

RC Practice Exercise (700-800 Level)

Passage 1

Film scholars agree that Hollywood portrayals of America at war follow a cyclical pattern. During and immediately after a conflict, important films trumpet glory and sacrifice. Ten to fifteen years later, questioning and sometimes pacifistic movies about the conflict dominate. In the late 1960's, "the raging bulls" of Hollywood—the young trendsetters rising to prominence—proclaimed this pattern obsolete. However, the passage of time has demonstrated this cultural pattern to be more resilient than it seemed in those days of social change.

Throughout the majority of the last century, evidence of the cyclical portrayal of war in film abounds. After America declared war against Germany during World War I, the still infant film industry glorified the fight against "the Hun." By the early 1930's, major releases had changed their tone; for example, *All Quiet on the Western Front* put forth an anti-war message by displaying the horrors of combat. After World War II began, the industry shifted gears. Suddenly, important pictures again portrayed glories and courage without the questioning or despair. For example, *Guadalcanal Diary*, produced during the war, showed "the ultimate sacrifice" as a noble and undoubted good. Once again, though, by 1957, films such as *The Bridge on the River Kwai* won awards for depicting the moral confusion of war.

Those who later declared this pattern dead based their conviction on their hearts rather than their minds. During the Vietnam War, the only major film about that conflict was *The Green Berets*, starring John Wayne and far closer in tone to *Guadalcanal Diary* than to *The Bridge on the River Kwai*. Similarly, years went by before more complex visions of war, such as *Apocalypse Now*, and then *Platoon*, emerged.

While today's film industry is more diverse and its audience more culturally fragmented, this cycle largely continues. *Jarhead*, a layered depiction of the first gulf war, premiered more than ten years after that conflict. Further evidence of this pattern can be seen in the release of *Apocalypse Now Redux*, which contained additional footage that the producers originally thought would repel audiences. Thus, the famous aphorism "The more things change, the more they stay the same" certainly applies to this aspect of the film industry.

1. According to the passage, *Apocalypse Now Redux* differed from *Apocalypse Now* in which of the following ways?
 - The added footage made it less appealing to a more culturally diverse audience.
 - The added footage made its portrayal of war less glorified and more ambiguous.
 - The added footage made its portrayal of war less harsh and more glorified.
 - The added footage made it more similar in tone to other war movies.
 - The removed footage made its portrayal of war less glorified and less appealing.

2. The passage implies that the combat depicted in *All Quiet on the Western Front* least resembles the depiction of combat in which of the following?
 - *Jarhead*
 - *Apocalypse Now*
 - *The Bridge on the River Kwai*
 - *Platoon*
 - *Guadalcanal Diary*
3. In the second paragraph, the author implies that "the Hun" refers to which of the following?
 - The Huns
 - The Hungarians
 - The Austro-Hungarians
 - The Germans
 - The Russians
4. What is the main point made by the author?
 - Hollywood has never fully supported America's armed conflicts.
 - In the last century, the film industry has become more culturally diverse.
 - An established cultural pattern is more durable than was thought during a time of social upheaval.
 - The film industry has only supported American military efforts during the actual conflict.
 - Cyclical patterns determine the type of big budget films produced by Hollywood more than individuals do.
5. What is the function of the last paragraph of the passage?
 - It shows that, despite changes in the industry and audience, the pattern discussed still exists.
 - It points out that the film industry never changes.
 - It shows that changes in the film industry and its audience have made the pattern previously discussed obsolete.
 - It discusses how *Jarhead* and *Apocalypse Now Redux* are fundamentally different from all the war movies that preceded them.
 - It demonstrates that war movies have changed to reflect the more culturally diverse audience.
6. Which one of the following does the author believe is true about *The Bridge on the River Kwai*?
 - It deserved the awards that it won.
 - It is a more intelligent and well-crafted movie than *The Green Berets*.
 - It was the first movie to portray the moral confusion of war.
 - Its portrayal of war is more ambivalent than that in *Guadalcanal Diary*.
 - It was more financially successful than any war movie that came before it.

Passage 2

Measuring more than five feet tall and ten feet long, the Javan rhinoceros is often called the rarest large mammal on earth. None exist in zoos. Like the Indian rhino, the Javan has only one horn; African and Sumatran rhinos have two. While the Javan rhino habitat once extended across southern Asia, now there are fewer than one hundred of the animals in Indonesia and under a dozen in Vietnam. Very little is known about Javan rhinos because they lead secretive and solitary lives in remote jungles. Until recently, scientists debated whether females even have horns, and most scientific work has had to rely on DNA garnered from dung.

