora washes on day 5.

If Betty washes on day 2, Gina washes on day 5.

If Harriet washes on day 6, Dora washes on day 4.

22. Which of the following is an acceptable order in which the campers can wash dishes from the first to the last day?

- A. Dora, Betty, Alice, Gina, Carmen, Harriet
- B. Betty, Alice, Harriet, Carmen, Gina, Dora
- C. Harriet, Gina, Betty, Carmen, Dora, Alice
- D. Carmen, Betty, Alice, Dora, Gina, Harriet
- E. Alice, Betty, Dora; Carmen, Gina, Harriet

Explanation:

D meets all the requirements and is the correct answer.

Betty washes dishes on either the second or the sixth day, so the second and third answer choices are not acceptable orders. If Betty washes dishes on the second day, Gina washes dishes on the fifth day, so the first choice is not an acceptable order. If Alice washes dishes on the first day, then Harriet washes dishes on the fifth day, so the last answer choice is not an acceptable order.

23. If Dora washes on day 6, on which day does Carmen wash?

- A. 1
- B. 2

- C. 3
- D. 4
- E. 5

Explanation:

If Dora washes dishes on day 6, Betty must wash dishes on day 2. Since Betty washes dishes on day 2, Gina must wash dishes on day 5. Since Gina washes dishes on day 5, she will not wash dishes on day 3, so Alice must wash dishes on day 3. Only two days remain unassigned – 1 and 4. Carmen can only wash dishes on day 4 if Alice washes dishes on day 1. Therefore, Carmen washes dishes on day 1, and A is the correct answer. Carmen can only wash dishes on day 4 if Alice washes dishes on day 1. Therefore, Carmen washes dishes on day 1, and A is the correct answer.

24. If Alice washes on day 1, who washes on day 2?

- A. Betty
- B. Carmen
- C. Dora
- D. Gina
- E. Harriet

Explanation:

If Alice washes dishes on day 1, Carmen must wash dishes on day 4 and Harriet must wash dishes on day 5. Gina must wash dishes on day 3, since Alice is assigned to day 1 and, therefore, cannot wash dishes on day 3. Only days 2 and 6 remain unassigned. Betty cannot be assigned to day 2, since that would require Gina to wash dishes on day 5. That leaves Dora to wash dishes on the second day, so the third answer choice is the correct answer.

SECTION IV: ARGUMENT

Time ---35 Minutes

25 Questions

1. The average normal infant born in the United States weighs between twelve and fourteen pounds at the age of three months. Therefore, if a three-month-old child weighs only ten pounds, its weight gain has been below the United States average.

Which of the following indicates a flaw in the reasoning above?

- A. Weight is only one measure of normal infant development.
- B. Some three-month-old children weigh as much as seventeen pounds.
- C. It is possible for a normal child to weigh ten pounds at birth.
- D. The phrase “below average” does not necessarily mean insufficient.
- E. Average weight gain is not the same as average weight.

Explanation:

The evidence on which the conclusion is based concerns only average weight, but the conclusion concerns average weight gain. Because there is not necessarily a connection between an absolute measurement-such as weight-and a rate of increase-such as weight gain-this argument is flawed. The relevant reasoning error is described in E, which is the best answer. Neither of A and D identifies a reasoning error in the passage, since the passage makes no claim that weight is the only relevant measure of infant development in general, and no claim about sufficiency. B and C are consistent with the claims in the passage, and neither identifies a flaw in the argument.

2. Red blood cells in which the malarial-fever parasite resides are eliminated from a person’s body after 120 days. Because the parasite cannot travel to a new generation of red blood cells, any fever that develops in a person more than 120 days after that person has moved to a malaria-free region is not due to the malarial parasite.

Which of the following, if true, most seriously weakens the conclusion above?

- A. The fever caused by the malarial parasite may resemble the fever caused by flu viruses.
- B. The anopheles mosquito, which is the principal insect carrier of the malarial parasite, has been eradicated in many parts of the world.
- C. Many malarial symptoms other than the fever, which can be suppressed with anti-malarial medication, can reappear within 120 days after the medication is discontinued.
- D. In some cases, the parasite that causes malarial fever travels to cells of the spleen, which are less frequently eliminated from a person’s body than are red blood cells.
- E. In any region infested with malaria-carrying mosquitoes, there are individuals who appear to be immune to malaria.

Explanation:

The passage concludes that, because the malarial parasite cannot reside in red blood cells for more than 120 days, the malarial parasite cannot cause fever more than 120 days after infection. However, according to D, there is a site in the body where the parasite could reside for more than 120 days after

infection. Therefore, D weakens the conclusion and is the best answer. The resemblance between malarial-fever symptoms and those of other diseases, the existence of other malarial symptoms, and the possibility of immunity to malaria are irrelevant to the issue of the conditions under which malarial fever can occur. B provides confirmation for the existence of malaria-free regions but does not otherwise bear on the conclusion.

3. Fact 1: Television advertising is becoming less effective: the proportion of brand names promoted on television that viewers of the advertising can recall is slowly decreasing.

Fact 2: Television viewers recall commercials aired first or last in a cluster of consecutive commercials far better than they recall commercials aired somewhere in the middle.

Fact 2 would be most likely to contribute to an explanation of fact 1 if which of the following were also true?

- A. The average television viewer currently recalls fewer than half the brand names promoted in commercials he or she saw.
- B. The total time allotted to the average cluster of consecutive television commercials is decreasing.
- C. The average number of hours per day that people spend watching television is decreasing.
- D. The average number of clusters of consecutive commercials per hour of television is increasing.
- E. The average number of television commercials in a cluster of consecutive commercials is increasing.

Explanation:

Because E indicates that the number of commercials in a cluster is increasing, it entails that proportionally more commercials are aired in intermediate positions. Hence, E helps fact 2 explain fact 1 by showing that increasingly more commercials are aired in positions in which viewers find them difficult to recall. E is the best answer. A testifies to the ineffectiveness of television advertising but does not help fact 2 explain fact 1. B indicates that fact 2 contradicts rather than explains fact 1, since it suggests that the number of commercials per cluster is decreasing. C and D help to explain fact 1-by describing a change in viewing habits and a change in programming-but neither relates fact 2 to fact 1.

4. The number of people diagnosed as having a certain intestinal disease has dropped significantly in a rural county this year, as compared to last year. Health officials attribute this decrease entirely to improved sanitary conditions at water-treatment plants, which made for cleaner water this year and thus reduced the incidence of the disease.

Which of the following, if true, would most seriously weaken the health officials' explanation for the lower incidence of the disease?

- A. Many new water-treatment plants have been built in the last five years in the rural county.
- B. Bottled spring water has not been consumed in significantly different quantities by people diagnosed as having the intestinal disease, as compared to people who did not contract the disease.
- C. Because of a new diagnostic technique, many people who until this year would have been diagnosed as having the intestinal disease are now correctly diagnosed as suffering from intestinal ulcers.

- D. Because of medical advances this year, far fewer people who contract the intestinal disease will develop severe cases of the disease.
- E. The water in the rural county was brought up to the sanitary standards of the water in neighboring counties ten years ago.

Explanation:

The health officials' explanation assumes that the decrease in the number of people diagnosed with the disease accurately reflects a diminution in cases of the disease. By pointing out that this assumption is false, C undermines the officials' explanation and thus is the best answer. Since A supports the view that sanitary conditions have been improving, it tends to support the officials' explanation. B also tends to support the officials' explanation, because it eliminates a factor that might have differentiated between those contracting and those not contracting the disease and thus rules out an alternative explanation. The reduction of the severity of the diagnosed cases does not bear on the officials' explanation. So D is not correct. Since the standards in neighboring counties might themselves have been inadequate, E does not weaken the officials' explanation.

5. The price the government pays for standard weapons purchased from military contractors is determined by a pricing method called "historical costing." Historical costing allows contractors to protect their profits by adding a percentage increase, based on the current rate of inflation, to the previous year's contractual price.

Which of the following statements, if true, is the best basis for a criticism of historical costing as an economically sound pricing method for military contracts?

- A. The government might continue to pay for past inefficient use of funds.
- B. The rate of inflation has varied considerably over the past twenty years.
- C. The contractual price will be greatly affected by the cost of materials used for the products.
- D. Many taxpayers question the amount of money the government spends on military contracts.
- E. The pricing method based on historical costing might not encourage the development of innovative weapons.

Explanation:

If the original contractual price for the weapons purchased incorporated an inefficient use of funds, then, since historical costing merely adds to the original price, it preserves these inefficiencies. An economically sound pricing method should at least allow the possibility of reductions in price as such inefficiencies are removed. Hence, A is the best answer. Because historical costing responds to inflation, B and C are consistent with the economic soundness of historical costing—the rate of inflation and costs that are reflected in inflation. D offers no grounds for questioning the economic soundness of historical costing in particular. Historical costing applies to standard weapons only, not to the innovative weapons that are mentioned in E.

6. Some who favor putting governmental enterprises into private hands suggest that conservation objectives would in general be better served if private environmental groups were put in charge of operating and financing the national park system, which is now run by the government.

Which of the following, assuming that it is a realistic possibility, argues most strongly against the

suggestion above?

- A. Those seeking to abolish all restrictions on exploiting the natural resources of the parks might join the private environmental groups as members and eventually take over their leadership.
- B. Private environmental groups might not always agree on the best ways to achieve conservation objectives.
- C. If they wished to extend the park system, the private environmental groups might have to seek contributions from major donors and general public.
- D. There might be competition among private environmental groups for control of certain park areas.
- E. Some endangered species, such as the California condor, might die out despite the best efforts of the private environmental groups, even if those groups are not hampered by insufficient resources.

Explanation:

If those seeking to abolish restrictions on exploiting the natural resources of the parks assumed the leadership of a group that was placed in charge of operating the park system, conservation objectives would not be better served. A suggests that such a scenario might result from the proposed policy and is thus the best answer. B indicates the potential for disagreement among various private environmental groups, but it does not suggest that disagreements could not be resolved. C, D and E list problems that might confront private environmental groups in charge of parks, but they do not give reason to believe that such groups would not be better able to pursue conservation objectives than is the current administration of the park system.

7. A recent spate of launching and operating mishaps with television satellites led to a corresponding surge in claims against companies underwriting satellite insurance. As a result, insurance premiums shot up, making satellites more expensive to launch and operate. This, in turn, has added to the pressure to squeeze more performance out of currently operating satellites.

Which of the following, if true, taken together with the information above, best supports the conclusion that the cost of television satellites will continue to increase?

- A. Since the risk to insurers of satellites is spread over relatively few units, insurance premiums are necessarily very high.
- B. When satellites reach orbit and then fail, the causes of failure are generally impossible to pinpoint with confidence.
- C. The greater the performance demands placed on satellites, the more frequently those satellites break down.
- D. Most satellites are produced in such small numbers that no economies of scale can be realized.
- E. Since many satellites are built by unwieldy international consortia, inefficiencies are inevitable.

Explanation:

According to the passage, satellite mishaps caused a surge in insurance claims, which, in turn, caused increased insurance premiums. Higher premiums made the satellites more costly, resulting in increased performance demands. If C is true, the greater demands on performance will lead to further increases in costs by increasing the number of mishaps, and thus pushing insurance premiums still higher. Thus, C is the best answer. A, D and E all describe factors relevant to costs, but there is no reason to think that the situation described in the passage will cause the costs resulting from these

factors to increase. Similarly, the impossibility of pinpointing the cause of failure, mentioned in B, is consistent with the cost of satellites remaining stable.

8. Rural households have more purchasing power than do urban or suburban households at the same income level, since some of the income urban and suburban households use for food and shelter can be used by rural households for other needs.

Which of the following inferences is best supported by the statement made above?

- A. The average rural household includes more people than does the average urban or suburban household.
- B. Rural households have lower food and housing costs than do either urban or suburban households.
- C. Suburban households generally have more purchasing power than do either rural or urban households.
- D. The median income of urban and suburban households is generally higher than that of rural households.
- E. All three types of households spend more of their income on food and housing than on all other purchases combined.

Explanation:

If the greater purchasing power of rural households results from their having more money left over after meeting basic expenses, it follows, as B says, that those expenses are lower for those households than they are for suburban or urban households at the same income level. Consequently, B is the best answer. A is not a supported inference, since there is no information to suggest that larger households are not more likely to have either more purchasing power or lower food and shelter expenses. C and D are not supported, since the passage compares only households that share the same income level. Because the relative amounts spent on different types of expenditures are not specified for any of the categories of households, E is not supported.

9. In 1985 state border colleges in Texas lost the enrollment of more than half, on average, of the Mexican nationals they had previously served each year. Teaching faculties have alleged that this extreme drop resulted from a rise in tuition for international and out-of-state students from \$ 40 to \$ 120 per credit hour.

Which of the following, if feasible, offers the best prospects for alleviating the problem of the drop in enrollment of Mexican nationals as the teaching faculties assessed it?

- A. Providing grants-in-aid to Mexican nationals to study in Mexican universities.
- B. Allowing Mexican nationals to study in Texas border colleges and to pay in-state tuition rates, which are the same as the previous international rate
- C. Reemphasizing the goals and mission of the Texas state border colleges as serving both in-state students and Mexican nationals
- D. Increasing the financial resources of Texas colleges by raising the tuition for in-state students attending state institutions
- E. Offering career counseling for those Mexican nationals who graduate from state border colleges and intend to return to Mexico

Explanation:

The teaching faculties attribute the drop in enrollment of Mexican nationals to an increase in tuition costs. If the faculties are correct, reducing these costs should halt the drop in enrollment. B offers a plan for reducing these costs and so is the best answer. None of C, D and E offers a plan that would reduce the costs taken to be responsible for the drop in enrollment. Nor does A offer such a plan: because the problem to be addressed is a drop in enrollment of Mexican nationals at Texas border colleges, providing financial incentive for Mexican nationals to study at Mexican universities, as A suggests, would offer no prospect of alleviating the problem.

10. Affirmative action is good business. So asserted the National Association of Manufacturers while urging retention of an executive order requiring some federal contractors to set numerical goals for hiring minorities and women. "Diversity in work force participation has produced new ideas in management, product development, and marketing," the association claimed.

The association's argument as it is presented in the passage above would be most strengthened if which of the following were true?

- A. The percentage of minority and women workers in business has increased more slowly than many minority and women's groups would prefer.
- B. Those businesses with the highest percentages of minority and women workers are those that have been the most innovative and profitable.
- C. Disposable income has been rising as fast among minorities and women as among the population as a whole.
- D. The biggest growth in sales in the manufacturing sector has come in industries that market the most innovative products.
- E. Recent improvements in management practices have allowed many manufacturers to experience enormous gains in worker productivity.

Explanation:

If, as B says, businesses with the highest percentages of minorities and women have been the most profitable, there is reason to believe that, because it increases the level of participation of women and minorities in the work force, affirmative action is good business. Thus, B is the best answer. A suggests that minority and women's groups have reason to support affirmative action, but it does not indicate that affirmative action is good business. Because there is no indication that the improvement in disposable income noted in C is due to affirmative action, C does not strengthen the argument given for affirmative action. D and E address growth in sales and improvements in management; neither, however, asserts that these benefits are due to affirmative action.

11. If the airspace around centrally located airports were restricted to commercial airliners and only those private planes equipped with radar, most of the private-plane traffic would be forced to sue outlying airfields. Such a reduction in the amount of private-plane traffic would reduce the risk of midair collision around the centrally located airports.

The conclusion drawn in the first sentence depends on which of the following assumptions?

- A. Outlying airfields would be as convenient as centrally located airports for most pilots of private

planes.

- B. Most outlying airfields are not equipped to handle commercial-airline traffic.
- C. Most private planes that use centrally located airports are not equipped with radar.
- D. Commercial airliners are at greater risk of becoming involved in midair collisions than are private planes.
- E. A reduction in the risk of midair collision would eventually lead to increases in commercial-airline traffic.

Explanation:

The first sentence concludes that prohibiting private planes that are not radar-equipped from centrally located airports would force most private planes away from those airports. This conclusion cannot be true unless it is true that, as C says, most private planes that use these airports are not radar-equipped. Therefore, the first sentence's conclusion assumes this choice, which is thus the best answer. The conclusion need not assume that outlying airfields are convenient for private planes (A), since the restrictions would give planes that are not radar equipped no choice. The conclusion concerns only how the radar requirement would affect the volume of private plane traffic, so B, D and E, which deal with commercial planes and with risk of midair collision, need not be assumed.

12. If the airspace around centrally located airports were restricted to commercial airliners and only those private planes equipped with radar, most of the private-plane traffic would be forced to use outlying airfields. Such a reduction in the amount of private-plane traffic would reduce the risk of midair collision around the centrally located airports.

Which of the following, if true, would most strengthen the conclusion drawn in the second sentence?

- A. Commercial airliners are already required by law to be equipped with extremely sophisticated radar systems.
- B. Centrally located airports are experiencing overcrowded airspace primarily because of sharp increases in commercial-airline traffic.
- C. Many pilots of private planes would rather buy radar equipment than be excluded from centrally located airports.
- D. The number of midair collisions that occur near centrally located airports has decreased in recent years.
- E. Private planes not equipped with radar systems cause a disproportionately large number of midair collisions around centrally located airports.

Explanation:

The second sentence concludes that the reduction described in the first sentence would reduce the risk of midair collisions around centrally located airports. According to E, such a reduction would remove precisely the kind of plane that causes a disproportionate number of midair collisions. Thus, E is the best answer. Because A does not address the question of whether reducing private-plane traffic would reduce the risk of midair collisions, it is inappropriate. B and C concern the question of whether or not the proposed restrictions would reduce plane traffic, but not the question of whether any resulting reductions would reduce the risk of midair collisions. That the number of midair collisions has recently decreased is irrelevant to whether the proposed reduction would further reduce collisions, so

D is inappropriate.

13. Which of the following best completes the passage below?

Established companies concentrate on defending what they already have. Consequently, they tend not to be innovative themselves and tend to underestimate the effects of the innovations of others. The clearest example of this defensive strategy is the fact that_____.

- A. ballpoint pens and soft-tip markers have eliminated the traditional market for fountain pens, clearing the way for the marketing of fountain pens as luxury or prestige items
- B. a highly successful automobile was introduced by the same company that had earlier introduced a model that had been a dismal failure
- C. a once-successful manufacturer of slide rules reacted to the introduction of electronic calculators by trying to make better slide rules
- D. one of the first models of modern accounting machines, designed for use in the banking industry, was purchased by a public library as well as by banks
- E. the inventor of a commonly used anesthetic did not intend the product to be used by dentists, who currently account for almost the entire market for that drug.

Explanation:

C is a clear example of a defensive, non-innovative strategy that underestimates the effects of others' innovations: the slide-rule manufacturer acted as though any advantages offered by the newer and fundamentally different technology of a competing product, the electronic calculator, could be matched by improving the older, more familiar product. C is thus the best answer. A is not an example of the defensive strategy; it presents a case in which innovative products displaces an older product from its traditional market but in so doing made possible a new marketing strategy for the older product. B is not clearly an example of the defensive strategy since it does not describe a response to the innovations of others. D and E are cases of new products finding unintended users, not of responses to innovations of others, so they are not examples of the defensive strategy described.

14. Most archaeologists have held that people first reached the Americas less than 20,000 years ago by crossing a land bridge into North America. But recent discoveries of human shelters in South America dating from 32,000 years ago have led researchers to speculate that people arrived in South America first, after voyaging across the Pacific, and then spread northward.

Which of the following, if it were discovered, would be pertinent evidence against the speculation above?

- A. A rock shelter near Pittsburgh, Pennsylvania, contains evidence of use by human beings 19,000 years ago.
- B. Some North American sites of human habitation predate any sites found in South America.
- C. The climate is warmer at the 32,000-year-old South American site than at the oldest known North American site.
- D. The site in South America that was occupied 32,000 years ago was continuously occupied until 6,000 years ago.
- E. The last Ice Age, between 11,500 and 20,000 years ago, considerably lowered worldwide sea

levels.

Explanation:

The reasoning behind the researchers' speculation that people first arrived in South America is that there is no evidence of North American sites that predate the human shelters discovered in South America. If it were discovered that, as B states, some North American sites predate those in South America, the reasoning behind the speculation would no longer hold. Thus, B is the best answer. The facts related in A and E both involve time periods occurring after those discussed in the passage, and so create no conflict with the speculation. Although C and D describe discoveries about the South American site, neither the relative climates nor the duration of occupation mentioned provides evidence against the speculation.

15. In Asia, where palm trees are non-native, the trees' flowers have traditionally been pollinated by hand, which has kept palm fruit productivity unnaturally low. When weevils known to be efficient pollinators of palm flowers were introduced into Asia in 1980, palm fruit productivity increased-by up to fifty percent in some areas-but then decreased sharply in 1984.

Which of the following statements, if true, would best explain the 1984 decrease in productivity?

- A. Prices for palm fruit fell between 1980 and 1984 following the rise in production and a concurrent fall in demand.
- B. Imported trees are often more productive than native trees because the imported ones have left behind their pests and diseases in their native lands.
- C. Rapid increases in productivity tend to deplete trees of nutrients needed for the development of the fruit-producing female flowers.
- D. The weevil population in Asia remained at approximately the same level between 1980 and 1984.
- E. Prior to 1980 another species of insect pollinated the Asian palm trees, but not as efficiently as the species of weevil that was introduced in 1980.

Explanation:

If C is true, the rapid increase in productivity among Asian palm trees after 1980 probably depleted nutrients needed for the development of fruit-producing flowers. Thus, C explains why the palms' productivity could subsequently decline, and is the best answer. A relates a drop in the price of palm fruit to a rise in production and a fall in demand, but it does not explain the subsequent drop in the trees' productivity. B gives no reason for the decrease in productivity of the trees introduced to Asia. D does not explain the decrease in productivity, since the stability of the weevil population described would support stability of palm fruit productivity between 1980 and 1984 rather than a decrease. Because E describes the pollination of the trees prior to 1980, it cannot explain a change occurring in 1984.

16. Since the mayor's publicity campaign for Greenville's bus service began six months ago, morning automobile traffic into the midtown area of the city has decreased seven percent. During the same period, there has been an equivalent rise in the number of persons riding buses into the midtown area. Obviously, the mayor's publicity campaign has convinced many people to leave their cars at home and ride the bus to work.

Which of the following, if true, casts the most serious doubt on the conclusion drawn above?

- A. Fares for all bus routes in Greenville have risen an average of five percent during the past six months.
- B. The mayor of Greenville rides the bus to City Hall in the city's midtown area.
- C. Road reconstruction has greatly reduced the number of lanes available to commuters in major streets leading to the midtown area during the past six months.
- D. The number of buses entering the midtown area of Greenville during the morning hours is exactly the same now as it was one year ago.
- E. Surveys show that longtime bus riders are no more satisfied with the Greenville bus service than they were before the mayor's publicity campaign began.

Explanation:

The passage concludes that the mayor's publicity campaign has persuaded people to ride the bus to work instead of driving, and it cites as evidence the decreased morning automobile traffic and increased bus ridership into the midtown area. But the road reconstruction described in C provides an alternative explanation for this evidence, so C is the best answer. A eliminates decreased fares as a possible explanation for the increased ridership, so it supports rather than casts doubt on the conclusion. The fact that the mayor rides the bus, cited in B, may contribute to the effectiveness of the publicity campaign, but it is irrelevant to assessing whether the campaign caused the increased ridership. D eliminates a possible explanation—that the increased ridership is a result of extra buses—and thus supports the conclusion rather than casts doubt on it. E eliminates a possible explanation—that the increased ridership is a result of improved service—and thus supports the conclusion rather than casts doubt on it.

17. In the aftermath of a worldwide stock-market crash, Country T claimed that the severity of the stock-market crash it experienced resulted from the accelerated process of denationalization many of its industries underwent shortly before the crash.

Which of the following, if it could be carried out, would be most useful in an evaluation of Country T's assessment of the causes of the severity of its stock-market crash?

- A. calculating the average loss experienced by individual traders in Country T during the crash
- B. using economic theory to predict the most likely date of the next crash in Country T
- C. comparing the total number of shares sold during the worst days of the crash in Country T to the total number of shares sold in Country T just prior to the crash
- D. comparing the severity of the crash in Country T to the severity of the crash in countries otherwise economically similar to Country T that have not experienced recent denationalization
- E. comparing the long-term effects of the crash on the purchasing power of the currency of Country T to the immediate, more severe short-term effects of the crash on the purchasing power of the currency of Country T

Explanation:

The comparison suggested in D would be useful in evaluating Country T's assessment of the cause of the severity of its stock market crash. If the severity of the crash is at least as great in the countries that are, except for recent nationalization, economically similar to Country T, Country T's assessment is

undermined. if the severity of the crash is not as great in these countries as in Country T, however, the assessment is supported. Thus, D is the best answer. A, C and E are not good answers because each concerns only determining the severity of the crash in Country T, not assessing a hypothesis about the causes of the crash. The date of Country T's next crash is not relevant to any hypothesis about what caused its latest crash to be so severe; thus B is inappropriate.

18. With the emergence of biotechnology companies, it was feared that they would impose silence about proprietary results on their in-house researchers and their academic consultants. This constraint, in turn, would slow the development of biological science and engineering.

Which of the following, if true, would tend to weaken most seriously the prediction of scientific secrecy described above?

- A. Biotechnological research funded by industry has reached some conclusions that are of major scientific importance.
- B. When the results of scientific research are kept secret, independent researchers are unable to build on those results.
- C. Since the research priorities of biotechnology companies are not the same as those of academic institutions, the financial support of research by such companies distorts the research agenda.
- D. To enhance the companies' standing in the scientific community, the biotechnology companies encourage employees to publish their results, especially results that are important.
- E. Biotechnology companies devote some of their research resources to problems that are of fundamental scientific importance and that are not expected to produce immediate practical applications.

Explanation:

D weakens the prediction of secrecy by establishing that biotechnology companies have a strong motive to encourage their researchers to publicize results. Therefore, it is the best answer. A and B support the argument that developments in biological science and engineering would be slowed if the prediction of secrecy were fulfilled, but do not provide any reason to expect that the prediction will not be fulfilled. The distortion of the research agenda asserted in C is not relevant to the question of scientific secrecy. E, which says that biotechnology companies devote some resources to fundamental problems without immediate practical benefits, is merely consistent with that argument and so does not weaken the prediction.

19. Some people have questioned the judge's objectivity in cases of sex discrimination against women. But the record shows that in sixty percent of such cases, the judge has decided in favor of the women. This record demonstrates that the judge has not discriminated against women in cases of sex discrimination against women.

The argument above is flawed in that it ignores the possibility that

- A. a large number of the judge's cases arose out of allegations of sex discrimination against women
- B. many judges find it difficult to be objective in cases of sex discrimination against women
- C. the judge is biased against women defendants or plaintiffs in cases that do not involve sex discrimination

- D. the majority of the cases of sex discrimination against women that have reached the judge's court have been appealed from a lower court
- E. the evidence shows that the women should have won in more than sixty percent of the judge's cases involving sex discrimination against women

Explanation:

The flaw in the argument is that it assumes erroneously that a majority of decisions favorable to women in sex discrimination cases demonstrates absence of discriminatory behavior against women on the part of the judge who made those decisions. E exposes this flaw by pointing out that the judge may well have failed to decide in favor of women in cases where evidence shows that the women should have won. Therefore, it is the best answer. A and D have no bearing on the reasoning of the argument, because the origin of the cases is not at issue in the argument. B and C introduce considerations with no bearing on the reasoning of the argument. Because the argument concerns a particular judge, and cases of a particular type, B and C are inappropriate.

20. The tobacco industry is still profitable and projections are that it will remain so. In the United States this year, the total amount of tobacco sold by tobacco-farmers has increased, even though the number of adults who smoke has decreased.

Each of the following, if true, could explain the simultaneous increase in tobacco sales and decrease in the number of adults who smoke EXCEPT:

- A. During this year, the number of women who have begun to smoke is greater than the number of men who have quit smoking
- B. The number of teen-age children who have begun to smoke this year is greater than the number of adults who have quit smoking during the same period
- C. During this year, the number of nonsmokers who have begun to use chewing tobacco or snuff is greater than the number of people who have quit smoking
- D. The people who have continued to smoke consume more tobacco per person than they did in the past
- E. More of the cigarettes made in the United States this year were exported to other countries than was the case last year.

Explanation:

If the number of men beginning to smoke and the number of women quitting smoking during the year are equal, A would result in an increase, not a decrease, in the number of adults who smoke. Hence, A does NOT explain the facts cited and is the best answer. Given the decrease in the number of adults who smoke, the increase in tobacco sales could be explained by a proportionally greater increase in the non-adults who smoke or the nonsmokers who use tobacco. An increase in total tobacco use by smokers or in the sales in the United States tobacco abroad would also explain the facts cited. Thus, because B, C, D and E could explain the facts cited, none of them can be the best answer.

21. Kale has more nutritional value than spinach. But since collard greens have more nutritional value than lettuce, it follows that kale has more nutritional value than lettuce.

Any of the following, if introduced into the argument as an additional premise, makes the argument

above logically correct EXCEPT:

- A. Collard greens have more nutritional value than kale
- B. Spinach has more nutritional value than lettuce
- C. Spinach has more nutritional value than collard greens
- D. Spinach and collard greens have the same nutritional value
- E. Kale and collard greens have the same nutritional value

Explanation:

The question asks for an additional premise that does NOT make the argument logically correct. Adding A to the information given in the passage leaves open the possibility that, in order of nutritional value, the vegetables rank: collard greens, lettuce, kale, spinach. Because this order is contrary to the conclusion of the argument, A leaves open the possibility that the conclusion of the argument is false; it is thus the best answer. By contrast, any of other choices, when added to the information that the nutritional value of kale is greater than that of spinach and that the nutritional value of collard greens is greater than that of lettuce, makes the conclusion-that kale has more nutritional value than lettuce-follow logically.

22. On the basis of a decrease in the college-age population, many colleges now anticipate increasingly smaller freshman classes each year. Surprised by a 40 percent increase in qualified applicants over the previous year, however, administrators at Nice College now plan to hire more faculties for courses taken by all freshmen.

Which of the following statements about Nice College's current qualified applicants, if true, would strongly suggest that the administrators' plan is flawed?

- A. A substantially higher percentage than usual plan to study for advanced degrees after graduation from college.
- B. According to their applications, their level of participation in extracurricular activities and varsity sports is unusually high.
- C. According to their applications, none of them lives in a foreign country.
- D. A substantially lower percentage than usual rate Nice College as their first choice among the colleges to which they are applying
- E. A substantially lower percentage than usual list mathematics as their intended major.

Explanation:

If, as D states, a substantial percentage of the qualified applicants do not rate Nice college as their first choice, then, provided many of these applicants are accepted at and enroll in the colleges that are their first choices, the increase in applications to Nice College might not result in any increase in the size of its freshman class. So D is the best answer. Nothing can be determined from A, B, C and E about the size of the freshman class, so none of these choices is relevant to the question of whether Nice College should hire more faculty to teach courses taken by all freshmen. Thus, these choices are inappropriate.

23. A researcher discovered that people who have low levels of immune-system activity tend to score much lower on tests of mental health than do people with normal or high immune-system activity. The researcher concluded from this experiment that the immune system protects against mental illness as

well as against physical disease.

The researcher's conclusion depends on which of the following assumptions?

- A. High immune-system activity protects against mental illness better than normal immune-system activity does.
- B. Mental illness is similar to physical disease in its effects on body systems.
- C. People with high immune-system activity cannot develop mental illness.
- D. Mental illness does not cause people's immune-system activity to decrease.
- E. Psychological treatment of mental illness is not as effective as is medical treatment.

Explanation:

The researcher concludes from the association of low immune-system activity with low mental-health scores that, in effect, immune system activity can inhibit mental illness. If, contrary to D, mental illness can depress immune-system activity, the association mentioned does not support the researcher's conclusion. So D must be assumed. Normal immune-system activity could protect against mental illness without high-immune system activity offering increased protection or prevention, contrary to what A and C state, so neither of A and C is assumed. The conclusion does not depend on there being a similarity between mental and physical illness or a difference in treatments, so B and E are not assumed.

24. A milepost on the towpath read "21" on the side facing the hiker as she approached it and "23" on its back. She reasoned that the next milepost forward on the path would indicate that she was halfway between one end of the path and the other. However, the milepost one mile further on read "20" facing her and "24" behind.

Which of the following, if true, would explain the discrepancy described above?

- A. The numbers on the next milepost had been reversed.
- B. The numbers on the mileposts indicate kilometers, not miles.
- C. The facing numbers indicate miles to the end of the path, not miles from the beginning.
- D. A milepost was missing between the two the hiker encountered.
- E. The mileposts had originally been put in place for the use of mountain bikers, not for hikers.

Explanation:

The hiker's reasoning assumes that the number that faced her indicated distance from the path's beginning. The numbers on the second milepost show that this assumption was erroneous. They are, however, the numbers that would be expected if the facing number indicated the distance to the path's end with the number on the back indicating the distance from the beginning. Thus choice C explains the discrepancy and is the best answer.

The next milepost being reversed (Choice A) cannot be in explanation, because if the hiker's reasoning were accurate both numbers on the milepost would be 22. The units (choice B) would not affect whether the number became smaller or larger. Nor would a missing milepost (choice D) affect the direction of change. The mode of transportation (choice E) is irrelevant to distance.

25 Airline: Newly developed collision-avoidance systems, although not fully tested to discover potential malfunctions, must be installed immediately in passenger planes. Their mechanical warnings

enable pilots to avoid crashes.

Pilots: Pilots will not fly in planes with collision-avoidance systems that are not fully tested. Malfunctioning systems could mislead pilots, causing crashes.

The pilots' objection is most strengthened if which of the following is true?

- A. It is always possible for mechanical devices to malfunction.
- B. Jet engines, although not fully tested when first put into use, have achieved exemplary performance and safety records.
- C. Although collision-avoidance systems will enable pilots to avoid some crashes, the likely malfunctions of the not-fully-tested systems will cause even more crashes.
- D. Many airline collisions are caused in part by the exhaustion of overworked pilots.
- E. Collision-avoidance systems, at this stage of development, appear to have worked better in passenger planes than in cargo planes during experimental flights made over a six-month period.

Explanation:

Choice C states that what the pilots think could happen is likely to happen. Thus, C is the best choice. Choice A is inappropriate because it says nothing about the malfunctions that most concern the pilots—those that might mislead. Nor does A distinguish tested from not-fully-tested systems. Choice B is inappropriate. The only outcome of using insufficiently tested equipment that might strengthen the pilots' objection is an unfavorable one, but B reports on a favorable outcome. Choice D is inappropriate because it mentions a problem that needs to be addressed whether or not the collision-avoidance systems are installed immediately. Choice E is inappropriate because it provides no evidence that any malfunctions were of a sort to mislead pilots and cause crashes.

LSAT SAMPLE TEST 3 Answered with Complete Explanations

SECTION I: ARGUMENT

Time ---35 Minutes

25 Questions

1. Correctly measuring the productivity of service workers is complex. Consider, for example, postal workers: they are often said to be more productive if more letters are delivered per postal worker. But is this really true? What if more letters are lost or delayed per worker at the same time that more are delivered?

The objection implied above to the productivity measure described is based on doubts about the truth of which of the following statements?

- A. Postal workers are representative of service workers in general.
- B. The delivery of letters is the primary activity of the postal service.
- C. Productivity should be ascribed to categories of workers, not to individuals.
- D. The quality of services rendered can appropriately be ignored in computing productivity.
- E. The number of letters delivered is relevant to measuring the productivity of postal workers.

Explanation:

The critique of the proposed purely quantitative measure of productivity raises the issue of quality of service, which implies that quality of service is a potentially relevant consideration. Thus, choice D is the best answer.

The objection assumes that postal workers are a suitable illustrative example of service workers in general; thus, choice A is inappropriate. By delivery of letters, the argument treats letter delivery as the primary activity of postal workers; thus, choice B is inappropriate. Because the passage explicitly ascribes productivity to entire categories of workers, choice C is inappropriate. Choice E is inappropriate, since the objector does not question the relevance of the number of letters delivered but implies that something else might also be relevant.

2. Male bowerbirds construct elaborately decorated nests, or bowers. Basing their judgment on the fact that different local populations of bowerbirds of the same species build bowers that exhibit different building and decorative styles, researchers have concluded that the bowerbirds' building styles are a culturally acquired, rather than a genetically transmitted, trait.

Which of the following, if true, would most strengthen the conclusion drawn by the researchers?

- A. There are more common characteristics than there are differences among the bower-building styles of the local bowerbird population that has been studied most extensively
- B. Young male bowerbirds are inept at bower-building and apparently spend years watching their

elders before becoming accomplished in the local bower style.

- C. The bowers of one species of bowerbird lack the towers and ornamentation characteristic of the bowers of most other species of bowerbird.
- D. Bowerbirds are found only in New Guinea and Australia, where local populations of the birds apparently seldom have contact with one another.
- E. It is well known that the song dialects of some songbirds are learned rather than transmitted genetically.

Explanation:

The information in choice B says that young bowerbirds progress slowly toward mastery of a bower-building style, which suggests that the skill is one they must learn, rather than one whose transmission is wholly genetic. Choice B also suggests a means of cultural transmission, namely, observation of older birds' technique. Thus, B supports the conclusion and is the best answer.

That differences within building styles are outnumbered by similarities (choice A) and that local populations have little contact (choice D) are both equally consistent with building-style differences being culturally acquired or genetically transmitted. Nor are differences among species of bowerbird (choice C) the issue. Finally, choice E confirms the possibility of birds learning skills, but it is not evidence that bower-building styles are learned.

3. A greater number of newspapers are sold in Town S than in Town T. Therefore, the citizens of Town S are better informed about major world events than are the citizens of Town T.

Each of the following, if true, weakens the conclusion above EXCEPT:

- A. Town S has a larger population than Town T.
- B. Most citizens of Town T work in Town S and buy their newspapers there.
- C. The average citizen of Town S spends less time reading newspapers than does the average citizen of Town T.
- D. A weekly newspaper restricted to the coverage of local events is published in Town S.
- E. The average newsstand price of newspapers sold in Town S is lower than the average price of newspapers sold in Town T.