The near extinction of the Javan rhino is the direct result of human actions. For centuries, farmers, who favored the same habitat, viewed them as crop eating pests and shot them on sight. During the colonial period, hunters slaughtered thousands. Now, human efforts to save them may well prove futile. The Vietnamese herd is probably doomed, as too few remain to maintain the necessary genetic variation. Rhinos from Java cannot supplement the Vietnamese numbers because in the millions of years since Indonesia separated from the mainland, the two groups have evolved into separate sub-species. In Indonesia, the rhinos are protected on the Ujung Kulon peninsula, which is unsettled by humans, and still have sufficient genetic diversity to have a chance at survival. Ironically, however, the lack of human disturbance allows mature forests to replace the shrubby vegetation the animals prefer. Thus, human benevolence may prove little better for these rhinos than past human maltreatment.

1. Which of the following can be inferred from the passage?
 - Javan rhinos are one of the most endangered animals on the planet.
 - More is known about the genetics of the Javan rhino than is known about its mating patterns.
 - Hunters killed more Javan rhinos in Vietnam than in Indonesia.
 - Most animal extinctions are the result of human actions.
 - Genetic diversity is the most important factor for the survival of a species.
2. The author's attitude toward current human efforts to save the Javan rhino can best be described as
 - optimistic and worthwhile
 - pointless and doomed
 - idealistic but profitable
 - problematic and ironic
 - confused but heroic
3. The author mentions that the Javan rhino has only one horn in order to do which of the following?
 - explain why it is closer to extinction than the African rhino
 - contrast it to the number of horns that the Indian rhino has
 - demonstrate its evolution into a separate sub-species
 - describe the features of the animal
 - contrast it to the number of horns that females have
4. The purpose of the first paragraph is to
 - discuss the different types of rhinoceroses that populate the world
 - describe the ways in which human actions have brought the Javan rhino close to extinction
 - outline the few known facts about the Javan rhino
 - discuss the steps taken to save the Javan rhino
 - highlight the differences between the sub-species of Javan rhinos in Vietnam and Indonesia
5. According to the passage, which of the following best explains why the number of Javan rhinos in Vietnam cannot be increased by additions from those in the Ujung Kulon peninsula?
 - The Indonesian Javan rhinos constitute a separate sub-species.
 - The Javan rhinos cannot swim to Vietnam and have no land route available.
 - Neither Vietnam nor Indonesia has the funds for such a project.
 - Javan rhinos in the Ujung Kulon peninsula are almost impossible to capture.
 - Terrorist activity in Indonesia has made such a project too dangerous to attempt.
6. The author states that which of the following was most responsible for the near extinction of the Javan rhino?
 - farmers shooting them on sight
 - the separation of Indonesia from the mainland
 - hunters slaughtering thousands
 - current human efforts to save them
 - the cumulative effect of many past human activities

Passage 3

For years, U.S. employers have counted on a steady flow of labor from Mexico willing to accept low-skilled, low paying jobs. These workers, many of whom leave economically depressed villages in the Mexican interior, are often more than willing to work for wages well below both the U.S. minimum wage and the poverty line. However, thanks to a dramatic demographic shift currently taking place in Mexico, the seemingly inexhaustible supply of workers migrating from Mexico to the United States might one day greatly diminish if not cease.

Predictions of such a drastic decrease in the number of Mexican immigrants, both legal and illegal, are driven by Mexico's rapidly diminishing population growth. As a result of a decades-long family planning campaign, most Mexicans are having far fewer children than was the norm a generation ago. The campaign, organized around the slogan that "the small family lives better," saw the Mexican government establish family-planning clinics and offer free contraception. For nearly three decades, the government's message concerning population hasn't wavered. In fact, the Mexican Senate recently voted to extend public school sex education programs to kindergarten.

The result of Mexico's efforts to stem population growth is nothing short of stunning. In 1968, the average Mexican woman had just fewer than seven children; today, the figure is slightly more than two. For two primary reasons, Mexico's new demographics could greatly impact the number of Mexicans seeking work in the U.S. First, smaller families by their nature limit the pool of potential migrants. Second, the slowing of Mexico's population growth has fostered hope that Mexico will develop a healthy middle class of people content to make their livelihoods in their home country.