Explanation:

The conclusion is based on comparing newspaper sales in Town S and Town T. Four answer choices indicate why greater newspaper sales in S need not imply that citizens of S are better informed about world events. Choice B suggests that many newspapers sold in S inform citizens of T, not S. Choices A and C both show how greater newspaper sales can occur without the average citizen having greater familiarity with the news. Finally, choice D suggests that much newspaper reading in S is not a source of information about world events.

The price differential noted in E might help to explain the difference in sales, but it does not undermine the conclusion based on that difference. Therefore, E is the best answer.

4. A drug that is highly effective in treating many types of infection can, at present, be obtained only from the bark of the ibora, a tree that is quite rare in the wild. It takes the bark of 5,000 trees to make one kilogram of the drug. It follows, therefore, that continued production of the drug must inevitably

lead to the ibora's extinction.

Which of the following, if true, most seriously weakens the argument above?

- A. The drug made from ibora bark is dispensed to doctors from a central authority.
- B. The drug made from ibora bark is expensive to produce.
- C. The leaves of the ibora are used in a number of medical products.
- D. The ibora can be propagated from cuttings and grown under cultivation.
- E. The ibora generally grows in largely inaccessible places.

Explanation:

If the ibora can be successfully cultivated, it is possible to continue production of the drug without threatening the ibora with extinction. Therefore, choice D is the best answer.

If production continues, the method for distributing the drug after it has been produced (choice A) is not likely, on its own, to have consequences for the continued existence of the ibora. Nor is the price of the drug (choice B). If the leaves of the ibora also have a use (choice C), the threat of extinction is strengthened rather than weakened. Finally, if the ibora is largely inaccessible (choice E), this bears on the question of whether production of the drug could continue, not on what would happen if it did continue.

5. High levels of fertilizer and pesticides, needed when farmers try to produce high yield of the same crop year after year, pollute water supplies. Experts therefore urge farmers to diversify their crops and to rotate their plantings yearly.

To receive governmental price-support benefits for a crop, farmers must have produced that same crop for the past several years.

The statements above, if true, best support which of the following conclusions?

- A. The rules for governmental support of farm prices work against efforts to reduce water pollution.
- B. The only solution to the problem of water pollution from fertilizers and pesticides is to take farmland out of production.
- C. Farmers can continue to make a profit by rotating diverse crops, thus reducing costs for chemicals, but not by planting the same crop each year.
- D. New farming techniques will be developed to make it possible for farmers to reduce the application of fertilizers and pesticides.
- E. Governmental price supports for farm products are set at levels that are not high enough to allow farmers to get out of debt.

Explanation:

Farmers benefit from governmental price supports only when they produce the same crops from year to year. Farmers who wish to receive the benefit of these price supports will be unlikely to reduce water pollution because they will not follow the experts' advice regarding diversification and rotation. Thus, A is the best answer.

Since the experts' advice is evidently their favored solution, the notion that the sole solution is something else (choice B) is not supported. The statements mention neither farmers' cost and revenues nor developments in farming techniques, and thus support no conclusions about prospects for profits (choice C) or future farming techniques (choice D). Because no information is given about either the

amount of price support or farmers' debt, choice E is not supported.

6. Shelby Industries manufactures and sells the same gauges as Jones Industries. Employee wages account for forty percent of the cost of manufacturing gauges at both Shelby Industries and Jones Industries. Shelby Industries is seeking a competitive advantage over Jones Industries. Therefore, to promote this end, Shelby Industries should lower employee wages.

Which of the following, if true, would most weaken the argument above?

- A. Because they make a small number of precision instruments, gauge manufacturers cannot receive volume discounts on raw materials.
- B. Lowering wages would reduce the quality of employee work, and this reduced quality would lead to lowered sales.
- C. Jones Industries has taken away twenty percent of Shelby Industries' business over the last year.
- D. Shelby Industries pays its employees, on average, ten percent more than does Jones Industries.
- E. Many people who work for manufacturing plants live in areas in which the manufacturing plant they work for is the only industry.

Explanation:

According to choice B, the effect of lowering wages is to reduce quality sufficiently to reduce sales. This is a good reason to doubt that wage cuts would give Shelby Industries any competitive advantage, so choice B is the best answer.

Some of the other choices provide good reasons for, rather than against, lowering wages. Choice A implies that reducing the cost of raw materials is not possible, choice D indicates that Shelby Industries' wages are relatively high, and choice E suggests that Shelby Industries would not lose many workers if it did reduce wages. Choice C gives a reason for Shelby Industries to be concerned about its competitive position but no reason to think wage cuts would not improve that position.

7. Some communities in Florida are populated almost exclusively by retired people and contain few, if any, families with small children. Yet these communities are home to thriving businesses specializing in the rental of furniture for infants and small children.

Which of the following, if true, best reconciles the seeming discrepancy described above?

- A. The businesses specializing in the rental of children's furniture buy their furniture from distributors outside of Florida.
- B. The few children who do reside in these communities all know each other and often make overnight visits to one another's houses.
- C. Many residents of these communities who move frequently prefer renting their furniture to buying it outright.
- D. Many residents of these communities must provide for the needs of visiting grandchildren several weeks a year.
- E. Children's furniture available for rental is of the same quality as that available for sale in the stores.

Explanation:

If many residents of these communities host visiting grandchildren several weeks a year, as D states, that in itself might generate sufficient demand for rented children's furniture to support thriving businesses. Thus, D helps reconcile the apparent discrepancy and is the best answer.

The few households mentioned in choice B are unlikely to generate sufficient demand for rental businesses to thrive. Similarly, choices A and E, though they provide information concerning the furniture that is rented in these communities, do not address the prior issue of why there should be such demand for children's furniture. Choice C helps explain why these communities have an unusually high demand for rental furniture, but not why such a demand would extend to children's furniture.

8. Large national budget deficits do not cause large trade deficits. If they did, countries with the largest budget deficits would also have the largest trade deficits. In fact, when deficit figures are adjusted so that different countries are reliably comparable to each other, there is no such correlation.

If the statements above are all true, which of the following can properly be inferred on the basis of them?

- A. Countries with large national budget deficits tend to restrict foreign trade.
- B. Reliable comparisons of the deficit figures of one country with those of another are impossible.
- C. Reducing a country's national budget deficit will not necessarily result in a lowering of any trade deficit that country may have.
- D. When countries are ordered from largest to smallest in terms of population, the smallest countries generally have the smallest budget and trade deficits.
- E. Countries with the largest trade deficits never have similarly large national budget deficits.

Explanation:

The passage asserts that large budget deficits do not cause large trade deficits. If this is so, it is possible that a country with large budget and trade deficits could reduce its budget deficit and yet retain a large trade deficit. Thus, choice C is the best answer.

None of the other choices can be inferred. The passage says nothing about how countries respond to large budget deficits (choice A). The passage states that comparing deficit figures for different countries can be reliable (contrary to choice B). Correlation between deficit size and population size (choice D) is not at issue in the passage. Finally, it is consistent with the passage that countries with the largest trade deficits sometimes have similarly large budget deficits (choice E).

9. "Fast cycle time" is a strategy of designing a manufacturing organization to eliminate bottlenecks and delays in production. Not only does it speed up production, but it also assures quality. The reason is that the bottlenecks and delays cannot be eliminated unless all work is done right the first time.

The claim about quality made above rests on a questionable presupposition that

- A. any flaw in work on a product would cause a bottleneck or delay and so would be prevented from occurring on a "fast cycle" production line
- B. the strategy of "fast cycle time" would require fundamental rethinking of product design
- C. the primary goal of the organization is to produce a product of unexcelled quality, rather than to

generate profits for stockholders

- D. “fast cycle time” could be achieved by shaving time off each of the component processes in production cycle
- E. “fast cycle time” is a concept in business strategy that has not yet been put into practice in a factory

Explanation:

The argument presupposes that, if bottlenecks and delays are eliminated, production work must have been accomplished flawlessly. This presupposition is questionable, since there might well be flaws that do not impede the manufacturing process. The best answer is thus choice A.

None of the other choices is presupposed. The argument is consistent with redesigning the manufacturing process and not the product (choice B). The primary goal might be profits, and quality merely a means to that end (choice C). The argument does not rely on the feasibility of any one method of implementing “fast cycle time” (choice D). Finally, the concept of “fast cycle time” could already have been implemented operationally (choice E).

10. Many breakfast cereals are fortified with vitamin supplements. Some of these cereals provide 100 percent of the recommended daily requirement of vitamins. Nevertheless, a well-balanced breakfast, including a variety of foods, is a better source of those vitamins than are such fortified breakfast cereals alone.

Which of the following, if true, would most strongly support the position above?

- A. In many foods, the natural combination of vitamins with other nutrients makes those vitamins more usable by the body than are vitamins added in vitamin supplements.
- B. People who regularly eat cereals fortified with vitamin supplements sometimes neglect to eat the foods in which the vitamins occur naturally.
- C. Foods often must be fortified with vitamin supplements because naturally occurring vitamins are removed during processing.
- D. Unprocessed cereals are naturally high in several of the vitamins that are usually added to fortified breakfast cereals.
- E. Cereals containing vitamin supplements are no harder to digest than similar cereals without added vitamins.

Explanation:

By pointing out that, when occurring in natural combination with other nutrients, vitamins are more usable by the body than are those same vitamins when added as a supplement, choice A provides reason to believe that a well-balanced breakfast is a better source of vitamins than is a fortified breakfast cereal. A is the best answer.

Choice B does not support the position taken, although the position taken, if correct, is relevant to the people mentioned. Choice E describes a similarity between fortified cereals and other cereals. Choice C provides a reason for adding supplements to processed cereals, and choice D gives information about unprocessed cereals, but neither adds support for the alleged advantage of a well-balanced breakfast over a fortified cereal.

11. Which of the following best completes the passage below?

The more worried investors are about losing their money, the more they will demand a high potential return on their investment; great risks must be offset by the chance of great rewards. This principle is the fundamental one in determining interest rates, and it is illustrated by the fact that——.

- A. successful investors are distinguished by an ability to make very risky investments without worrying about their money
- B. lenders receive higher interest rates on unsecured loans than on loans backed by collateral
- C. in times of high inflation, the interest paid to depositors by banks can actually be below the rate of inflation
- D. at any one time, a commercial bank will have a single rate of interest that it will expect all of its individual borrowers to pay
- E. the potential return on investment in a new company is typically lower than the potential return on investment in a well-established company

Explanation:

Since an unsecured loan is more risky, from the lender's point of view, than a loan backed by collateral, the fact that lenders receive higher interest rates for unsecured loans is an illustration of the principle outlined in the passage. Thus, choice B is the best answer.

None of the other choices gives a clear instance in which increased risk is compensated by the potential for increased return. Choice A does not concern return on investment at all. Choice C is an instance of low return unrelated to risk. In choice D, contrary to the principle, the rate of return remains constant despite possible variations in risk, and choice E also runs counter to the principle if investments in well-established companies entail less risk.

12. A famous singer recently won a lawsuit against an advertising firm for using another singer in a commercial to evoke the famous singer's well-known rendition of a certain song. As a result of the lawsuit, advertising firms will stop using imitators in commercials. Therefore, advertising costs will rise, since famous singers' services cost more than those of their imitators.

The conclusion above is based on which of the following assumptions?

- A. Most people are unable to distinguish a famous singer's rendition of a song from a good imitator's rendition of the same song.
- B. Commercials using famous singers are usually more effective than commercials using imitators of famous singers.
- C. The original versions of some well-known songs are unavailable for use in commercials.
- D. Advertising firms will continue to use imitators to mimic the physical mannerisms of famous singers.
- E. The advertising industry will use well-known renditions of songs in commercials.

Explanation:

If choice E were not assumed, the costs of the services of the famous singers of well-known renditions of songs would not be said to affect advertising costs. Since advertising costs are, however, projected to rise because of the relatively high cost of famous singers' services, choice E is assumed and is the best answer.

Choice A is irrelevant to the argument, since famous singers' service cost more than imitators' anyway. The argument addresses commercials' cost, not their effectiveness, so choice B is not assumed. The argument assumes that some well-known renditions of songs are available, but does not require that any versions be unavailable (choice C). Since the argument states that advertising firms will stop using imitators, choice D is not assumed.

13. A certain mayor has proposed a fee of five dollars per day on private vehicles entering the city, claiming that the fee will alleviate the city's traffic congestion. The mayor reasons that, since the fee will exceed the cost of round-trip bus fare from many nearby points, many people will switch from using their cars to using the bus.

Which of the following statements, if true, provides the best evidence that the mayor's reasoning is flawed?

- A. Projected increases in the price of gasoline will increase the cost of taking a private vehicle into the city.
- B. The cost of parking fees already makes it considerably more expensive for most people to take a private vehicle into the city than to take a bus.
- C. Most of the people currently riding the bus do not own private vehicles.
- D. Many commuters opposing the mayor's plan have indicated that they would rather endure traffic congestion than pay a five-dollar-per day fee.
- E. During the average workday, private vehicles owned and operated by people living within the city account for twenty percent of the city's traffic congestion.

Explanation:

The mayor's reasoning rests on assuming that, if it costs more to travel to the city by car than by bus, people will choose to travel by bus rather than by car. Choice B provides evidence that this assumption is false, and is therefore the best answer.

Choice A does not undermine the mayor's view that the five-dollar fee will provide an incentive to switch to buses. Choice C makes it unlikely that the bus system will lose current riders if new riders are attracted. Choice D is inappropriate since many drivers not switching to buses is entirely consistent with many people making the switch. Choice E supports the mayor's proposal by indicating that vehicles entering the city produce most of the city's congestion.

14. A group of children of various ages was read stories in which people caused harm, some of those people doing so intentionally, and some accidentally. When asked about appropriate punishments for those who had caused harm, the younger children, unlike the older ones, assigned punishments that did not vary according to whether the harm was done intentionally or accidentally. Younger children, then, do not regard people's intentions as relevant to punishment.

Which of the following, if true, would most seriously weaken the conclusion above?

- A. In interpreting these stories, the listeners had to draw on a relatively mature sense of human psychology in order to tell whether harm was produced intentionally or accidentally.
- B. In these stories, the severity of the harm produced was clearly stated.
- C. Younger children are as likely to produce harm unintentionally as are older children.

- D. The older children assigned punishment in a way that closely resembled the way adults had assigned punishment in a similar experiment.
- E. The younger children assigned punishments that varied according to the severity of the harm done by the agents in the stories.

Explanation:

Choice A, the best answer, indicates that younger children might be unable to tell whether the harm in the stories was produced intentionally. Thus, even if younger children do regard people's intentions as relevant, they might be unable to apply this criterion here. Therefore, A undermines the conclusion's support.

Choice B and E support the conclusion by suggesting that another factor-severity of harm-either possibly (choice B) or actually (choice E) motivated variations in the punishments assigned by younger children. Neither choice C nor choice D affects the conclusion. The conclusion concerns what children recognize about others' behavior, not children's own behavior (choice C). The similarity between older children's and adult's assignment (choice D) leaves open the question of why younger children's assignments differed.

15. When hypnotized subjects are told that they are deaf and are then asked whether they can hear the hypnotist, they reply, "No." Some theorists try to explain this result by arguing that the selves of hypnotized subjects are dissociated into separate parts, and that the part that is deaf is dissociated from the part that replies.

Which of the following challenges indicates the most serious weakness in the attempted explanation described above?

- A. Why does the part that replies not answer, "Yes"?
- B. Why are the observed facts in need of any special explanation?
- C. Why do the subjects appear to accept the hypnotist's suggestion that they are deaf?
- D. Why do hypnotized subjects all respond the same way in the situation described?
- E. Why are the separate parts of the self the same for all subjects?

Explanation:

Since the question elicits a reply, the question was presumably heard, but presumably not by the part that is deaf. The explanation's obvious weakness, therefore, is that it fails to indicate why the part that replies would reply as if it were the part that is deaf. Choice A points to this failure and is the best answer.

Choice B does not challenge the explanation itself, but the need for an explanation in the first place. Choices C and D raise pertinent questions concerning the facts described, but do not address the proffered explanation of those facts. Choice E points to a question to which the attempted explanation gives rises, but does not challenge the adequacy of the explanation.

Questions 16-17 are based on the following.

The program to control the entry of illegal drugs into the country was a failure in 1987. If the program had been successful, the wholesale price of most illegal drugs would not have dropped substantially in

1987.

16. The argument in the passage depends on which of the following assumptions?

- A. The supply of illegal drugs dropped substantially in 1987.
- B. The price paid for most illegal drugs by the average consumer did not drop substantially in 1987.
- C. Domestic production of illegal drugs increased at a higher rate than did the entry of such drugs into the country.
- D. The wholesale price of a few illegal drugs increased substantially in 1987.
- E. A drop in demand for most illegal drugs in 1987 was not the sole cause of the drop in their wholesale price.

Explanation:

The only choice that must be true in order to conclude legitimately from the drop in the wholesale price of illegal drugs that the program was a failure is choice E, the best answer. If the drop in price was caused by a drop in demand, there is no reason to suspect that there has been any increase in supply caused by drugs entering the country.

The other choices can be false without affecting the argument. The supply of illegal drugs need not have dropped (choice A), and the retail price could have dropped (choice B). The entry of illegal drugs could have risen at a higher rate than domestic production (choice C), and no illegal drug need have undergone a substantial price rise (choice D).

17. The argument in the passage would be most seriously weakened if it were true that

- A. in 1987 smugglers of illegal drugs, as a group, had significantly more funds at their disposal than did the country's customs agents
- B. domestic production of illegal drugs increased substantially in 1987
- C. the author's statements were made in order to embarrass the officials responsible for the drug-control program
- D. in 1987 illegal drugs entered the country by a different set of routes than they did in 1986
- E. the country's citizens spent substantially more money on illegal drugs in 1987 than they did in 1986.

Explanation:

If domestic production of illegal drugs increased substantially, the overall supply could have increased (and the price fallen) without more illegal drugs entering the country, and without any failure of the program. Thus, choice B is the best answer.

None of the other choices weakens the argument. The smugglers' having more money (choice A) suggests that they would have resources to evade controls. The author's intention (choice C) is irrelevant to whether the reasoning the statements express is cogent. A change of routes (choice D) would have increased the chance of the program failing, and an increase in the amount of money spent (choice E) also provides evidence that the program did fail, given the low price levels.

18. Excavation of the ancient city of Kourion on the island of Cyprus revealed a pattern of debris and collapsed buildings typical of towns devastated by earthquakes. Archaeologists have hypothesized that the destruction was due to a major earthquake known to have occurred near the island in A.D.365.

Which of the following, if true, most strongly supports the archaeologists' hypothesis?

- A. Bronze ceremonial drinking vessels that are often found in graves dating from years preceding and following A.D.365 were also found in several graves near Kourion.
- B. No coins minted after A.D.365 were found in Kourion, but coins minted before that year were found in abundance.
- C. Most modern histories of Cyprus mention that an earthquake occurred near the island in A.D.365.
- D. Several small statues carved in styles current in Cyprus in the century between A.D.300 and 400 were found in Kourion.
- E. Stone inscriptions in a form of the Greek alphabet that was definitely used in Cyprus after A.D.365 were found in Kourion.