Though the former of these factors is all but assured, the growth of a healthy middle class is far from a foregone conclusion. The critical challenge for Mexico is what it does with the next 20 years. Mexico must invest in education, job training, and infrastructure, as well as a social-security system to protect its aging population. If Mexico is willing to step forward and meet this challenge, America may one day wake up to find that, like cheap gasoline, cheap Mexican labor has become a thing of the past.

1. The passage does NOT indicate which of the following concerning Mexico's current demographics?
 - Due to the government's family planning campaign, Mexico's population is currently diminishing.
 - On average, Mexican women are having approximately one-third the number of children that they had in 1968.
 - Many Mexicans still migrate to the United States in search of work.
 - As a result of declining birth rates, Mexico's population is aging.
 - A healthy middle class in Mexico has not yet fully developed.
2. Which of the following can be inferred about U.S. employers of Mexican immigrants?
 - Most of these employers pay Mexican immigrants less money than they pay American citizens.
 - Some of these employers violate wage laws.
 - Many of these employers work in the agricultural industry.
 - Without Mexican immigrants, some of these employers would be forced to close their businesses.
 - The majority of these employers show no concern for the welfare of their workers.
3. With which of the following statements would the author of the passage MOST likely agree?
 - The United States will soon have to replace lost Mexican labor with labor provided by other immigrant groups.
 - It is difficult for a country with a large population to develop a healthy middle class.
 - Many Mexican immigrants who work in the United States believe that they are taken advantage of by American employers.
 - Most rapidly growing countries should institute a family planning campaign to limit population growth.
 - Mexico does not currently have the infrastructure to develop a healthy middle class.
4. One function of the final paragraph of the passage is to
 - relate why the number of Mexican immigrants seeking work in the United States is certain to decline.
 - detail the successes of Mexico's family planning campaign.
 - explain why the number of Mexican immigrants seeking work in the United States may not dramatically decrease.
 - specify the types of infrastructure in which Mexico must invest.
 - notify American employers that they will soon need to find alternative sources of labor.

Passage 4

The golden toad of Costa Rica, whose beauty and rarity inspired an unusual degree of human interest from a public generally unconcerned about amphibians, may have been driven to extinction by human activity nevertheless. In the United States, a public relations campaign featuring the toad raised money to purchase and protect the toad's habitat in Costa Rica, establishing the Monteverde Cloud Forest Preserve in 1972. Although this action seemed to secure the toad's future, it is now apparent that setting aside habitat was not enough to save this beautiful creature. The toad's demise in the late 1980s was a harbinger of further species extinction in Costa Rica. Since that time, another twenty of the fifty species of frogs and toads known to once inhabit a 30 square kilometer area near Monteverde have disappeared.

The unexplained, relatively sudden disappearance of amphibians in Costa Rica is not a unique story. Populations of frogs, toads, and salamanders have declined or disappeared the world over. Scientists hypothesize that the more subtle effects of human activities on the world's ecosystems, such as the build-up of pollutants, the decrease in atmospheric ozone, and changing weather patterns due to global warming, are beginning to take their toll. Perhaps amphibians - whose permeable skin makes them sensitive to environmental changes - are the "canary in the coal mine," giving us early notification of the deterioration of our environment. If amphibians are the biological harbingers of environmental problems, humans would be wise to heed their warning.

1. According to the passage, all of the following are true EXCEPT:
 - Humans are at least partially responsible for changing weather patterns.
 - Toads, like frogs, have permeable skin.
 - Human activity is not necessarily responsible for the global decline of amphibious populations.
 - Costa Rica's Monteverde Cloud Forest Preserve was not paid for solely by the Costa Rican government.
 - More frog and toad species than salamander species have disappeared in Costa Rica since the late 1980s.
2. It can be inferred from the passage that
 - only thirty species of frogs and toads remain in Costa Rica
 - humans do not have permeable skin
 - the build-up of pollutants in the atmosphere causes a decrease in atmospheric ozone
 - humans do not usually take signals of environmental deterioration seriously
 - Costa Rica suffers from more serious environmental problems than many other countries
3. The author uses the adjective "subtle" in the second paragraph most probably to emphasize that
 - these effects are not easily recognized by sophisticated testing equipment
 - these effects are difficult to notice because they take place over time on a global scale
 - these effects are so minimal that they affect only small animal species such as amphibians
 - these slight effects of human activity are rarely discussed by scientists
 - these effects are infrequently observed because they affect only specific world regions
4. The passage implies that
 - many amphibians are not considered beautiful.
 - the Monteverde Cloud Forest Preserve was not large enough to protect the golden toad.
 - only Costa Rican amphibians living near Monteverde have disappeared since the 1980s.
 - amphibians sometimes live in coal mines.
 - no humans yet consider the decline of amphibious populations an indication of a threat to human populations.
5. The primary purpose of the passage is to
 - discuss the mysterious disappearance of Costa Rica's golden toad.
 - explain why human activity is undoubtedly to blame for the global decline of amphibious populations.
 - convince humans that they must minimize the global output of pollutants.
 - describe the recent global decline of amphibious populations and hypothesize about its causes.
 - urge humans to pay careful attention to important environmental changes.

Passage 5

For millennia, the Nile River flooded nearly every year as a natural consequence of heavy summer rains on the Ethiopian Plateau; in the last century, as the population in the region exploded, the cycle of flooding interspersed with periodic drought caused widespread suffering for the local population. In the mid-1950s, the Egyptian government concluded that a significant dam was necessary to enable the country's economic development to be on a par with that of Western nations. The Aswan Dam would prevent the annual flooding, generate hydroelectric power and supply a steady source of water for residents and agricultural activities, though it would also have other, less positive effects.

By the 1970s, most Egyptian villages had electric power, and the dam provided approximately half of Egypt's entire output of electricity. The benefits were counteracted, however, by consequences which were sometimes slow to appear but ruinous in their long-term effects. Dams prevent silt from flowing through to downstream lands. The silt is essential for renewing the minerals and nutrients that make the land fertile; before the dam, the Nile floodplain was famously productive. Farmers have had to substitute artificial fertilizers, reducing profits and causing pervasive chemical pollution with deleterious effects for the human, animal and plant populations living near or in the river. It is difficult to draw definite conclusions about a project with such substantial and varied results, but it would be untenable to assert that the Egyptian government should never have built the Aswan Dam.

1. Based upon the content of the passage, the author would most likely agree with which of the following propositions?
 - If a plan achieves its stated goals, it should still be carried out, even in the face of unintended negative results.
 - Planners of highly complex projects should expect some unintended negative consequences, even if they cannot foresee what those consequences will be.
 - Although a major undertaking may have unpredictable results, those results are not necessarily grounds for condemning the entire endeavor.
 - Any potential positive and negative effects should be weighed before starting a project of considerable magnitude or complexity.
 - It is necessary to determine the net impact of all outcomes, good and bad, before deciding whether to denounce the overall project.
2. The author's attitude toward the Aswan Dam Project is best reflected by which of the following phrases?
 - inconsistent support
 - strict neutrality
 - keen enthusiasm
 - mild endorsement
 - cautious opposition
3. The passage implies which of the following about the effects of the Aswan Dam?
 - Crops cannot grow without silt.
 - Although farmers are pleased with the absence of seasonal flooding, they would prefer that the dam not have been built because of the problems it has caused.
 - The land around the river is not as fertile as it was before the dam was built.
 - Egypt now competes successfully on an economic level with Western nations.
 - The country would have been better off if the dam had not been built.
4. What is the significance of the author's statement that the dam generated half of Egypt's output of electricity by the 1970s?
 - It proves that Egypt no longer needed to rely on other sources of electricity.
 - It demonstrates the magnitude of the positive effects created by the dam.
 - It argues that the positive energy output is more important than any negative effects.
 - It shows that the dam fell short of initial expectations.
 - It contrasts the positive and negative effects of the dam.
5. What is the primary purpose of the passage?
 - to explain that varied effects can result even from sound business plans that accomplish their goals
 - to demonstrate that advantages are usually outweighed by unforeseen disadvantages
 - to assert that the Egyptian government should not have undertaken these plans for economic development
 - to describe the implementation of a project with significant environmental effects
 - to detail the negative effects suffered because of poor planning
6. All of the following are mentioned as benefits of the Aswan Dam EXCEPT
 - a constant source of fresh water for consumers and industry
 - electrical power for a sizable portion of the population
 - the facilitation of economic development possibilities similar to those in Western nations
 - the elimination of annual flood cycles in the region
 - the protection of animal and plant life in and near the river