Explanation:

The archaeologists hypothesized that Kourion was devastated by an earthquake known to have occurred in A. D. 365. Since choice B provides evidence that A.D. 365 was the date when life in Kourion was disrupted, B supports the hypothesis that it was the A. D. 365 earthquake that devastated Kourion. Thus, B is the best answer.

By contrast, choices A, D, and E all give information about artifacts found in or used in Kourion, but they do not specifically point to A. D. 365 as the date of the devastation. Thus, A, D, and E are inappropriate. Since choice C supports something already established, namely, that an earthquake occurred in A. D. 365, C is inappropriate.

19. Sales of telephones have increased dramatically over the last year. In order to take advantage of this increase, Mammoth Industries plans to expand production of its own model of telephone, while continuing its already very extensive advertising of this product.

Which of the following, if true, provides most support for the view that Mammoth Industries cannot increase its sales of telephones by adopting the plan outlined above?

- A. Although it sells all of the telephones that it produces, Mammoth Industries' share of all telephone sales has declined over the last year.
- B. Mammoth Industries' average inventory of telephones awaiting shipment to retailers has declined slightly over the last year.
- C. Advertising has made the brand name of Mammoth Industries' telephones widely known, but few consumers know that Mammoth Industries owns this brand.
- D. Mammoth Industries' telephone is one of three brands of telephone that have together accounted for the bulk of the last year's increase in sales.
- E. Despite a slight decline in the retail price, sales of Mammoth Industries' telephones have fallen in the last year.

Explanation:

Choice E indicates that Mammoth's telephones already fail to participate in the industry trend of higher sales despite heavy advertising. Producing more of the same model would thus be unlikely to generate increased sales for Mammoth, so E is the best answer.

If Mammoth has sold all the telephones it produced, it might increase sales by producing more, even if it has lost market share, as choice A states. Choice D indicates that Mammoth's sales are increasing,

and similarly for B if the decrease in inventory results from retailers taking delivery of more telephones. So long as consumers recognize the brand name of Mammoth's telephones, as choice C states, it probably does not matter whether they associate it with Mammoth.

20. Many institutions of higher education suffer declining enrollments during periods of economic slowdown. At two-year community colleges, however, enrollment figures boom during these periods when many people have less money and there is more competition for jobs.

Each of the following, if true, helps to explain the enrollment increases in two-year community colleges described above EXCEPT:

- A. During periods of economic slowdown, two-year community colleges are more likely than four-year colleges to prepare their students for the jobs that are still available.
- B. During periods of economic prosperity, graduates of two-year community colleges often continue their studies at four-year colleges.
- C. Tuition at most two-year community colleges is a fraction of that at four-year colleges.
- D. Two-year community colleges devote more resources than do other colleges to attracting those students especially affected by economic slowdowns.
- E. Students at two-year community colleges, but not those at most four-year colleges, can control the cost of their studies by choosing the number of courses they take each term.

Explanation:

Four of the choices give reasons why, in an economic slowdown, many people would choose a two-year college. Choice A indicates that a two-year college education gives one a better chance of finding a job when economic conditions are poor. Choice C and E indicate why people with less money might prefer two-year colleges. Finally, choice D suggests that more is being done to attract people whose lives are affected by the slowdown to two-year than to four-year colleges.

Choice B, the best answer, might explain the decreased enrollment at four-year colleges during the slowdown, but because it deals with graduates of two-year colleges it cannot explain why enrollment at these colleges might increase.

Question 21-22 are based on the following.

Hardin argued that grazing land held in common (that is, open to any user) would always be used less carefully than private grazing land. Each rancher would be tempted to overuse common land because the benefits would accrue to the individual, while the costs of reduced land quality that results from overuse would be spread among all users. But a study comparing 217 million acres of common grazing land with 433 million acres of private grazing land showed that the common land was in better condition.

21. The answer to which of the following questions would be most useful in evaluating the significance, in relation to Hardin's claim, of the study described above?

- A. Did any of the ranchers whose land was studied use both common and private land?
- B. Did the ranchers whose land was studied tend to prefer using common land over using private land for grazing?
- C. Was the private land that was studied of comparable quality to the common land before either was used for grazing?
- D. Were the users of the common land that was studied at least as prosperous as the users of the

private land?

- E. Were there any owners of herds who used only common land, and no private land, for grazing?

Explanation:

Hardin's claim is that common grazing land deteriorates more quickly than private grazing land because of overuse. The study indicates that common grazing land is currently in better shape, but this would not undermine Hardin's claim if common grazing land was in far better shape before grazing began. Thus, choice C is the best answer.

Choices A and E are inappropriate since the study can undermine Hardin's Claim whether or not some ranchers use both sorts of land, or use only common land. Similarly, the study can undermine Hardin's claim whether or not ranchers prefer to use common land, as B says. Finally, D is inappropriate since the force of the study is not diminished if users of common land are more or less prosperous.

22. Which of the following, if true and known by the ranchers, would best help explain the results of the study?

- A. With private grazing land, both the costs and the benefits of overuse fall to the individual user.
- B. The cost in reduced land quality that is attributable to any individual user is less easily measured with common land than it is with private land.
- C. An individual who overuses common grazing land might be able to achieve higher returns than other users can, with the result that he or she would obtain a competitive advantage.
- D. If one user of common land overuses it even slightly, the other users are likely to do so even more, with the consequence that the costs to each user outweigh the benefits.
- E. There are more acres of grazing land held privately than there are held in common.

Explanation:

The study indicates that common lands are in better shape than private lands. The best answer, D, indicates that, contrary to Hardin's claim, it is in each rancher's self-interest not to overuse common land, which would explain why common lands are in relatively good shape.

Choices A and C can only explain why private land is in better shape than common land, not the reverse. Neither the fact that it is more difficult to attribute deterioration of common land to any particular user (choice B) nor the fact that the relative amounts of common and private land differ (choice E) gives a reason for farmers not to graze their herds on common land as much as possible.

23. In tests for pironoma, a serious disease, a false positive result indicates that people have pironoma when, in fact, they do not; a false negative result indicates that people do not have pironoma when, in fact, they do. To detect pironoma most accurately, physicians should use the laboratory test that has the lowest proportion of false positive results.

Which of the following, if true, gives the most support to the recommendation above?

- A. The accepted treatment for pironoma does not have damaging side effects.
- B. The laboratory test that has the lowest proportion of false positive results causes the same minor side effects as do the other laboratory tests used to detect pironoma.
- C. In treating pironoma patients, it is essential to begin treatment as early as possible, since even a week of delay can result in loss of life.

- D. The proportion of inconclusive test results is equal for all laboratory tests used to detect pironoma.
- E. All laboratory tests to detect pironoma have the same proportion of false negative results.

Explanation:

The most accurate test for pironoma would be the one with the fewest false results. If all tests have the same proportion of false negatives, then the most accurate is the one that has the lowest proportion of false positives. Thus, E supports the recommendation and is the best answer.

Choice A and C deal with the treatment for pironoma and are irrelevant to the accuracy of tests pironoma. Choice B deals with the side effects of tests for pironoma, and does not address their accuracy. That the proportion of inconclusive test results is equal for all tests (choice D) leaves open the question of which test is more accurate, since it does not indicate which test has fewest false results.

Questions 24-25 are based on the following.

In many corporations, employees are being replaced by automated equipment in order to save money. However, many workers who lose their jobs to automation will need government assistance to survive, and the same corporations that are laying people off will eventually pay for that assistance through increased taxes and unemployment insurance payments.

24. The author is arguing that

- A. higher taxes and unemployment insurance payments will discourage corporations from automating
- B. replacing people through automation to reduce production costs will result in increases of other costs to corporations.
- C. many workers who lose their jobs to automation will have to be retrained for new jobs
- D. corporations that are laying people off will eventually rehire many of them
- E. corporations will not save money by automating because people will be needed to run the new machines

Explanation:

The author argues that replacing employees with automated equipment might lend to less savings for corporations than anticipated, since laying off workers will lead to other costs. Choice B states the author's main points and thus is the best answer.

The author argues that corporations that automate might incur unexpected costs, but the author does not argue that these costs will discourage corporations from automating (choice A). The author does not address the issues of retraining (choice C) and rehiring (choice D). Although the author argues that some unanticipated costs might offsets savings resulting from automation, the cost of running the new machines (choice E) is clearly not one of these unanticipated costs.

25. Which of the following, if true, most strengthens the author's argument?

- A. Many workers who have already lost their jobs to automation have been unable to find new jobs.
- B. Many corporations that have failed to automate have seen their profits decline.
- C. Taxes and unemployment insurance are paid also by corporations that are not automating.
- D. Most of the new jobs created by automation pay less than the jobs eliminated by automation did.
- E. The initial investment in machinery for automation is often greater than the short-term savings in

labor costs.

Explanation:

The threat envisioned by the author to the economic survival of workers displaced by automation will be serious only if they cannot find new jobs. Choice A, the best answer, says that there are already many such workers unable to find new jobs, and so strengthens the author's argument.

Since the causes for declining profits for corporations that fail to automate are not analyzed in the passage, B is inappropriate. By saying that costs associated with unemployment C weakens the argument. Since the author tacitly grants that, initially, automation will cut costs, the detail given in D provides us added support. Choice E is inappropriate because it concerns short-term rather than long-term results of automation.

SECTION II: READING

Time ---35 Minutes

27 Questions

In the two decades between 1910 and 1930, over ten percent to the Black population of the United States left the South, where the preponderance of the Black population had been located, and migrated to northern (5) 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 what has come to be called the Great Migration came from rural areas and were motivated by two concurrent (10) 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 immigration caused by the outbreak of the First World War in 1914. This assumption (15) 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 with urban living and a lack of industrial skills.

But the question of who actually left the South has (20) never been rigorously investigated. Although numerous investigations document an exodus from rural southern areas to southern cities prior to the Great Migration, no one has considered whether the same migrants then moved on to northern cities. In 1910 over 600,000 (25) Black workers, or ten percent of the Black work force, reported themselves to be engaged in "manufacturing and mechanical pursuits," the federal census category roughly encompassing the entire industrial sector. The Great Migration could easily have been made up entirely (30) of this group and their families. It is perhaps surprising to argue that an employed population 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 (35)

were from the old artisan class of slavery-blacksmiths, masons, carpenters—which had had a monopoly of certain trades, but they were gradually being pushed out by competition, mechanization, and obsolescence,

(40) The remaining sixty-five percent, more recently urbanized, worked in 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

(45) Black press, that they could earn more even as unskilled 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

(50) to undercut the wages 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 comes into question.

1. 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

Explanation:

D is the best answer.

In lines 35–41, the author states that ten percent of the Black workers in the South were employed in “manufacturing and mechanical pursuits” and then identifies “manufacturing and mechanical pursuits” as the general federal census category for industrial occupations in 1910. Thus, she indicates that she used the federal census as a source of information.

2. 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 Black workers living in southern cities, only those in a small number of trades were threatened by obsolescence.

Explanation:

C is the best answer. To answer this question, you must first identify the author’s argument. The author argues that it is possible that Black migrants to the North were living and working in urban areas of the South rather than in rural areas, as researchers had previously assumed. In lines 44-48, the author states that it may be “surprising” that an employed population would relocate. Thus, the author anticipates an objection to her argument on the grounds that Black urban workers in the South would have been unlikely to leave an economically secure existence. She meets that objection by stating that “an explanation lies in the labor conditions then prevalent in the South” (lines 46-48), and discusses the low wages that may have motivated Black workers to migrate north for higher pay.

3. 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.

Explanation:

A is the best answer. The author discusses wages in southern cities in the third paragraph. Lines 68-73 state that an increase in the number of rural workers who migrated to southern cities after the collapse of the cotton industry led to increased competition for jobs and resulted in wages being pushed lower.

4. The author cites each of the following as possible influences in a Black 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 Black press

Explanation:

D is the best answer. This question asks you to identify the possible influences that motivated Black workers in their decision to migrate north, and then to recognize which of the choices is NOT mentioned as an influence on Black workers.

This is the only option not mentioned in the passage as an influence that may have motivated southern Black workers to move north.

5. It can be inferred from the passage that the “easy conclusion” mentioned in line 53 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 country seldom undertake a second migration.

Explanation:

C is the best answer. To answer this question, you must first identify the “easy conclusion” mentioned in lines 77-79, which ties Black migrants’ “subsequent economic problems in the North to their rural background.” This linkage of rural background to economic difficulty after migration to the North is first mentioned in lines 20-26. Here, the author points out that researchers have assumed that Black migrants encountered economic difficulties in northern cities because they were from rural rather than urban backgrounds, and that rural backgrounds imply “unfamiliarity with urban living and a lack of industrial skills.” This choice provides an assumption about the relationship between rural backgrounds and economic difficulty that underlies this conclusion. It states that people with rural backgrounds are more likely to have economic difficulty in urban areas than are people with urban backgrounds.

6. 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

Explanation:

D is the best answer. The first paragraph describes a common assumption about the Great Migration, that the majority of migrants came from rural areas. It also restates the conclusion that is based on this assumption, that the subsequent economic difficulties of Black migrants in the North were a result of their unfamiliarity with urban life. In the second paragraph, the author states that the “question of who actually left the South” (lines 27-28) has never been adequately researched. She goes on to argue that Black migrants may actually have been from urban areas rather than rural areas, and thus that their subsequent economic problems in northern cities were not caused by their rural background. In making this argument, the author is challenging the “widely accepted explanation” presented in the first paragraph.

Passage 7

In 1896 a Georgia couple suing for damages in the accidental death of their two year old was told that since the child had made no real economic contribution to the family, there was no liability for damages. In contrast, (5) less than a century later, in 1979, the parents of a three year old sued in New York for accidental-death damages and won an award of \$750,000.

The transformation in social values implicit in juxtaposing these two incidents is the subject of Viviana (10) Zelizer's excellent book, *Pricing the Priceless Child*. During the nineteenth century, she argues, the concept of the "useful" child who contributed to the family economy gave way gradually to the present-day notion of the "useless" child who, though producing no income (15) for, and indeed extremely costly to, its parents, is yet considered emotionally "priceless." Well established among segments of the middle and upper classes by the mid-1800's, this new view of childhood spread throughout society in the late-nineteenth and early-twentieth (20) centuries as reformers introduced child-labor regulations and compulsory education laws predicated in part on the assumption that a child's emotional value made child labor taboo.

For Zelizer the origins of this transformation were (25) many and complex. The gradual erosion of children's productive value in a maturing industrial economy, the decline in birth and death rates, especially in child mortality, and the development of the companionate family (a family in which members were united by (30) explicit bonds of love rather than duty) were all factors critical in changing the assessment of children's worth. Yet "expulsion of children from the 'cash nexus,' ... although clearly shaped by profound changes in the economic, occupational, and family structures," Zelizer (35) maintains. "was also part of a cultural process 'of sacralization' of children's lives. " Protecting children from the crass business world became enormously important for late-nineteenth-century middle-class Americans, she suggests; this sacralization was a way of resisting what

(40) they perceived as the relentless corruption of human values by the marketplace.

In stressing the cultural determinants of a child's worth, Zelizer takes issue with practitioners of the new "sociological economics," who have analyzed such traditionally sociological topics as crime, marriage, education, and health solely in terms of their economic determinants. Allowing only a small role for cultural forces in the form of individual "preferences," these sociologists tend to view all human behavior as directed primarily by (50) the principle of maximizing economic gain. Zelizer is highly critical of this approach, and emphasizes instead the opposite phenomenon: the power of social values to transform price. As children became more valuable in emotional terms, she argues, their "exchange" or "sur- (55) render" value on the market, that is, the conversion of their intangible worth into cash terms, became much greater.

7. It can be inferred from the passage that accidental-death damage awards in America during the nineteenth century tended to be based principally on the

- (A) earnings of the person at time of death
- (B) wealth of the party causing the death
- (C) degree of culpability of the party causing the death
- (D) amount of money that had been spent on the person killed
- (E) amount of suffering endured by the family of the person killed

Explanation:

A is the best answer. In the first paragraph, the author cites an accidental-death case from nineteenth-century America in which the absence of economic contribution on the part of a deceased child was ruled sufficient grounds to deny the awarding of damages to the child's parents. The author goes on to discuss how this case typified attitudes that persisted even into the twentieth century. It can be inferred from this that in nineteenth-century America the chief consideration in determining damages in an accidental-death case was the deceased person's earnings.

There are no evidence in the passage to suggest that the factors in B, C, D and E were of primary concern in determining accidental-death damages in nineteenth-century America.

8. It can be inferred from the passage that in the early 1800's children were generally regarded by their families as individuals who

- (A) needed enormous amounts of security and affection
- (B) required constant supervision while working

- (C) were important to the economic well-being of a family
- (D) were unsuited to spending long hours in school
- (E) were financial burdens assumed for the good of society

Explanation:

C is the best answer.

In the second paragraph, the author describes how during the nineteenth century the concept of the “ ‘useful’ child who contributed to the family economy” (lines 23-24) gradually gave way to the present-day notion of the economically “useless” but emotionally “priceless” child. This new view of childhood was “well established among segments of the middle and upper classes by the mid-1800’s” and “spread throughout society in the late-nineteenth and early-twentieth centuries” (lines 31-38). Thus in the early 1800’s, prior to the shift in the valuation of children, families valued the role children had to play in the family’s economic well-being.

A and E describe attitude more in accord with the present-day view of childhood. B and D address issues that are not raised in the passage.

9. Which of the following alternative explanations of the change in the cash value of children would be most likely to be put forward by sociological economists as they are described in the passage?

- (A) The cash value of children rose during the nineteenth century because parents began to increase their emotional investment in the upbringing of their children.
- (B) The cash value of children rose during the nineteenth century because their expected earnings over the course of a lifetime increased greatly.
- (C) The cash value of children rose during the nineteenth century because the spread of humanitarian ideals resulted in a wholesale reappraisal of the worth of an individual
- (D) The cash value of children rose during the nineteenth century because compulsory education laws reduced the supply, and thus raised the costs, of available child labor.
- (E) The cash value of children rose during the nineteenth century because of changes in the way negligence law assessed damages in accidental-death cases.

Explanation:

B is the best answer.

According to the author, practitioners of the new “sociological economics” explain sociological phenomena “solely in terms of their economic determinants” and “tend to view all human behavior as directed primarily by the principle of maximizing economic gain” (lines 85-98). This choice provides just such an economic explanation for the nineteenth-century rise in the cash value of children.

A paraphrases Zelizer’s own explanation, which is at odds with that of the sociological economists. C uses social values and emotional factors to explain an even broader revaluation of individual worth. D uses an economic argument to explain the change, but here the economic factors at work are the result of a change. E provides a legal explanation for the change.

10. The primary purpose of the passage is to

- (A) review the literature in a new academic subfield

- (B) present the central thesis of a recent book
- (C) contrast two approaches to analyzing historical change
- (D) refute a traditional explanation of a social phenomenon
- (E) encourage further work on a neglected historical topic

Explanation:

B is the best answer.

In the first paragraph, the author contrasts two incidents that are said to exemplify the transformation in social values that forms the subject of Zelizer's book.

The second and third paragraphs consist of a brief history of that transformation, as Zelizer presents it, and an account of the factors she considers important in bringing it about. In the last paragraph, the author explains how Zelizer's thesis differs from that of sociological economists. Thus, the passage serves primarily to present the central thesis of Zelizer's book.

A and E misrepresent the subject matter of the passage. D misrepresents the author's approach. C is incorrect because although the passage does contrast two approaches, this contrast takes place only in the final paragraph.

11. It can be inferred from the passage that which of the following statements was true of American families over the course of the nineteenth century?

- (A) The average size of families grew considerably
- (B) The percentage of families involved in industrial work declined dramatically.
- (C) Family members became more emotionally bonded to one another.
- (D) Family members spent an increasing amount of time working with each other.
- (E) Family members became more economically dependent on each other.

Explanation:

C is the best answer.

In the third paragraph, the author cites Zelizer's contention that the new view of childhood that developed in nineteenth-century America was due in part to "the development of the companionate family (a family in which members were united by explicit bonds of love rather than duty)"(lines 54-58). From this it can be inferred that the emotional bonds between family members became increasingly important during this period.

There are no information in the passage to support the other answer choices.

12. Zelizer refers to all of the following as important influences in changing the assessment of children's worth EXCEPT changes in

- (A) the mortality rate
- (B) the nature of industry
- (C) the nature of the family
- (D) attitudes toward reform movements
- (E) attitudes toward the marketplace

Explanation:

D is the best answer.

Although reform movements are mentioned in lines 39-45, the passage does not discuss attitudes or changes in attitudes toward those movements. This choice is therefore NOT among the influences Zelizer is said to regard as important in changing the assessment of children's worth.

A, B and C are mentioned in lines 48-58 as factors Zelizer regards as "critical in changing the assessment of children's worth". E is mentioned in lines 70-80, which describe how the "sacralization" of children's lives represented "a way of resisting what they <middle-class Americans> perceived as the relentless corruption of human values by the marketplace."

- Most large corporations in the United States were once run by individual capitalists who owned enough stock to dominate the board of directors and dictate company policy. Because putting such large amounts of
- (5) stock on the market would only depress its value, they could not sell out for a quick profit and instead had to concentrate on improving the long-term productivity of their companies. Today, with few exceptions, the stock of large United States corporations is held by large
- (10) institutions-pension funds, for example-and because these institutions are prohibited by antitrust laws from owning a majority of a company's stock and from actively influencing a company's decision-making, they can enhance their wealth only by buying and selling
- (15) stock in anticipation of fluctuations in its value. A minority shareholder is necessarily a short term trader. As a result, United States productivity is unlikely to improve unless shareholders and the managers of the companies in which they invest are encouraged to
- (20) enhance long-term productivity (and hence long-term profitability), rather than simply to maximize short-term profits.
- Since the return of the old-style capitalist is unlikely, today's short-term traders must be remade into
- (25) tomorrow's long-term capitalistic investors. The legal limits that now prevent financial institutions from acquiring a dominant shareholding position in a corporation should be removed, and such institutions encouraged to take a more active role in the operations of the
- (30) companies in which they invest. In addition, any institution that holds twenty percent or more of a company's stock should be forced to give the public one day's

notice of the intent to sell those shares. Unless the announced sale could be explained to the public on (35) grounds other than anticipated future losses, the value of the stock would plummet and, like the old-time capitalists, major investors could cut their losses only by helping to restore their companies' productivity. Such measures would force financial institutions to become (40) capitalists whose success depends not on trading shares at the propitious moment, but on increasing the productivity of the companies in which they invest.

13. In the passage, the author is primarily concerned with doing which of the following?

- (A) Comparing two different approaches to a problem
- (B) Describing a problem and proposing a solution
- (C) Defending an established method
- (D) Presenting data and drawing conclusions from the data
- (E) Comparing two different analyses of a current situation

Explanation:

This question asks you to determine the main task that the passage is designed to accomplish.

The best answer is B. The passage identifies a problem (shareholder' and manager' failure to enhance companies' long-term productivity) in the first paragraph, most pointedly in the last sentence of that paragraph. In the second paragraph, the author recommends certain actions as a means of solving that problem.

Choice A is not correct. The author of the passage identifies a problem in the first paragraph, but the author does not compare two different approaches to that problem. Rather, in the second paragraph, the author proposes a single, unified approach to solving the problem. Choice C is incorrect. The author does not defend an established method of institutional shareholding in the United States and recommends a different method in the second paragraph. Choice D is also incorrect. The author describes a situation in the first paragraph but does not provide data or draw any conclusions from data. Choice E is not the correct answer. The author does not compare alternative analyses of the current situation discussed in the passage.

14. It can be inferred from the passage that which of the following is true of majority shareholders in a corporation?

- (A) They make the corporation's operational management decisions.
- (B) They are not allowed to own more than fifty percent of the corporation's stock.
- (C) They cannot make quick profits by selling their stock in the corporation.
- (D) They are more interested in profits than in productivity.
- (E) They cannot sell any of their stock in the corporation without giving the public advance notice.

Explanation:

This question asks you to decide what the passage implies, rather than states directly, about majority shareholders in a corporation.

The best answer is C. According to lines 4-8 of the passage, those individual capitalists who were once majority shareholders in a corporation would not be able to make a quick profit by selling a large amount of stock because such a sale would depress the stock's value. It can be inferred from the passage that this would be true of any majority shareholders.

Choice A is not the correct answer. The passage suggests, in lines 11-13, that majority shareholders can actively influence a company's decision-making, but it does not suggest that this influence is equal to the absolute authority suggested by the language of this answer choice. The passage also does not discuss the "operational management decisions" of corporations. Choice B is not correct. The passage does not specify what percent of a corporation's stock any one shareholder is allowed to own. Choice D is not the correct answer. The author does not imply that majority shareholders are more interested in profits than in productivity. In fact, the author argues the opposite, stating that majority shareholders such as the old-style capitalists concentrated more on long-term productivity than on quick profits. Choice E is also incorrect. In lines 30-33, the author proposes that shareholders of more than 20 percent of a company's stock should be required to give advance public notice before a stock sale, but the passage does not suggest that majority shareholders are currently required to do so.

15. According to the passage, the purpose of the requirement suggested in lines 30-33 would be which of the following?

- (A) To encourage institutional stockholders to sell stock that they believe will decrease in value
- (B) To discourage institutional stockholders from intervening in the operation of a company whose stock they own
- (C) To discourage short-term profit-taking by institutional stockholders
- (D) To encourage a company's employees to take an active role in the ownership of stock in the company
- (E) To encourage investors to diversify their stock holdings

Explanation:

This question asks you to identify the stated purpose of the author's suggestion in lines 30-33, namely, that any institution holding 20 percent or more of a corporation's stock be required to give the public one day's notice of the intent to sell that stock.

The best answer is C. The purpose of the requirement that institutions holding 20 percent or more of a company's stock be required to give advance public notice of the sale of that stock is stated in lines 38-42: to prevent institutions from "trading shares at the propitious moment" and to encourage them to concentrate on increasing a company's productivity.

Choice A is incorrect. The suggested requirement that an institution give advance notice of its intent to sell a significant amount of stock tends to discourage institutional stockholders from selling stock they believe will decrease in value since, according to the passage, such an announcement would cause the stock's value to plummet (lines 33-36). Choice B is also incorrect. In lines 28-30, the author argues that institutional stockholders should be "encouraged to take a more active role in the operations of the companies in which they invest." The advance notice requirement discussed in lines 30-33 is

proposed by the author as a means of fostering, not discouraging, institutional stockholders' participation in the operation of the companies they invest in. Choice D is not the correct answer. The passage does not discuss ownership of company stock by that company's employees. Choice E is also incorrect. The passage states only that institutions should be allowed to acquire "a dominant shareholding position in a corporation," but it does not discuss whether investors should diversify their stock holdings by investing in different companies.

16. The author suggests that which of the following is a true statement about people who typify the "old style capitalist" referred to in line 23?

- (A) They now rely on outdated management techniques.
- (B) They seldom engaged in short-term trading of the stock they owned.
- (C) They did not influence the investment policies of the corporations in which they invested.
- (D) They now play a much smaller role in the stock market as a result of antitrust legislation.
- (E) They were primarily concerned with maximizing the short-term profitability of the corporations in which they owned stock.

Explanation:

To answer this question, you must use information contained in the passage to infer something about the "old-style capitalist" referred to in line 23.

The best answer is B. According to lines 1-7 of the passage, the individual capitalists of the past, referred to later in the passage as "old-style" capitalists (line 23), could not "sell out for a quick profit" because to do so would depress the value of their stocks. From this statement it can be inferred that someone who typifies the "old-style capitalist" would be unlikely to engage in short-term stock trading.

Choice A is incorrect. A comparison between the old-style capitalists and their modern counterparts is made in lines 36-38, but the passage does not express an opinion about whether or not the management techniques used by these capitalists are outdated.

Choice C is not the correct answer. The passage does not discuss the investment policies of the corporations in which financial institutions invest. Choice D is also incorrect. According to the passage (lines 1-2; line 23), the old-style capitalists were individual investors, not large institutions. While the passage states that large institutions are affected by anti-trust legislation (lines 8-12), it says nothing about whether this legislation affects individual investors. In addition, the passage does not mention anything about how great a role individual investors now play in the stock market. Choice E is also incorrect. The passage states that the old-style capitalists focused on long-term productivity (lines 5-8), and hence not on short-term profitability.

17. It can be inferred that the author makes which of the following assumptions about the businesses once controlled by individual capitalists?

- (A) These businesses were less profitable than are businesses today.
- (B) Improving long-term productivity led to increased profits.
- (C) Each business had only a few stockholders.
- (D) There was no short-term trading in the stock of these businesses.

(E) Institutions owned no stock in these companies.

Explanation:

This question asks you to infer, from information stated in the passage, what the author assumes about the companies once controlled by individual capitalists.

The best answer is B. In lines 5-8, the author asserts that individual capitalists “had to concentrate on improving the long-term productivity of their companies.” Then, in lines 20-21, the author identifies improved long-term profitability as a consequence of improved long-term productivity. From this it can be inferred that the author assumes that if the businesses controlled by individual capitalists had improved long-term productivity, they would also have become more profitable.

Choice A is not correct. The author does not make any direct comparison between the profitability of past and present corporations. Choice C is not the correct answer. The first sentence of the passage states that most large corporations were once dominated by individual capitalists who owned large portions of the companies’ stock, but the passage does not specify whether many or few people owned the remainder of each company’s stock. Choice D is incorrect. In lines 4-6, the passage states that the individual capitalists who once dominated large corporations “could not sell out for a quick profits,” but the passage does not indicate whether or not the other shareholders of these corporations were involved in short-term trading of their stock. Choice E is not correct. The passage does not suggest that institutions owned no stock in most large corporations, only that individual capitalist owned enough stock to dominate these corporations.

18. The author suggests that the role of large institutions as stockholders differs from that of the “old-style capitalist” in part because large institutions

- (A) invest in the stock of so many companies that they cannot focus attention on the affairs of any single corporation
- (B) are prohibited by law from owning a majority of a corporation’s stock
- (C) are influenced by brokers who advise against long-term ownership of stocks
- (D) are able to put large amounts of stock on the market without depressing the stock’s value
- (E) are attracted to the stocks of corporations that demonstrate long-term gains in productivity

Explanation:

This question asks you to infer, from information stated in the passage, a way in which the role of large institutions as stockholders differs from that of the “old-style capitalist.”

The best answer is B. According to the passage, the old-style capitalists were able to play a dominant role in the corporations in which they held stock because they owned enough stock to do so (lines 1-4). The passage also states that large institutions are legally barred from owning a majority of a company’s stock (lines 8-12). From this it can be inferred that large institutions, because their ability to own stock is limited, do not play as dominant a role in the corporations of which they are stockholders as did the old-style capitalists.

Choice A is not correct. The passage does not indicate whether large institutions invest in many companies, few companies, or even just a single company. Choice C is not the correct answer. The passage does not mention brokers or any other parties who might influence the investment choices made by large institutions. Choice D is incorrect. In lines 33-36 of the passage, the author notes that an

institution' sale of a large amount of stock would, in fact, decrease the stock's value. Choice E is not the correct answer. The passage does not suggest any reason why large institutions are attracted to the stock of any particular corporations.

19. The primary function of the second paragraph of the passage is to

- (A) identify problems
- (B) warn of consequence
- (C) explain effects
- (D) evaluate solutions
- (E) recommend actions

Explanation:

This question asks you to determine the main purpose served by the second paragraph of the passage in the context of the passage as a whole.

The best answer is E. The second paragraph is devoted to the author's recommendations of certain actions, namely, the adoption of new regulations concerning the holding and selling of stock by institutional investors.

Choice A is not the correct answer. The author of the passage identifies a problem-short-term trading done by institutional shareholders-but does so in the first paragraph, not in the second. Choice B is incorrect. In the second paragraph, the author recommends new regulations regarding shareholding by institutions. Although in lines 38-42 the author mentions some consequences of the suggested regulations, the author clearly views these consequences as desirable. Choice C is not correct. The second paragraph contains suggestions about new ways to regulate shareholding by institutions. Although the author asserts that certain effects would result from the proposed regulations, these effects are not explained. Choice D is not correct. The second paragraph proposes measures to solve the problem presented in the first paragraph, but it simply describes, rather than evaluate, these proposed solutions.

- Joseph Glarthaar's *Forged in Battle* is not the first excellent study of Black soldiers and their White officers in the Civil War, but it uses more soldiers' letters and diaries—including rare material from Black soldiers—and concentrates more intensely on Black-White relations in Black regiments than do any of its predecessors. Glarthaar's title expresses his thesis: loyalty, friendship, and respect among White officers and Black soldiers were fostered by the mutual dangers they faced in combat.
- (10) Glarthaar accurately describes the government's discriminatory treatment of Black soldiers in pay, promotion, medical care, and job assignments, appropriately emphasizing

- the campaign by Black soldiers and their officers to get the opportunity to fight. That chance remained limited through
- (15) out the war by army policies that kept most Black units serving in rear-echelon assignments and working in labor battalions. Thus, while their combat death rate was only one-third that of White units, their mortality rate from disease, a major killer in his war, was twice as great.
- (20) Despite these obstacles, the courage and effectiveness of several Black units in combat won increasing respect from initially skeptical or hostile White soldiers. As one White officer put it, “they have fought their way into the respect of all the army.”
- (25) In trying to demonstrate the magnitude of this attitudinal change, however, Glatthaar seems to exaggerate the prewar racism of the White men who became officers in Black regiments. “Prior to the war,” he writes of these men, “virtually all of them held powerful racial prejudices.”
- (30) While perhaps true of those officers who joined Black units for promotion or other self-serving motives, this statement misrepresents the attitudes of the many abolitionists who became officers in Black regiments. Having spent years fighting against the race prejudice endemic in Ameri-
- (35) can society; they participated eagerly in this military experiment, which they hoped would help African Americans achieve freedom and postwar civil equality. By current standards of racial egalitarianism, these men’s paternalism toward African Americans was racist. But to call their
- (40) feelings “powerful racial prejudices” is to indulge in generational chauvinism—to judge past eras by present standards.

20. The passage as a whole can best be characterized as which of the following?

- (A) An evaluation of a scholarly study
- (B) A description of an attitudinal change
- (C) A discussion of an analytical defect
- (D) An analysis of the causes of a phenomenon
- (E) An argument in favor of revising a view

Explanation:

The best answer is A. This question requires you to identify the option that best describes the passage as a whole. In the first paragraph, the author of the passage compares Glatthaar’s scholarly study with other “excellent” studies of its kind, noting that Glatthaar’s makes more extensive use of certain types of material. The second paragraph summarizes several points of the study, noting that one point is

presented “accurately” and another “appropriately.” Paragraph three assesses Glatthaar’s ability to “demonstrate the magnitude” of a change, asserting that he exaggerates a particular element. Thus, the passage as a whole is concerned with offering an overall “evaluation of a scholarly study”; it does not present a sustained discussion of any of the matters described by the other options.

21. According to the author, which of the following is true of Glatthaar’s *Forged in Battle* compared with previous studies on the same topic?

- (A) It is more reliable and presents a more complete picture of the historical events on which it concentrates than do previous studies.
- (B) It uses more of a particular kind of source material and focuses more closely on a particular aspect of the topic than do previous studies.
- (C) It contains some unsupported generalizations, but it rightly emphasizes a theme ignored by most previous studies.
- (D) It surpasses previous studies on the same topic in that it accurately describes conditions often neglected by those studies.
- (E) It makes skillful use of supporting evidence to illustrate a subtle trend that previous studies have failed to detect.

Explanation:

The best answer is B. Lines 3-6 state that *Forged in Battle* “uses more soldiers’ letters and diaries” and “concentrates more intensely on Black-White relations in Black regiments than do any of its predecessors.” Thus, the author of the passage asserts, as B states, that *Forged in Battle* “use more of a particular kind of source material and relied more closely on a particular aspect of the topic than do previous studies.” Nowhere does the passage compare the reliability of Glatthaar’s work to that of earlier studies, as A and D assert. Similarly, C and E can be eliminated because the passage does not assert that previous studies neglected any particular subject, only that Glatthaar’s work “concentrates more intensely on Black-White relations than do...its predecessors.”

22. The author implies that the title of Glatthaar’s book refers specifically to which of the following?

- (A) The sense of pride and accomplishment that Black soldiers increasingly felt as a result of their Civil War experiences
- (B) The civil equality that African Americans achieved after the Civil War, partly as a result of their use of organizational skills honed by combat
- (C) The changes in discriminatory army policies that were made as a direct result of the performance of Black combat units during the Civil War
- (D) The improved interracial relations that were formed by the races’ facing of common dangers and their waging of a common fight during the Civil War
- (E) The standards of racial egalitarianism that came to be adopted as a result of White Civil War veterans’ repudiation of the previous racism

Explanation:

The best answer is D. In lines 6-9, the author of the passage asserts that the title of Glatthaar’s work, *Forged in Battle*, “expresses his (Glatthaar’s) thesis: loyalty, friendship, and respect among White

officers and Black soldiers were fostered by the mutual dangers they faced in combat.” That the combat dangers “fostered” such attributes suggests that they acted to improve the relations among the Black and White soldiers; thus the passage implies, as D states, that the title *Forged in Battle* refers specifically to the idea that interracial relations between Black and White soldiers fighting in the Civil War were improved by their shared experience of combat dangers. The other options describe factors that the author of the passage in no way relates to the book’s title.

23. The passage mentions which of the following as an important theme that receives special emphasis in Glatthaar’s book?

- (A) The attitudes of abolitionist officers in Black units
- (B) The struggle of Black units to get combat assignments
- (C) The consequences of the poor medical care received by Black soldiers
- (D) The motives of officers serving in Black units
- (E) The discrimination that Black soldiers faced when trying for promotions

Explanation:

The best answer is B. In the second paragraph, the author of the passage describes Glatthaar’s work as “appropriately emphasizing the campaign by Black soldiers and their officers to get the opportunity to fight.” Thus, the “struggle of Black units to get combat assignments” (choice B) is identified as rightfully emphasized by Glatthaar—that is, as being important and receiving emphasis. None of the other options describe such themes: (choice A) is mentioned only by the author of the passage; C and E are wrong because medical care and discrimination are mentioned merely as realities that Glatthaar “accurately describes”; and D because, although the passage mentions the motives of White officers in Black units, Glatthaar is nowhere described as giving special emphasis to the motives of all officers in such units.