Passage 6

Lysosomal storage diseases form a category of genetic disorders resulting from defective enzymes that normally function to degrade unneeded molecules in cells. These enzymes do their work in the lysosome, a small compartment in a cell analogous to a garbage disposal. The lysosome contains between thirty and forty different degradative enzymes. When any one of the lysosomal enzymes is defective, the molecules requiring that specific enzyme for their degradation will accumulate and cause that individual's lysosomes to swell enormously. The physiological effects of such swelling on the individual include motor and mental deterioration, often to the point of premature death. But each disease resulting from one specific defective lysosomal enzyme has its own characteristic pathology. The age of onset, rate of progression, and severity of the clinical symptoms observed in patients with the same defective lysosomal enzyme are highly variable. For many years, this variability in patients with the same defective enzyme puzzled scientists. Only recently have researchers begun to answer the riddle, thanks to a genetic analysis of a lysosomal storage disorder known as Tay-Sachs disease.

As in most lysosomal storage diseases, patients suffering from Tay-Sachs disease show both mental and motor deterioration and variability in age of onset, progression, and severity. Physicians have categorized the patients into three groups: infantile, juvenile, and adult, based on onset of the disease. The infantile group begins to show neurodegeneration as early as six months of age. The disease advances rapidly and children rarely live beyond 3 years old. The first symptoms of the disease appear in juvenile cases between 2 and 5 years of age, with death usually occurring around age 15. Those with the adult form generally live out a normal lifespan, suffering from milder symptoms than do those with the infantile and juvenile forms. Researchers hoped that the categorization would yield insight into the cause of the variability of symptoms among Tay-Sachs patients, but this turned out not to be the case.

In Tay-Sachs disease, undegraded materials accumulate mainly in the lysosomes in the brains of patients, but the kinds of molecules left undegraded and the specific identity of the defective lysosomal enzyme responsible for the malfunction were not discovered until the 1950s and 60s, respectively. The main storage molecule was found to be a lipid-like material known as GM2 ganglioside. The defective enzyme was later identified as hexosaminidase. In 1985, the gene coding for the normal hexosaminidase enzyme was cloned and its DNA sequence determined. Shortly thereafter, the DNA sequences of genes encoding hexosaminidase from many Tay-Sachs patients were studied. It soon became apparent that not one or two but many different types of mutations in the hexosaminidase gene could result in Tay-Sachs disease. Some of the mutations prevented the synthesis of any hexosaminidase, preventing all such enzyme activity in the cell. Patients with this type of mutation all had the infantile form of Tay-Sachs disease. Other mutations were found in certain

regions of the gene coding for areas of the enzyme known to be critical for its catalytic activity. Such mutations would allow for only extremely crippled hexosaminidase activity. Most of the patients with these mutations clustered in the juvenile category. Adult Tay-Sachs patients presented mutations in the regions of the hexosaminidase gene that were less important for the enzyme's activity than were those affected in juvenile patients. Scientists quickly hypothesized that the variation in age of onset and severity of Tay-Sachs disease correlated with the amount of residual enzymatic activity allowed by the genetic mutation. Though more research is needed to demonstrate similarity with other lysosomal storage diseases, the work done on Tay-Sachs disease has already offered a promising glimpse into the underlying mechanisms of these disorders.

1. The passage suggests that which of the following lines of inquiry would be most useful in determining the relevance of the research done on Tay-Sachs disease to lysosomal storage diseases generally?
 - Do patients suffering from other lysosomal storage diseases have the same mortality rate as those suffering from Tay-Sachs?
 - Do other lysosomal storage diseases affect the hexosaminidase gene?
 - How many different mutations are present in the defective genes responsible for other lysosomal storage diseases?
 - Does the onset of other lysosomal storage diseases vary with the location of mutations in DNA sequences?
 - What purpose does GM2 ganglioside serve in the human body?
2. It can be inferred from the passage that which of the following statements is true of lysosomal storage diseases?
 - They are generally caused by mutations to the hexosaminidase gene.
 - They are undetectable until physical symptoms are present.
 - They can be fatal even when allowing some enzymatic activity.
 - They are most lethal when onset is in a patient's infancy.
 - Their causes were unknown before the 1950s.
3. The author of the passage is primarily concerned with
 - illuminating the physiological consequences of Tay-Sachs disease
 - explaining the importance of research on a specific disease to other diseases of that type
 - arguing for a more detailed examination of lysosomal storage diseases
 - challenging a traditional view of a class of diseases as incomplete
 - describing the implications of genetic mutations for mortality rates

Passage 7

In the past decade, rapid technological progress and a greater demand for high-quality digital imaging have led to dramatic advances in video display technology. The dominant technology currently used in most consumer product displays is the active matrix liquid crystal diode display (LCD).