24. The passage suggests that which of the following was true of Black units’ disease mortality rates in the Civil War?

- (A) They were almost as high as the combat mortality rates of White units.
- (B) They resulted in part from the relative inexperience of these units when in combat.
- (C) They were especially high because of the nature of these units’ usual duty assignments.
- (D) They resulted in extremely high overall casualty rates in Black combat units.
- (E) They exacerbated the morale problems that were caused by the army’s discriminatory policies.

Explanation:

The best answer is C. In lines 15-19, the passage describes “army policies that kept most Black units serving in rear echelon assignments and working in labor battalions.” The passage continues: “Thus...their mortality rate from disease ... was twice as great.” The use of the word “thus” here suggests that some aspect of these conditions was the cause of the high mortality rates, as C states. Nothing can be inferred from the passage about the absolute relationship between disease mortality rates of Black units and combat mortality rates of White units (choice A), or about the relative severity of overall casualty rates in Black combat units (choice D). nor does the passage mention or suggest the

role of either the inexperience (choice B) or the morale (choice E) of Black units.

25. The author of the passage quotes the White officer in lines 23-24 primarily in order to provide evidence to support the contention that

- (A) virtually all White officers initially had hostile attitudes toward Black soldiers
- (B) Black soldiers were often forced to defend themselves from physical attacks initiated by soldiers from White units
- (C) the combat performance of Black units changed the attitudes of White soldiers toward Black soldiers
- (D) White units paid especially careful attention to the performance of Black units in battle
- (E) respect in the army as a whole was accorded only to those units, whether Black or White, that performed well in battle

Explanation:

The best answer is C. Lines 20-22 assert that the combat performance of Black units “won increasing respect from initially skeptical or hostile White soldiers.” To support the assertion that the performance of the Black units changed White soldiers’ attitudes toward them, the author of the passage then quotes a comment made by one of those White officers about the Black units: “they fought their way into the respect of all the army” (line 22-24). The passage makes no assertions about whether “virtually all White officers” were hostile (choice A).; or about whether White units either physically attacked Black units (choice B) or paid particular attention to the performance of Black units (choice E). Nor does it address the relationship “in the army as a whole” between a unit’s performance and the respect accorded it (choice E).

26. Which of the following best describes the kind of error attributed to Glarthaar in lines 25-28?

- (A) Insisting on an unwarranted distinction between two groups of individuals in order to render an argument concerning them internally consistent
- (B) Supporting an argument in favor of a given interpretation of a situation with evidence that is not particularly relevant to the situation
- (C) Presenting a distorted view of the motives of certain individuals in order to provide grounds for a negative evaluation of their actions
- (D) Describing the conditions prevailing before a given event in such a way that the contrast with those prevailing after the event appears more striking than it actually is
- (E) Asserting that a given event is caused by another event merely because the other event occurred before the given event occurred

Explanation:

The best answer is D. To answer this question, you must determine what “kind of error” the author of the passage directly attributes to Glathhaar in lines 25-28. These lines assert that “in trying to demonstrate the magnitude of this attitudinal change”-the change in White soldiers’ attitudes toward Black units-“Glatthaar seems to exaggerate the prewar racism of the White men who became officers in Black regiments.” The error attributed to Glathhaar is one of exaggerating conditions before the Civil War so as to overstate the contrast between prewar and postwar conditions. Glatthaar is not

specifically faulted in lines 25-28 for presenting either “an unwarranted distinction between two groups” (choice A); or irrelevant evidence (choice B); or for distorting motives in order to evaluate actions negatively (choice C); or for misattributing causality (choice E).

27. Which of the following actions can best be described as indulging in “generational chauvinism” (lines 40-41) as that practice is defined in the passage?

- (A) Condemning a present-day monarch merely because many monarchs have been tyrannical in the past.
- (B) Clinging to the formal standards of politeness common in one’s youth to such a degree that any relaxation of those standards is intolerable
- (C) Questioning the accuracy of a report written by an employee merely because of the employee’s gender.
- (D) Deriding the superstitions accepted as “science” in past eras without acknowledging the prevalence of irrational beliefs today.
- (E) Labeling a nineteenth-century politician as “corrupt” for engaging in once-acceptable practices considered intolerable today.

Explanation:

The best answer is E. This question requires you to identify a hypothetical situation that exemplifies the concept of “generational chauvinism” as it is defined in the passage. This term is defined in lines 37-41, where the author of the passage criticizes the use of “current standards of racial egalitarianism” to judge the motives of abolitionist White officers serving in Black regiments: “to call their feelings ‘powerful racial prejudices’ is to indulge in generational chauvinism—to judge past eras by present standards.” The last phrase serves to define “generational chauvinism,” a concept exemplified by the situation described in choice E, in which the “one-accepted practices’ of a nineteenth-century politician are labeled as “corrupt.” None of the other options exemplify this “generational chauvinism” as it is defined in the passage.

SECTION III: GAME

Time ---35 Minutes

24 Questions

Questions 1 to 6

Red letters are given first to G or H.

Blue letters are given first to any one of the following: G, J, or I.

If a letter raises a problem that cannot be resolved by the person to whom it is given, it must be forwarded until it reaches someone who can resolve the problem and answer the letter. A letter must be forwarded as follows:

By G to I if the letter is red, but to J if the letter is blue;

By H to either G or I;

By I to J if the letter is red, but to K if the letter is blue;

By J to either I or K whether the letter is red or blue;

By K to L whether the letter is red or blue;

L answers every letter given to him.

1. Any of the following can be true EXCEPT:

- A. G forwards a red letter to I.
- B. H forwards a red letter to G.
- C. H forwards a red letter to I.
- D. I forwards a red letter to K.
- E. J forwards a red letter to I.

Explanation:

D cannot happen; I forwards red letters to J only. Therefore, the fourth choice is the correct answer.

A check of the procedures for letter forwarding shows that the first, second, third, and last answer choices can all happen.

2. A blue letter could reach L via which of the following sequences of people?

- A. G to H to K
- B. G to I to J
- C. G to J to K
- D. I to H to J
- E. I to G to J to K

Explanation:

The sequence in C conforms fully with the procedures; therefore C is the correct answer.

G may not forward a blue letter to either H or I; therefore, A and B are ruled out. I may not forward a blue letter to either H or G; therefore, D and E are ruled out.

3. Any letter that reaches L must have been previously given to

- A. G
- B. H
- C. I
- D. J
- E. K

Explanation:

Since no letters are given first to L and only K forwards letters to L, every letter that reaches L must have been previously given to K. Therefore, E is the correct answer.

A letter may reach L via the sequence J to K to L without being seen by G, H, or I; thus, the first, second, and third answer choices are ruled out. Another allowable sequence is I to K to L; therefore, D is incorrect.

4. Which of the following could be given to each of the six members of the consumer complaint department in turn?

- A. A red letter that is first given to H
- B. A red letter that is first given to G
- C. A blue letter that is first given to G
- D. A blue letter that is first given to I
- E. A blue letter that is first given to J

Explanation:

A red letter first given to H could be given to each member of the department in the sequence H to G to I to J to K to L. Therefore, A is the correct answer.

Since no one forwards letters to H, any letter not given first to H will not be received by H. Therefore, B, C, D, and E are ruled out.

5. Any letter that reaches L must have been given to a minimum of how many members of the consumer complaint department before reaching L?

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5

Explanation:

L is not given letters initially, but when L is given letters they come from K only. K, who also is not given letters initially, receives them from either I or J, either of whom may be give letters initially. Therefore, a minimum of two members of the department (I and K or J and K) must have received a letter before it reaches L, and B is the correct answer.

A minimum of two members of the department (I and K or J and K) must have received a letter before it reaches L. therefore, A, C, D, and E incorrect.

6. If a member of the consumer complaint department is given a letter that he or she had previously

given to some other member of the department, the person who is given the letter a second time could be

- A. G
- B. H
- C. J
- D. K
- E. L

Explanation:

A red letter may be given to J a second time via the sequence H to I to J to I to J. Therefore, C is the correct answer.

Since no one forwards letters to H, and only H forwards letters to G, neither G nor H could be given a letter for a second time. Thus, the first and second answer choices are ruled out. Since K forwards letters to L only, and L answers every letter given to him, neither K nor L could be given a letter for a second time. Therefore, the fourth and fifth answer choices are incorrect.

Questions 7 to 12

Two-way roads exist among the following towns surrounding a mountain:

Between M and N

Between M and O

Between O and R

Between R and T

Between R and U

Between T and P

Between P and S

There is also a one-way road between town P and town N; the permitted direction of travel is from P to N.

None of these roads intersect each other except at the towns.

There are no other towns or roads in the vicinity.

Bicycles must follow the direction established for general traffic on roads.

7. To bicycle from S to N by road, it is necessary to go to or through town

- A. M
- B. P
- C. R
- D. T
- E. U

Explanation:

To bicycle from S to N, one could go on one of two basic routes: S to P to N or else S to P to T to T to O to M to N. the only town common to both routes that is also one of the answer choices is P. Thus, B is the correct answer.

8. If a rock slide temporarily makes the road between O and R impassable, then in order to reach M by road from U, a bicyclist would have to go to or through a total of how many other towns besides M and U?

- A. 2
- B. 3
- C. 4
- D. 5
- E. 6

Explanation:

If the rock between O and R were impassable, the bicyclist would have to go through the following towns: U to R to T to P to N to M. This route intersects four towns, not counting U and M, so C is the correct answer.

9. If a bridge on the road between M and O is washed out, making the road impassable, a bicyclist would NOT be able to go by road from

- A. N to M
- B. N to S
- C. P to M
- D. P to S
- E. R to M

Explanation:

Even with no travel between O and M, it is possible to get to every other town from O, R, U, T, P, or S. However, since the road between P and N goes only in the direction from P to N, the only town the bicyclist can reach from N is M. Thus, travel from N to S is not possible, and B is the correct answer.

10. If a rock slide blocks a lane of the road from R to T, with the result that travel on the road can go only one way, from R to T, it will still be possible to go on a bicycle by road from P to

- A. N and /or S but impossible to go to M, O, R, T, or U
- B. N, S, and /or T but impossible to go to M, O, R, or U
- C. M, N, O, and /or T, but impossible to go to S, R, or U
- D. M, O, R, S, and /or T but impossible to go to N or U
- E. M, N, O, R, S, T, and /or U

Explanation:

From P it is possible to go directly to N, T, and S. By going from P to N, it is possible to get to N, M, O, R, T, and U. Thus, E is the correct answer.

11. Assume that one lane of the road from O to R is closed for repairs, with the result that travel on the road goes only one way, from R to O. It will then be possible to travel by road on a bicycle among any of the towns M, N, O, P, R, S, T, and U, among which such travel was possible before the closing, if which of the following one-way temporary roads is constructed?

- A. From M to U

- B. From P to R
- C. From S to R
- D. From S to U
- E. From T to U

Explanation:

From P, R, S, T, and U it is still possible to travel to every town. However, it is not possible to get to P, R, S, T, or U from M, N, or O. It is possible to travel between M, N, and O, so what is needed is a link from one of these towns to either P, R, S, T, or U. The choice of A names such a link and is the correct answer.

12. If M is lower and T is higher on the mountain than any of the other towns in the vicinity and if N, P, and R are all at the same altitude, the distance by road going from U to S will be shortened by building a two-way road along a level straight line between

- A. R and N
- B. R and M
- C. P and M
- D. P and R
- E. T and N

Explanation:

The most direct route from U to S before an additional road is built is U to R to T to P to S. Since T is higher than R and P and since R and P are at the same altitude, a straight, level road between R and P must be shorter than the route from R to T to P. Thus, D is the correct answer.

A is incorrect. In order to go from U to S using a road from R to N, the bicyclist would have to cover the same ground twice and return to R before going on to S. Thus, the distance from U to S could not be shortened by a road from R to N. B is also incorrect. Since M is lower than all the other towns, M is lower than R. Hence, it is not possible to build a road along a level line between R and M. The third answer choice is incorrect. Since M is lower than all the other towns, M is lower than P. Hence, it is not possible to build a road along a level line between P and M. The last answer choice is incorrect. Since T is higher than all the other towns, T is higher than N. Hence, it is not possible to build a road along a level line between T and N.

Questions 13 to 17

The manager of a repertory theater company is planning a schedule of productions for the company's five-week summer festival. Two different plays will be scheduled for each of the five weeks. The ten plays that will be scheduled are four plays by playwright R, two plays by playwright S, two plays by playwright T, one play by playwright U, and one play by playwright V. The scheduling is subject to the following restrictions:

No two plays by the same playwright will be scheduled for any of the five weeks, except for week 3, for which two plays by playwright R will be scheduled.

The play by playwright V will be scheduled for week 5.

No play by playwright S will be scheduled for the same week as any play by playwright R.

13. Which of the following could be the two plays scheduled for week 1?

- A. Two plays by playwright R
- B. Two plays by playwright S
- C. A play by playwright R and a play by playwright S
- D. A play by playwright R and the play by playwright U
- E. The play by playwright U and the play by playwright V

Explanation:

D violates none of the requirements and is thus the correct answer.

A and B can be eliminated because two plays by the same playwright cannot be scheduled in the first week. C can be eliminated because no play by R can be scheduled in the same week as any play by S.

E can also be eliminated because the play by playwright V is already scheduled for week 5 and is not available for the first week.

14. If the plays by playwright R will be scheduled for weeks 2, 3, and 4, which of the following must be true?

- A. A play by playwright S will be scheduled for week 2.
- B. A play by playwright S will be scheduled for week 5.
- C. A play by playwright T will be scheduled for week 2.
- D. A play by playwright T will be scheduled for week 4.
- E. The play by playwright U will be scheduled for week 1.

Explanation:

Since plays by playwright S cannot be scheduled on weeks with plays by playwright R, only weeks 1 and 5 are open for plays by playwright S. Since playwright S's two plays cannot be scheduled for the same week, there must be a play by S both weeks, including week 5. Therefore, the second answer choice is the right answer.

A is incorrect. A play by playwright S cannot be scheduled for the same week as one by R. C is not the correct answer. Plays by playwright T can be scheduled for weeks 1 and 4 without violating the restrictions. Thus, a play by playwright T need not be scheduled for week 2. D is also incorrect. Plays by playwright T can be scheduled for weeks 1 and 2 without violating the restrictions. Thus, a play by playwright T need not be scheduled for week 4. E is also incorrect. The play by playwright U can be scheduled for either of weeks 2 or 4 without violating the restrictions. Thus, a play by playwright U need not be scheduled for week 1.

15. If the plays by playwright S will be scheduled for weeks 1 and 2, which of the following must be true?

- A. A play by playwright R will be scheduled for week 4.
- B. A play by playwright T will be scheduled for week 1.
- C. A play by playwright T will be scheduled for week 4.
- D. A play by playwright T will be scheduled for week 5.
- E. The play by playwright U will be scheduled for week 4.

Explanation:

Since plays by playwright R cannot be scheduled for the same weeks as plays by playwright S, only weeks 3, 4, and 5 remain open for plays by playwright T. Since two will be scheduled for week 3, two are left to be scheduled for weeks 4 and 5. Since two cannot be scheduled for the same week, one must be scheduled for each of these weeks. Therefore, A is correct.

B is incorrect. The plays by playwright T can be scheduled for weeks 2 and 4 without violating the restrictions. C is incorrect the plays by playwright T can be scheduled for weeks 1 and 2 without violating the restrictions. D is incorrect. If plays by playwright S are scheduled for the first two weeks, each of the later weeks must have at least one play by playwright R. The play by playwright V is scheduled for week 5; thus, week 5 will have plays by R and V, and there will be no room to schedule a play by playwright T. E is also incorrect. The play by playwright U can be scheduled for weeks 1 or 2 without violating the restrictions.

16. Which of the following pairs of plays CANNOT be scheduled together for any week?

- A. A play by playwright R and a play by playwright T
- B. A play by playwright R and the play by playwright U
- C. A play by playwright S and a play by playwright T
- D. A play by playwright S and the play by playwright U
- E. A play by playwright T and the play by playwright U

Explanation:

Since two plays by playwright R are already scheduled for week 3, the remaining two plays by playwright R must be scheduled for two additional, different weeks. A play by playwright T cannot be scheduled for the same week as a play by playwright U because that would necessitate scheduling a play by playwright S for the same week as one by playwright R, thereby violating the third restriction. The fifth answer choice, therefore, is correct.

A is not correct. The following schedule is one of several that allow plays by playwrights R and T to be scheduled together:

Week 1: A play by playwright R and a play by playwright T

Week 2: A play by playwright R and a play by playwright T

Week 3: Two plays by playwright R

Week 4: A play by playwright S and a play by playwright U

Week 5: A play by playwright S and a play by playwright V

B is not correct. The following schedule is one of several that allow plays by playwrights R and U to be scheduled together:

Week 1: A play by playwright S and a play by playwright T

Week 2: A play by playwright S and a play by playwright T

Week 3: Two plays by playwright R

Week 4: A play by playwright R and a play by playwright U

Week 5: A play by playwright R and a play by playwright V

C is incorrect. The following schedule is one of several that allow plays by playwrights S and T to be scheduled together:

Week 1: A play by playwright S and a play by playwright T

Week 2: A play by playwright S and a play by playwright T

Week 3: Two plays by playwright R

Week 4: A play by playwright R and a play by playwright U

Week 5: A play by playwright R and a play by playwright V

D is incorrect. The following schedule is one of several that allow plays by playwrights S and U to be scheduled together:

Week 1: A play by playwright S and a play by playwright U

Week 2: A play by playwright S and a play by playwright T

Week 3: Two plays by playwright R

Week 4: A play by playwright R and a play by playwright T

Week 5: A play by playwright R and a play by playwright V

17. If a play by playwright S and the play by playwright U will both be scheduled for the same week, which of the following must be true?

- A. A play by playwright R and a play by playwright T will both be scheduled for the same week
- B. A play by playwright S and a play by playwright T will both be scheduled for the same week.
- C. The play by playwright U will be scheduled for week 2
- D. A play by playwright S will be scheduled for week 4.
- E. A play by playwright T will be scheduled for week 5.

Explanation:

Since plays by playwrights R and S cannot be scheduled for the same week, and only during the third week can two plays by the same playwright, playwright R, be scheduled, each week will have either a play by playwright R or a play by playwright S. There are only two plays by playwright S, and one of these is scheduled with one by playwright U; at most, one of these can be scheduled with one by playwright T. therefore, at least one of the plays by playwright T will be scheduled for the same week as one of the plays by playwright R. therefore, A is the correct answer.

B is not correct. The play by playwright S that is not scheduled for the same time as the one by playwright U may be scheduled for the same week as the play by playwright V, so that no plays by playwright S will be available to schedule with a play by playwright T. C is incorrect. The play by playwright U may be scheduled for either of weeks 1 or 4. D is not the correct answer. If plays by playwright S are scheduled for weeks 1 and 2, 1 and 5, or 2 and 5, no play by S will be scheduled for week 4. E is also incorrect. A play by playwright T cannot be scheduled for week 5, because one of the two available slots for that week will be filled with the play by playwright V and the other will be filled by a play by either playwright S or playwright R.

Questions 18 to 22

A doctor has prescribed an exercise program for a patient. Choosing from exercises P, Q, R, S, T, U, V, and W, the patient must perform a routine of exactly five different exercises each day. In any day's routine, except the first, exactly three of the exercises must be ones that were included in the routine done on the previous day, and any permissible routine must also satisfy the following conditions:

If P is in a routine, V cannot be done in that routine.

If Q is in a routine, T must be one of the exercises done after Q in that routine.

If R is in a routine, V must be one of the exercises done after R in that routine.

The fifth exercise of any routine must be either S or U.

18. Which of the following could be the routine for the first day of the program?

- A. P, R, V, S, U
- B. Q, S, R, V, U
- C. T, U, R, V, S
- D. U, Q, S, T, W
- E. V, Q, R, T, S

Explanation:

C satisfies all the conditions and is thus the correct answer.

P and V cannot be done in the same routine, so the first answer choice is not correct. If Q is in a routine, T must also be in the routine, so the second answer choice is not correct. The fifth exercise of any routine must be either S or U, so the fourth answer choice cannot be correct. If R is in a routine, V must be one of the exercises done after R in that routine, so the last answer choice is not correct.

19. If one day's routine is P, Q, W, T, U, each of the following could be the next day's routine EXCEPT

- A. Q, R, V, T, U
- B. Q, T, V, W, S
- C. W, R, V, T, U
- D. W, T, U, V, S
- E. W, T, S, P, U

Explanation:

If one day's routine is P, Q, W, T, U, then the next day's routine must contain exactly three of these exercises. The routine W, T, S, P, U contains four exercises in common with the first day, so it could not be the next day's routine, and E is the correct answer.

A, B, C, and D each contain exactly three exactly three exercises in common with the first day and satisfy all other conditions.

20. Which of the following is true of any permissible routine?

- A. P cannot be done third.
- B. Q cannot be done third.
- C. T cannot be done third.
- D. R cannot be done fourth.
- E. U cannot be done fourth.

Explanation:

Since S or U must be the fifth exercise in any routine; the other exercises must be done first through fourth. Since R must be done before V, and V cannot be done fifth, R cannot be done any later than

third in the routine. Thus, and this is the correct answer.

The first answer choice is incorrect. Q, T, P, W, U is a routine that meets all the conditions and has P being done third. The second answer choice is incorrect. P, W, Q, T, U is a routine that meets all the conditions, and has Q being done third. The third answer choice is incorrect. Q, P, T, W, S is a routine that meets all the conditions, and has T being done third. The last answer choice is incorrect. R, V, T, U, S is a routine that meets all the conditions, and has U being done fourth.

21. If the patient chooses R and W for the first day's routine, which of the following could be the other three exercises chosen?

- A. P, T, U
- B. Q, S, V
- C. Q, T, V
- D. T, S, U
- E. T, S, V

Explanation:

The routine R, V, W, T, S meets all of the conditions, so E is the correct answer.

If R is included in the exercise routine, then V must also be included. Therefore, the first and fourth choices are incorrect. Either S or U must be included in the exercise routine, so the third answer choice is not possible. If R, W, S, and V are four of the five exercises in the routine, Q cannot be the fifth exercise since T must be in a routine with Q. Therefore, the second choice is incorrect.

22. If R is the third exercise in a routine, which of the following CANNOT be the second exercise in that routine?

- A. Q
- B. S
- C. T
- D. U
- E. W

Explanation:

Since the fifth exercise in the routine must be either S or U and the third exercise is R, then V must be the fourth exercise. Q cannot be the second exercise because T must be an exercise done after Q and there is no available place for T after Q. A, therefore, is the correct answer.

The second and fourth choices are incorrect. Either one of S or U can be the second exercise if the other one is the fifth exercise. The third answer choice is incorrect. Q, T, R, V, S is an exercise routine that meets all of the conditions and includes T as the second exercise. The last answer choice is also incorrect. U, W, R, V, S is an exercise routine that meets all of the conditions and includes W as the second exercise.

Questions 23 to 24

The membership of two committees, designated X and Y, must be drawn exclusively from a group of seven people—Frederick, Georgia, Helen, Irene, Jorge, Karin, and Lamont. The following conditions

govern the assignment of people to the committees:

Each of the seven people must serve on X or Y.

No one can serve on both X and Y.

Frederick cannot serve on a committee with Georgia or with Jorge.

Helen cannot serve on a committee with Irene.

23. If Helen serves on X, which of the following must be true?

- A. Frederick serves on X
- B. Georgia serves on Y.
- C. Irene serves on Y.
- D. Karin serves on X.
- E. Lamont serves on Y.

Explanation:

Since Helen cannot serve on a committee with Irene and each person must serve on X or Y, if Helen serves on X, Irene must serve on Y. Therefore, C is the correct answer.

24. If exactly two people serve on X, which of the following can be one of the two?

- A. Georgia
- B. Helen
- C. Jorge
- D. Karin
- E. Lamont

Explanation:

Helen can serve on X with Frederick without violating any of the membership rules; therefore, the correct answer is B.

If either Georgia, Jorge, Karin, or Lamont serve on X with exactly one other person, then, since each person must serve on X or Y, either Frederick would serve on a committee with Georgia or with Jorge, or Helen would serve on a committee with Irene. None of these combinations is allowed; therefore, A, C, D, and E are ruled out.

SECTION IV: ARGUMENT

Time ---35 Minutes

25 Questions

1. The sustained massive use of pesticides in farming has two effects that are especially pernicious. First, it often kills off the pests' natural enemies in the area. Second, it often unintentionally gives rise to insecticide-resistant pests, since those insects that survive a particular insecticide will be the ones most resistant to it, and they are the ones left to breed.

From the passage above, it can be properly inferred that the effectiveness of the sustained massive use of pesticides can be extended by doing which of the following, assuming that each is a realistic possibility?

- (A) Using only chemically stable insecticides
- (B) Periodically switching the type of insecticide used
- (C) Gradually increasing the quantities of pesticides used
- (D) Leaving a few fields fallow every year
- (E) Breeding higher-yielding varieties of crop plants

Explanation:

Choice B gives a way of counteracting a serious drawback of the sustained massive use of pesticides. By periodically changing the pesticide used, pests resistant to one pesticide might be killed by the next pesticide, and those resistant to that pesticide might be killed by another, and so. Therefore, B is the best answer.

Choice A is inappropriate, since the effects of stable pesticides would simply be more persistent. Gradually increasing pesticide amounts (choice C) will likely have no effect on pests already resistant to massive amounts. Leaving a few fields fallow (choice D) is not relevant to the effectiveness of sustained use of pesticides. Breeding higher-yielding crops (choice E) might temporarily increase yields, but not because of anything to do with pesticides.

2. When a polygraph test is judged inconclusive, this is no reflection on the examinee. Rather, such a judgment means that the test has failed to show whether the examinee was truthful or untruthful. Nevertheless, employers will sometimes refuse to hire a job applicant because of an inconclusive polygraph test result.

Which of the following conclusions can most properly be drawn from the information above?

- (A) Most examinees with inconclusive polygraph test results are in fact untruthful.
- (B) Polygraph tests should not be used by employers in the consideration of job applicants.
- (C) An inconclusive polygraph test result is sometimes unfairly held against the examinee.
- (D) A polygraph test indicating that an examinee is untruthful can sometimes be mistaken.
- (E) Some employers have refused to consider the results of polygraph tests when evaluating job applicants.

Explanation:

The passage indicates that an inconclusive polygraph test tells nothing about the person who has taken the test, and yet employers sometimes refuse to hire someone whose results from such a test are

inclusive. Treating lack of information as if it were unfavorable evidence about a person can reasonably be considered unfair. There, C is the best choice.

Choice A is not supported, since the passage says that an inconclusive polygraph test is no reflection on the examinee. Neither B nor D is supported, since the information given includes nothing either implicit or explicit about polygraph tests that yield conclusive results. Since the passage is consistent with both E and its denial, E is not supported.

3. According to the new office smoking regulations, only employees who have enclosed office may smoke at their desks. Virtually all employees with enclosed offices are at the professional level, and virtually all secretarial employees lack enclosed offices. Therefore, secretaries who smoke should be offered enclosed offices.

Which of the following is an assumption that enables the conclusion above to be properly drawn?

- (A) Employees at the professional level who do not smoke should keep their enclosed offices.
- (B) Employees with enclosed offices should not smoke at their desks, even though the new regulations permit them to do so.
- (C) Employees at the secretarial level should be allowed to smoke at their desks, even if they do not have enclosed offices.
- (D) The smoking regulations should allow all employees who smoke an equal opportunity to do so, regardless of an employee's job level.
- (E) The smoking regulations should provide equal protection from any hazards associated with smoking to all employees who do not smoke.

Explanation:

The regulations allow some employees—those with enclosed offices—but not others the opportunity to smoke at their desks. If it is assumed that the regulations should allow all employees equal opportunity to smoke, those who are currently denied this opportunity should be given it, and so secretaries who smoke should be offered enclosed offices. Therefore, choice D is the best answer.

None of the other choices enables the conclusion to be properly drawn. Choice A tends to conflict with the conclusion, unless some enclosed offices are vacant. Choice B supports no conclusion about how secretaries should be treated, and choice C undermines the conclusion. Finally, nonsmokers already have equal protection from hazards, so choice E cannot be used to justify making any changes.

4. Dental researchers recently discovered that tooth-brushes can become contaminated with bacterial that cause pneumonia and strep throat. They found that contamination usually occurs after toothbrushes have been used for four weeks. For that reason, people should replace their toothbrushes at least once a month.

Which of the following, if true, would most weaken the conclusion above?

- (A) The dental researchers could not discover why toothbrush contamination usually occurred only after toothbrushes had been used for four weeks.
- (B) The dental researchers failed to investigate contamination of toothbrushes by viruses, yeasts, and other pathogenic microorganisms.
- (C) The dental researchers found that among people who used toothbrushes contaminated with bacterial that cause pneumonia and strep throat, the incidence of these diseases was no higher than among people who used uncontaminated toothbrushes.
- (D) The dental researchers found that people who rinsed their toothbrushes thoroughly in hot water after each use were as likely to have contaminated toothbrushes as were people who only rinsed

their toothbrushes hurriedly in cold water after each use.

- (E) The dental researchers found that, after six weeks of use, greater length of use of a toothbrush did not correlate with a higher number of bacterial being present.

Explanation:

According to choice C, using a contaminated toothbrush does not increase the incidence of infection, so the recommendation to replace a toothbrush before it becomes contaminated is greatly undermined. Choice C is therefore the best answer.

Since the recommendation is based on the discovery that bacterial contamination occurs after about four weeks, the researchers' inability to discover why contamination takes that long to appear does not weaken the recommendation (choice A), nor does their failure to investigate other forms of contamination (choice B), nor does the discovery that contamination does not worsen after six weeks (choice E). According to choice D, even thorough washing cannot prevent contamination, so replacing the toothbrush appears more essential, rather than less so.

Questions 5-6 are based on the following.

To protect certain fledgling industries, the government of country Z banned imports of the types of products those industries were starting to make. As a direct result, the cost of those products to the buyers, several export-dependent industries in Z, went up, sharply limiting the ability of those industries to compete effectively in their export markets.

5. Which of the following can be most properly inferred from the passage about the products whose importation was banned?

- (A) Those products had been cheaper to import than they were to make within country Z's fledgling industries.
- (B) Those products were ones that country Z was hoping to export in its turn, once the fledgling industries matured.
- (C) Those products used to be imported from just those countries to which country Z's exports went.
- (D) Those products had become more and more expensive to import, which resulted in a foreign trade deficit just before the ban.
- (E) Those products used to be imported in very small quantities, but they were essential to country Z's economy.

Explanation:

In Z, when the government banned imports of certain products the cost of those products rose, so the products must have been cheaper to import than they were to make in Z. Therefore choice A is the best answer.

None of the other choices can be inferred. Country Z need have had no plan to export those products later (choice B), nor need the products have come previously from those countries to which country Z exported goods (choice C). The products need not have become more expensive before the ban (choice D), and they could have been imported in relatively large quantities (choice E).

6. Which of the following conclusions about country Z's adversely affected export-dependent industries is best supported by the passage?

- (A) Profit margins in those industries were not high enough to absorb the rise in costs mentioned above.
- (B) Those industries had to contend with the fact that other countries banned imports from country Z.
- (C) Those industries succeeded in expanding the domestic market for their products.
- (D) Steps to offset rising materials costs by decreasing labor costs were taken in those industries.
- (E) Those industries started to move into export markets that they had previously judged unprofitable.

Explanation:

When the cost of the products rose, the competitive ability of those export-dependent industries that bought them was sharply limited. This fact strongly supports the claim that those industries did not have sufficiently high profit margins to enable them to absorb the price increase, so choice A is the best answer.

Given the limitation on their competitive ability, it is unlikely that those industries would be able either to expand their domestic markets (choice C) or to enter into new export markets (choice E). The other choices relate situations that would be possible but that are not strongly supported: other countries could have continued to permit imports from Z (choice B), and the industries may have been unable to decrease labor costs (choice D).

7. The difficulty with the proposed high-speed train line is that a used plane can be bought for one-third the price of the train line, and the plane, which is just as fast, can fly anywhere. The train would be a fixed linear system, and we live in a world that is spreading out in all directions and in which consumers choose the free-wheel systems (cars, buses, aircraft), which do not have fixed routes. Thus a sufficient market for the train will not exist.

Which of the following, if true, most severely weakens the argument presented above?

- (A) Cars, buses, and planes require the efforts of drivers and pilots to guide them, whereas the train will be guided mechanically.
- (B) Cars and buses are not nearly as fast as the high-speed train will be.
- (C) Planes are not a free-wheel system because they can fly only between airports, which are less convenient for consumers than the high-speed train's stations would be.
- (D) The high-speed train line cannot use currently underutilized train stations in large cities.
- (E) For long trips, most people prefer to fly rather than to take ground-level transportation.

Explanation:

The author argues that planes, since they are a free-wheel system, will be preferred to the high-speed train. Choice C weakens the argument by pointing out that planes are not a free-wheel system and are less convenient than the high-speed train would be. Thus C is the best answer.

The special feature of the high-speed train described in A is not one that clearly affects consumer choice one way or the other way. Since it is planes that would compete effectively with the proposed trains, the fact that cars and buses might not do so is irrelevant. Non-availability of certain station (choice D) and the consumer preferences described in choice E tend to make the proposed train less, not more, attractive and so both choices strengthen the argument.

8. Leaders of a miners' union on strike against Coalco are contemplating additional measures to

pressure the company to accept the union's contract proposal. The union leaders are considering as their principal new tactic a consumer boycott against Gasco gas stations, which are owned by Energy Incorporated, the same corporation that owns Coalco.

Answer to which of the following questions is LEAST directly relevant to the union leaders' consideration of whether attempting a boycott of Gasco will lead to acceptance of their contract proposal?

- (A) Would revenue losses by Gasco seriously affect Energy Incorporated?
- (B) Can current Gasco customers easily obtain gasoline elsewhere?
- (C) Have other miners' unions won contracts similar to the one proposed by this union?
- (D) Have other unions that have employed a similar tactic achieved their goals with it?
- (E) Do other corporations that own coal companies also own gas stations?

Explanation:

Whether corporations, other than Energy Incorporated, that own coal companies also own gas stations is not directly relevant to whether attempting a boycott of Gasco gas stations will coerce Coalco to accept the contract proposal. Thus choice E is the best answer.

Each of the other four questions is relevant to evaluating the chances the union strategy has of succeeding. Choice A bears on whether the strategy would apply sufficient economic pressure on Energy Incorporated. Choice B is relevant to whether consumers can respond to the call for a boycott. Choice C is relevant to whether the union's contract proposal is a reasonable one. Choice D is relevant because a successful precedent would favorably reflect on the union's chances of success.

Questions 9-10 are based on the following.

Transnational cooperation among corporations is experiencing a model renaissance among United States firms, even though projects undertaken by two or more corporations under a collaborative agreement are less profitable than projects undertaken by a singly corporation . The advantage of transnational cooperation is that such joint international projects may allow United States firms to win foreign contracts that they would not otherwise be able to win.

9. Which of the following statements by a United States corporate officer best fits the situation of United States firms as described in the passage above?

- (A) "We would rather make only a share of the profit and also risk only a share of a possible loss than run the full risk of a loss."
- (B) "We would rather make a share of a relatively modest profit than end up making none of a potentially much bigger profit."
- (C) "We would rather cooperate and build good will than poison the business climate by all-out competition."
- (D) "We would rather have foreign corporations join us in American projects than join them in projects in their home countries."
- (E) "We would rather win a contract with a truly competitive bid of our own than get involved in less profitable collaborative agreements."

Explanation:

According to the passage, for certain foreign contracts United States firms can either cooperate and hope to earn a modest profit, or not cooperate, not win the contract, and earn no part of a larger profit. This is how choice B describes the situation, so choice B is the best answer.

In order to earn a profit, United States firms must cooperate, so the alternatives described in several of the choices are not in practice open to them: the alternatives of a modest risk versus a full risk (choice A), cooperation versus competition (choice C), and winning on their own versus collaborating (choice E). Since they do not have the same need to cooperate with foreign corporations to win American contracts, choice D does not fit either.

10. Which of the following is information provided by the passage above?

- (A) Transnational cooperation involves projects too big for a single corporation to handle.
- (B) Transnational cooperation results in a pooling of resources leading to high-quality performance.
- (C) Transnational cooperation has in the past been both more common and less common than it is now among United States firms.
- (D) Joint projects between United States and foreign corporation are not profitable enough to be worth undertaking.
- (E) Joint projects between United States and foreign corporations benefit only those who commission the projects.

Explanation:

To say that transnational cooperation is experiencing a modest renaissance means that it used to be relatively common, became less so, and is now becoming more common again. Therefore choice C is the best answer, since it follows from that statement.

None of the other choices presents information provided by the passage. The passage says nothing about the size of the projects (choice A), nor about the quality of work in cases of transnational cooperation (choice B). Since the passage strongly suggests transnational cooperation can be profitable for the firms concerned, it thereby tends to contradict both the claims that joint projects are not profitable (choice D) and that they only benefit those who commission the projects (choice E).

11. A compelling optical illusion called the illusion of velocity and size makes objects appear to be moving more slowly the larger the objects are. Therefore, a motorist's estimate of the time available for crossing a highway with a small car approaching is bound to be lower than it would be with a large truck approaching.

The conclusion above would be more properly drawn if it were made clear that the

- (A) truck's speed is assumed to be lower than the car's
- (B) truck's speed is assumed to be the same as the car's
- (C) truck's speed is assumed to be higher than the car's
- (D) motorist's estimate of time available is assumed to be more accurate with cars approaching than with trucks approaching
- (E) motorist's estimate of time available is assumed to be more accurate with trucks approaching than with cars approaching

Explanation:

If the truck's speed is assumed to be the same as the car's, then since the truck is larger, the optical illusion will make it appear that there is more time to cross the highway with the truck approaching than with the car approaching. Thus, choice B helps in establishing the conclusion and is the best answer.

If the truck's speed is lower than the car's (choice A), the conclusion does not depend on the illusion. If the truck's speed is higher than the car's (choice C), the speed of the truck might counteract the illusion's effect. Since the illusion works as stated regardless of what vehicle the estimate happens to be accurate for, neither choice D nor choice E assists in drawing the conclusions.