LCDs apply thin-film transistors (TFTs) of amorphous or polycrystalline silicon sandwiched between two glass plates. The TFTs supply voltage to liquid-crystal-filled cells, or pixels, between the sheets of glass. When hit with an electric charge, the liquid crystals untwist to an exact degree to filter white light generated by a lamp. This filtered light shines directly on the viewing screen or, in the case of projection televisions, is projected through a small chip that acts as a lens. LCDs that are capable of producing color images, such as in televisions and computers, reproduce colors through a process of subtraction, blocking out particular color wavelengths from the spectrum of white light until only the desired color remains. It is the variation of the intensity of light permitted to pass through the matrix of liquid crystals that enables LCD displays to present images full of gradations of different colors.

The nature and functioning of LCD displays present many advantages relative to other display technologies. The amount of power required to untwist the crystals to display images, even dark ones, is much lower than that required for analogous processes using other technologies, such as plasma. The dense array of crystals displays images from computer or other video graphics sources extremely well, with full color detail, no flicker, and no screen burn-in. Moreover, the number of pixels per square inch on an LCD display is typically higher than that for other display technologies, so LCD monitors are particularly good at displaying large amounts of data with exceptional clarity and precision. As a result, LCD TVs are considered the best display platform for video games, high definition television, movie special effects, and other graphics-intensive uses.

1. The process through which an LCD monitor displays different colors is most closely analogous to
 - An hourglass partially blocked such that a limited stream of grains of sand fall into the lower portion
 - A series of filters that separate all of the components of a mixture according to size
 - A recording studio soundproofed so that any performances within are muted to those outside
 - A piece of construction paper with outlines of characters cut out such that a lamp in front of the paper casts shadows in the shapes of the characters
 - An air vent that emits warmer air outside of a building while an air conditioning system cools the interior of the building
2. It can be inferred from the passage that an LCD monitor would utilize the most electrical power when displaying
 - a movie scene of a NASCAR race with many computer-generated special effects
 - the introduction sequence for a World War II video game
 - a bright daytime television broadcast of a parade
 - a photorealistic screen saver of a bouquet of flowers
 - a filmed scene set inside a cave with minimal lighting
3. The passage indicates that each of the following may be considered an advantage of LCD displays relative to other display technologies EXCEPT
 - they consume less power
 - they generally have more pixels per square inch of the display
 - they are able to display continuous video graphics images with no interruption
 - they reflect a widely adopted standard
 - they represent the latest, most advanced technology
4. The tone of the passage could best be described as
 - supportive advocacy
 - historical discussion
 - objective explanation
 - intellectual exploration
 - qualified support

Passage 8

A recent ball-catching experiment conducted in space by astronauts on board a space shuttle has led neuroscientists to conclude that the brain contains an internal model of gravity that is both powerful and persistent. At the same time, the experiment provided evidence that the brain can adapt to environments in which the force of downward acceleration is less pronounced than it is on earth.

The experiment's outcomes suggested that an individual's understanding of motion is hard-wired from an earth-centric perspective. In the experiment, the astronauts were asked to catch balls released from a spring-loaded cannon. Analyzing data gathered from infrared tracking cameras and electrodes placed on the astronauts' arms, McIntyre, the experiment's principal designer, noticed that the astronauts' anticipation of the ball's motion was slightly off. Though they were able to catch the ball, the astronauts expected the ball to move faster than it did. He theorized that this over-anticipation is due to the fact that the brain expects the force of the earth's gravity to act on the ball.

The experiment also demonstrates the brain's ability to adjust to conditions that run counter to its pre-set wiring. While the astronauts did not adapt to the conditions in space for some time, by day 15 of the experiment, the amplitude of the premature arm movements decreased and a new well-timed arm movement immediately preceded the catch. Upon returning to earth, the astronauts again mis-anticipated the ball's motion, though this time the ball moved faster than anticipated. However, the astronauts were able to adjust back to the earth's gravitational effect on the balls much more quickly than they had been able to adapt to the conditions in space.

Many scientists view the findings as a first step in research that could have serious practical benefits. The ability of astronauts to safely explore space and investigate other planets is dependent on understanding the differences between our physical reactions on earth and elsewhere. On another level, understanding timing processes in the body might lead to the development of treatments for coordination problems experienced by individuals with certain types of brain damage.

1. It can be inferred from the passage that during the first two weeks of the experiment the astronauts, in attempting to catch the ball, tended to
 - move their arms higher than necessary
 - adjust their arms at the last possible second
 - use fewer arm movements than they would have on earth
 - keep their arms stationary for the two seconds preceding the catch
 - adjust their arms sooner than necessary
2. Which of the following, if true, would support McIntyre's theory that the brain has built-in knowledge of gravity?
 - An individual's hand-eye coordination tends to diminish with age.
 - Infants become fearful when placed on a glass tabletop where they can see the floor, even though they have never had the experience of falling.
 - Astronauts initially feel disoriented during the first several days after departing earth for space.
 - Most children can learn to catch a ball at a very young age.
 - It is counter-intuitive to most individuals that if no air resistance were present, a bowling ball and a feather dropped at the same time from the same height will reach the ground at the same time.
3. The passage implies which of the following about gravity?
 - Gravity does not exist in space.
 - Humans do not experience any gravity in space.
 - Humans experience less downward acceleration in space than they do on earth.
 - The force of gravity is essentially the same on earth as it is in space.
 - Humans feel weightless in space due to the lack of gravity in space.
4. The function of the final paragraph is to
 - provide an alternate point of view to contrast with the analysis earlier in the passage
 - summarize the main points of the previous paragraphs
 - clarify an ambiguity raised in the second paragraph
 - move beyond the detailed description of earlier paragraphs to present broader implications
 - pose an explicit challenge to specific researchers mentioned earlier in the passage
5. The primary purpose of the passage is to:
 - describe a recent space experiment and present its conclusions
 - detail the practical applications of recent research findings
 - correct a misunderstanding about how the brain functions
 - present a summary of how gravity works
 - outline the benefits of conducting experiments in space
6. According to the passage, research suggests that the brain's built-in understanding of gravity is
 - space-centric
 - adaptable
 - fleeting
 - weak
 - evolving

Passage 9

Symptoms of Parkinson's Disease, such as tremors, are thought to be caused by low dopamine levels in the brain. Current treatments of Parkinson's disease are primarily reactionary, aiming to replenish dopamine levels after dopamine-producing neurons in the brain have died. Without a more detailed understanding of the behavior of dopamine-producing neurons, it has been impossible to develop treatments that would prevent the destruction of these neurons in Parkinson's patients.

Recent research provides insight into the inner workings of dopamine-producing neurons, and may lead to a new drug treatment that would proactively protect the neurons from decay. By examining the alpha-synuclein protein in yeast cells, scientists have determined that toxic levels of the protein have a detrimental effect on protein transfer within the cell. More specifically, high levels of alpha-synuclein disrupt the flow of proteins from the endoplasmic reticulum, the site of protein production in the cell, to the Golgi apparatus, the component of the cell that modifies and sorts the proteins before sending them to their final destinations within the cell. When the smooth transfer of proteins from the endoplasmic reticulum to the Golgi apparatus is interrupted, the cell dies.

With this in mind, researchers conducted a genetic screen in yeast cells in order to identify any gene that works to reverse the toxic levels of alpha-synuclein in the cell. Researchers discovered that such a gene does in fact exist, and have located the genetic counterpart in mammalian nerve cells, or neurons. This discovery has led to new hopes that drug therapy could potentially activate this gene, thereby suppressing the toxicity of alpha-synuclein in dopamine-producing neurons.

While drug therapy to suppress alpha-synuclein has been examined in yeast, fruitflies, roundworms, and cultures of rat neurons, researchers are hesitant to conclude that such therapies will prove successful on human patients. Alpha-synuclein toxicity seems to be one cause for the death of dopamine-producing neurons in Parkinson's patients, but other causes may exist. Most scientists involved with Parkinson's research do agree, however, that such promising early results provide a basis for further testing.