13. Although migraine headaches are believed to be caused by food allergies, putting patients on diets that eliminate those foods to which the patients have been demonstrated to have allergic migraine reactions frequently does not stop headaches. Obviously, some other cause of migraine headaches besides food allergies must exist.

Which of the following, if true, would most weaken the conclusion above?

- (A) Many common foods elicit an allergic response only after several days, making it very difficult to observe links between specific foods patients eat and headaches they develop.
- (B) Food allergies affect many people who never develop the symptom of migraine headaches.
- (C) Many patients report that the foods that cause them migraine headaches are among the foods that they most enjoy eating.
- (D) Very few patients have allergic migraine reactions as children live migraine-free adult lives once they have eliminated from their diets foods to which they have been demonstrated to be allergic.
- (E) Very rarely do food allergies cause patients to suffer a symptom more severe than that of migraine headaches.

Explanation:

Algae whose rate of photosynthesis varies on a 24-hour basis even when they are under constant light constitute evidence against the hypothesis that it is alterations in light that control biological cycles. Therefore choice E is the best answer.

Choices A and B describe biological cycles, but provide no evidence about what controls them. Choice C says that cycles can become adapted to new patterns of light, weakly supporting the hypothesis that alterations in light control cycles. Finally, choice D provides evidence against a different hypothesis, namely, that it is the cell nucleus of single-cell plants that controls their biological cycles.

12. Biological functions of many plants and animals vary in cycles that are repeated every 24 hours. It is tempting to suppose that alteration in the intensity of incident light is the stimulus that controls these daily biological rhythms. But there is much evidence to contradict this hypothesis.

Which of the following, if known, is evidence that contradicts the hypothesis stated in lines 2-5 above?

- (A) Human body temperature varies throughout the day, with the maximum occurring in the late afternoon and the minimum in the morning.
- (B) While some animals, such as the robin, are more active during the day, others, such as mice, show greater activity at night.

- (C) When people move from one time zone to another, their daily biological rhythms adjust in a matter of days to the periods of sunlight and darkness in the new zone.
- (D) Certain single-cell plants display daily biological rhythms even when the part of the cell containing the nucleus is removed.
- (E) Even when exposed to constant light intensity around the clock, some algae display rates of photosynthesis that are much greater during daylight hours than at night.

Explanation:

If it is difficult to determine which foods cause migraines, then some foods that cause allergic reactions might not have been demonstrated to do so. Hence, if choice A is true, eliminating foods that have been demonstrated to cause migraines might not eliminate migraines, even if food allergies are the only cause of migraines. Choice A is the best answer.

Neither the fact some food allergies do not result in migraines (choice B), nor the fact that few allergies result in symptoms more severe than migraines. Choice C suggests that migraine sufferers do not naturally avoid the foods at issue. Choice D reiterates the information that eliminating certain foods does not usually solve the problem.

14. The technological conservatism of bicycle manufacturers is a reflection of the kinds of demand they are trying to meet. The only cyclists seriously interested in innovation and willing to pay for it are bicycle racers. Therefore, innovation in bicycle technology is limited by what authorities will accept as standard for purpose of competition in bicycle races.

Which of the following is an assumption made in drawing the conclusion above?

- (A) The market for cheap, traditional bicycles cannot expand unless the market for high-performance competition bicycles expands.
- (B) High-performance bicycles are likely to be improved more as a result of technological innovations developed in small workshops than as a result of technological innovations developed in major manufacturing concerns.
- (C) Bicycle racers do not generate a strong demand for innovations that fall outside what is officially recognized as standard for purposes of competition.
- (D) The technological conservatism of bicycle manufacturers results primarily from their desire to manufacture a product that can be sold without being altered to suit different national markets.
- (E) The authorities who set standards for high-performance bicycle racing do not keep informed about innovative bicycle design.

Explanation:

If racers, the only cyclists interested in innovation, created a strong demand for innovations for purposes other than official competition, then the conclusion would not follow. Therefore choice C-which asserts that racers generate no such demand-is assumed and is the best answer.

Since the argument is stated generally in terms of where demand for innovation lies and how manufacturers respond to demand, no assumption is made about the structure of the market for bicycles themselves (choice A) nor about which manufactures are most likely to produce innovations (choice B). Choice D presents another pressure toward technological conservatism, but the pressure is not required by the argument. Finally, the authorities may keep a close eye on innovation (choice E)

without the argument being affected.

15. Spending on research and development by United States businesses for 1984 showed an increase of about 8 percent over the 1983 level. This increase actually continued a downward trend evident since 1981 – when outlays for research and development increased 16.4 percent over 1980 spending. Clearly, the 25 percent tax credit enacted by Congress in 1981, which was intended to promote spending on research and development, did little or nothing to stimulate such spending.

The conclusion of the argument above cannot be true unless which of the following is true?

- (A) Business spending on research and development is usually directly proportional to business profits.
- (B) Business spending for research and development in 1985 could not increase by more than 8.3%.
- (C) Had the 1981 tax credit been set higher than 25%, business spending for research and development after 1981 would have increased more than it did.
- (D) In the absence of the 25% tax credit, business spending for research and development after 1981 would not have been substantially lower than it was.
- (E) Tax credits market for specific investments are rarely effective in inducing businesses to make those investments.

Explanation:

The conclusion that the tax credit did nothing to stimulate spending on research and development would not be true if, without the credit, such spending would have been even lower than it actually was. Thus choice D must be true for the conclusion to be true and is the best answer.

Since a tax credit generally improves business profits, if the conclusion is true choice A is unlikely to be true. If the tax credit was ineffective, some other factors must determine the level of spending, and could lead to much higher levels of spending in 1985 (against choice B), and could render a higher level of tax credit ineffective (against choice C), but it could be that credits are generally effective (against choice E).

16. Treatment for hypertension forestalls certain medical expenses by preventing strokes and heart disease. Yet any money so saved amounts to only one-fourth of the expenditures required to treat the hypertensive population. Therefore, there is no economic justification for preventive treatment for hypertension.

Which of the following, if true, is most damaging to the conclusion above?

- (A) The many fatal strokes and heart attacks resulting from untreated hypertension cause insignificant medical expenditures but large economic losses of other sorts.
- (B) The cost, per patient, of preventive treatment for hypertension would remain constant even if such treatment were instituted on a large scale.
- (C) In matters of health care, economic considerations should ideally not be dominant.
- (D) Effective prevention presupposes early diagnosis, and programs to ensure early diagnosis are costly.
- (E) The net savings in medical resources achieved by some preventive health measures are smaller than the net losses attributable to certain other measures of this kind.

Explanation:

If the results of untreated hypertension cause large economic losses, as choice A claims, then the treatment of hypertension may well be economically justifiable. Therefore choice A is most damaging to the conclusion and is the best answer.

Choices B and D tend to support the conclusion; choice B says that making preventive treatment widespread would not introduce economies of scale, and choice D identifies one aspect of prevention that is both costly and essential. Choice C undermines a different conclusion—that society should not support treatment for hypertension—but does not damage the conclusion actually drawn. The fact that different preventive health measures have different economic consequences (choice D) gives no specific information about treatment for hypertension, and so cannot affect the conclusion drawn.

17. Property taxes are typically set at a flat rate per \$ 1,000 of officially assessed value. Reassessments should be frequent in order to remove distortions that arise when property values change at differential rates. In practice, however, reassessments typically occur when they benefit the government – that is, when their effect is to increase total tax revenue.

If the statements above are true, which of the following describes a situation in which a reassessment should occur but is unlikely to do so?

- (A) Property values have risen sharply and uniformly.
- (B) Property values have all risen – some very sharply, some less so.
- (C) Property values have for the most part risen sharply yet some have dropped slightly.
- (D) Property values have for the most part dropped significantly; yet some have risen slightly.
- (E) Property values have dropped significantly and uniformly.

Explanation:

If most property values have dropped significantly, but some have risen slightly, a reassessment should occur (since values have changed at different rates) but is unlikely (since it will not benefit the government). Thus choice D describes the required situation and is the best answer.

According to the passage, choices A and E describe situations in which there is no need for a reassessment, since change has occurred uniformly. Similarly, choices B and C both describe situations in which a reassessment should occur, and is likely to, since the government will benefit.

18. The number of patents granted to inventors by the United States Patent Office dropped from 56,000 in 1971 to 45,000 in 1978. Spending on research and development, which peaked at 3 percent of the gross national product (GNP) in 1964, was only 2.2 percent of the GNP in 1978. During this period, when the United States percentage was steadily decreasing, West Germany and Japan increased the percentage of their GNP's spent on research and development to 3.2 percent and 1.6 percent, respectively.

Which of the following conclusions is best supported by the information above?

- (A) There is direct relationship between the size of a nation's GNP and the number of inventions it produces.
- (B) Japan and West Germany spent more money on research and development is directly related to the number of inventions patented in that nation.

- (C) The amount of money a nation spends on research and development is directly related to the number of inventions patented in that nation.
- (D) Between 1964 and 1978 the United States consistently spent a larger percentage of its GNP on research and development than did Japan.
- (E) Both West Germany and Japan will soon surpass the United States in the number of patents granted to investors.

Explanation:

From 1964 to 1978, spending on research and development never fell below 2.2 percent of the GNP in the United States and never rose above 1.6 percent in Japan. Therefore choice D follows from the information given and is the best answer.

Since no information is provided about the size of the GNP of any of the countries mentioned, neither choice A nor choice B is supported. The amount of information given about numbers of patents granted is insufficient to establish any general relation between spending and numbers of patents, so choice C is unsupported; and given that there is no information about the number of inventions patented in Japan and West Germany, choice E is not supported either.

19. When three Everett-owned Lightning-built airplanes crashed in the same month, the Everett company ordered three new Lightning-built airplanes as replacements. This decision surprised many in the airline industry because, ordinarily when a product is involved in accidents, users become reluctant to buy that product.

Which of the following, if true, provides the best indication that the Everett company's decision was logically well supported?

- (A) Although during the previous year only one Lightning-built airplane crashed, competing manufacturers had a perfect safety record.
- (B) The Lightning-built airplanes crashed due to pilot error, but because of the excellent quality of the planes there were many survivors.
- (C) The Federal Aviation Association issued new guidelines for airlines in order to standardize safety requirements governing preflight inspections.
- (D) Consumer advocates pressured two major airlines into purchasing safer airplanes so that the public would be safer while flying.
- (E) Many Lightning Airplane Company employees had to be replaced because they found jobs with the competition.

Explanation:

Everett's decision is most logically well supported if the crashes were not due to deficiencies in the planes, particularly if there is evidence that the airplanes provide significant protection to occupants in the event of a crash. Thus choice B is the best answer.

Choices A and E are incorrect because each suggests that the decision might be ill founded. Competing manufacturers' models might actually be safer (choice A), and Lightning might have lost its most able employees-those able to get new jobs (choice E). Choice C is incorrect because it provides no reason for preferring Lightning-built airplanes to other makes of airplane. Choice D is incorrect because, though it underscores the advisability of buying safe airplanes, it offers no evidence

that the airplanes that Everett bought were safe.

20. Recently a court ruled that current law allows companies to reject a job applicant if working in the job would entail a 90 percent chance that the applicant would suffer a heart attack. The presiding judge justified the ruling, saying that it protected both employees and employers.

The use of this court ruling as part of the law could not be effective in regulating employment practices if which of the following were true?

- (A) The best interests of employers often conflict with the interests of employees.
- (B) No legally accepted methods exist for calculating the risk of a job applicant's having a heart attack as a result of being employed in any particular occupation.
- (C) Some jobs might involve health risks other than the risk of heart attack.
- (D) Employees who have a 90 percent chance of suffering a heart attack may be unaware that their risk is so great.
- (E) The number of people applying for jobs at a company might decline if the company, by screening applicants for risk of heart attack, seemed to suggest that the job entailed high risk of heart attack.

Explanation:

The ruling would be ineffective in regulating employment practices if it could never be used to justify rejecting some application. According to choice B the ruling cannot be applied in a legally acceptable way. Thus choice B is the best answer.

None of the other choices casts doubt on the effectiveness of the ruling. Choice A suggests that the judge's justification for the ruling would be unavailable in many situations but not that the ruling itself would be ineffective. Choice C raises the possibility that there might be further rulings of a similar nature in the future. Choice D concerns employees, not job applicants; its concern is thus outside the scope of the ruling. Choice E describes one indirect effect on the job market that might stem from the ruling.

21. Robot satellites relay important communications and identify weather patterns. Because the satellites can be repaired only in orbit, astronauts are needed to repair them. Without repairs, the satellites would eventually malfunction. Therefore, space flights carrying astronauts must continue.

Which of the following, if true, would most seriously weaken the argument above?

- (A) Satellites falling from orbit because of malfunctions burn up in the atmosphere.
- (B) Although satellites are indispensable in the identification of weather patterns, weather forecasters also make some use of computer projections to identify weather patterns.
- (C) The government, responding to public pressure, has decided to cut the budget for space flights and put more money into social welfare programs.
- (D) Repair of satellites requires heavy equipment, which adds to the amount of fuel needed to lift a spaceship carrying astronauts into orbit.
- (E) Technical obsolescence of robot satellites makes repairing them more costly and less practical than sending new, improved satellites into orbit.

Explanation:

The argument presented in support of manned spaceflights rests on the notion that astronauts are

needed to repair satellites. If sending up a new, improved satellite is less costly and more practical than repairing an old one, however, as choice E states, the argument is weakened. Choice E is therefore the best answer.

None of the other choices gives any reason to think that manned spaceflights are not a necessity, so none of them is correct. Choice A describes one consequence of not repairing satellites, while choice B refers to another tool that weather forecasters use in addition to satellites. Choice C describes the circumstances in which defending manned spaceflight has become an issue, and choice D states a practical, but not insuperable, difficulty faced by flights intended for repair projects.

22. Advocates of a large-scale space-defense research project conclude that it will represent a net benefit to civilian business. They say that since government-sponsored research will have civilian applications, civilian businesses will reap the rewards of government-developed technology.

Each of the following, if true, raises a consideration arguing against the conclusion above, EXCEPT:

- (A) The development of cost-efficient manufacturing techniques is of the highest priority for civilian business and would be neglected for civilian business and would be neglected if resources go to military projects, which do not emphasize cost efficiency.
- (B) Scientific and engineering talent needed by civilian business will be absorbed by the large-scale project.
- (C) Many civilian businesses will receive subcontracts to provide materials and products needed by the research project.
- (D) If government research money is devoted to the space project, it will not be available for specifically targeted needs of civilian business, where it could be more efficiently used.
- (E) The increase in taxes or government debt needed to finance the project will severely reduce the vitality of the civilian economy.

Explanation:

Choice C describes a benefit to civilian business of the research project, and therefore provides support to the conclusion that the project will represent a net benefit to civilian business, rather than arguing against that conclusion. Choice C is therefore the best answer.

Each of the other choices presents a disadvantage of the project for civilian business that might outweigh the stated benefit, so none is correct. Cost efficiency, vital to civilian business, would be neglected (choice A); technical talent needed by civilian business would be unavailable (choice B); the government funding could be used more efficiently if directed specifically to the needs of civilian business (choice D); and the burden of financing the project would hamper civilian business (choice E).

23. In an attempt to promote the widespread use of paper rather than plastic, and thus reduce nonbiodegradable waste, the council of a small town plans to ban the sale of disposable plastic goods for which substitutes made of paper exist. The council argues that since most paper is entirely biodegradable, paper goods are environmentally preferable.

Which of the following, if true, indicates that the plan to ban the sale of disposable plastic goods is ill suited to the town council's environmental goals?

- (A) Although biodegradable plastic goods are now available, members of the town council believe biodegradable paper goods to be safer for the environment.
- (B) The paper factory at which most of the townspeople are employed plans to increase production of biodegradable paper goods.
- (C) After other towns enacted similar bans on the sale of plastic goods, the environmental benefits were not discernible for several years.
- (D) Since most townspeople prefer plastic goods to paper goods in many instances, they are likely to purchase them in neighboring towns where plastic goods are available for sale.
- (E) Products other than those derived from wood pulp are often used in the manufacture of paper goods that are entirely biodegradable.

Explanation:

If choice D is true, townspeople are likely to circumvent the local ban by purchasing disposable plastic goods in neighboring towns. The ban is thus likely to be largely ineffectual. Choice D is therefore the best answer.

None of choices A, B, C, or E indicates that the ban is ill chosen as a means of reaching the town council's environmental goals. Choice A indicates that the town council's basic criterion is avoidance of harm to the environment, not merely biodegradability. Choice B does nothing to call the ban into question, whether or not the factory sells biodegradable paper goods locally. Choice C suggests that environmental benefits would ensure, albeit not immediately. Choice E merely provides background details about paper that is completely biodegradable.

24. Since the deregulation of airlines, delays at the nation's increasingly busy airports have increased by 25 percent. To combat this problem, more of the takeoff and landing slots at the busiest airports must be allocated to commercial airlines.

Which of the following, if true, casts the most doubt on the effectiveness of the solution proposed above?

- (A) The major causes of delays at the nation's busiest airports are bad weather and overtaxed air traffic control equipment.
- (B) Since airline deregulation began, the number of airplanes in operation has increased by 25 percent.
- (C) Over 60 percent of the takeoff and landing slots at the nation's busiest airports are reserved for commercial airlines.
- (D) After a small Midwestern airport doubled its allocation of takeoff and landing slots, the number of delays that were reported decreased by 50 percents.
- (E) Since deregulation the average length of delay at the nation's busiest airports has doubled.

Explanation:

The passage presents a problem-delays at airports-and proposes a solution-allocating more slots to commercial airlines. Choice A states, however, that the major causes of the delays lie elsewhere, thereby casting doubt on the effectiveness of the proposed solution, and is thus the best answer.

None of the other choices gives any reason to think that allocating slots will not be an effective solution. Choice B describes another part of the problem, but says nothing about who uses the

additional airplanes. Choice C implies that at least some slots are available to be allocated to commercial airlines. Choice D gives one example where allocation was in fact successful, and choice E gives additional information about the scope of the problem.

25. The more frequently employees take time to exercise during working hours each week, the fewer sick days they take. Even employees who exercise only once a week during working hours take less sick time than those who do not exercise. Therefore, if companies started fitness programs, the absentee rate in those companies would decrease significantly.

Which of the following, if true, most seriously weakens the argument above?

- (A) Employees who exercise during working hours occasionally fall asleep for short periods of time after they exercise.
- (B) Employees who are frequently absent are the least likely to cooperate with or to join a corporate fitness program.
- (C) Employees who exercise only once a week in their company's fitness program usually also exercise after work.
- (D) Employees who exercise in their company's fitness program use their working time no more productively than those who do not exercise.
- (E) Employees who exercise during working hours take slightly longer lunch breaks than employees who do not exercise.

Explanation:

Even supposing that increasing the frequency of exercise leads to less sick time being taken, starting a company-supported fitness program might not produce significantly lowered absentee rates if employees who are frequently absent would not cooperate with such a program. Choice B says that such cooperation is unlikely and is the best answer.

Choices A and E suggest that exercise during working hours has undesirable consequences, and choice D indicates that such exercise fails to produce an added benefit, but none of these bears on sick time taken. Choice C concerns exercise done after work by employees participating in a fitness program, but provides no indication of the effect, if any, of that exercise on sick time taken.