1. It can be inferred from the passage that a yeast cell with toxic levels of alpha-synuclein will die because
 - low levels of dopamine will disrupt the flow of proteins from the endoplasmic reticulum to the Golgi apparatus
 - the gene that suppresses alpha-synuclein is missing or is not functioning properly in such yeast cells
 - drug therapy has proven to be ineffective in yeast cells
 - the normal distribution of proteins to the different cell components outside the Golgi apparatus will be affected
 - alpha-synuclein is by nature a toxic protein

2. One function of the third paragraph of the passage is to
 - highlight the many similarities between yeast cells and mammalian nerve cells
 - explain in detail the methods used to conduct a genetic screen in yeast cells
 - further explain the roles of various cellular components of yeast cells
 - identify the genes in yeast cells and mammalian nerve cells that work to reverse the toxic levels of alpha-synuclein
 - clarify the relevance of genetic testing in yeast cells to the search for a new treatment for Parkinson's disease
3. It can be inferred from the passage that current treatments of Parkinson's Disease
 - repair damaged cells by replenishing dopamine levels in the brain
 - are ineffective in their treatment of Parkinson's symptoms, such as tremors
 - were developed without a complete understanding of dopamine-producing neurons
 - will inevitably be replaced by new drug therapy to suppress alpha-synuclein toxicity
 - were not developed through research on yeast cells
4. According to the passage, which of the following represents the chronology of a typical protein life in a healthy yeast cell?
 - Protein is made in the endoplasmic reticulum, sent to the Golgi apparatus, processed and altered in the Golgi apparatus, and then delivered to other parts of the cell.
 - Protein is created in the Golgi apparatus, modified and delivered to other parts of the cell, then decomposed by alpha-synuclein.
 - Protein is produced in the endoplasmic reticulum, sent to the Golgi apparatus, and then decomposed by alpha-synuclein.
 - Protein is produced in the Golgi apparatus, modified by the Golgi apparatus, distributed to the neuron, and then sent to the endoplasmic reticulum.
 - Protein is produced by alpha-synuclein, transferred to the endoplasmic reticulum, sent to the Golgi apparatus for modification, and then distributed to the rest of the cell.

Passage 10

The single-celled parasite known as *Toxoplasma gondii* infects more than half of the world's human population without creating any noticeable symptoms. Once inside the human body, *Toxoplasma* rapidly spreads to the heart and other organs. It can even penetrate the tight barrier that normally protects the brain from most pathogens. Yet, the blood of infected persons carries very few free-floating *Toxoplasma* cells. Scientists have long been puzzled by this ability of *Toxoplasma* to parasitize the human body without triggering an immune response and without an appreciable presence in the bloodstream. Recent research, however, has shed light on the ways in which *Toxoplasma* achieves its remarkable infiltration of the human body.

Though there are few individual *Toxoplasma* cells coursing freely in the blood of an infected person, scientists have discovered that the parasite is quite common in certain cells, known as dendritic cells, involved in the human immune system. Dendritic cells are found in the digestive tract and frequently come into contact with the various pathogens that enter the human body through food and water. When the dendritic cells encounter pathogens, they travel to lymph nodes and relay this information to other immune cells that then take action against the reported pathogen. Scientists have found, however, that *Toxoplasma* is capable of hijacking dendritic cells, forcing them from their usual activity and using them as a form of transportation to infect the human body quickly. Without this transport mechanism, *Toxoplasma* could not reach the better-protected areas of the body.

Toxoplasma invades the human body through consumption of the undercooked meat of infected animals, primarily pigs and chickens. Other animals, such as cats, can become infected as well. In fact, cats are a necessary component in the reproductive cycle of *Toxoplasma*, since the animal's intestines are the parasite's sole breeding ground. *Toxoplasma* creates egg-like cysts, known as oocysts, in the cats' intestines. These oocysts are shed in the cats' droppings and contaminate ground water and soil, eventually finding their way into the food chain. Because *Toxoplasma* must somehow find its way into a new host cat in order to reproduce, it cannot kill its current host. Instead, it waits for the host, usually a small rodent, to be eaten by a cat, thus providing *Toxoplasma* the opportunity to reproduce.

1. It can be inferred from the passage that which of the following statements is true of dendritic cells in the human body?
 - They are produced by the lymphatic system.
 - They are more numerous in the digestive tract than in any other part of the human body.
 - Most dendritic cells of persons infected with *Toxoplasma* carry the parasite.
 - They are the only cells capable of being infected by *Toxoplasma*.
 - They are able to penetrate the membranes surrounding the brain.
2. According to the passage, all of the following are true of *Toxoplasma gondii* EXCEPT
 - it can contaminate ground water
 - it enters the human body through the food chain
 - it can alter the usual behavior of human cells
 - the human body is incapable of detecting it
 - it must find a host cat in order to reproduce
3. The second paragraph performs which of the following functions in the passage?
 - It summarizes the research that remains to be done regarding *Toxoplasma*.
 - It presents a recommendation based on the new understanding of *Toxoplasma*.
 - It describes the mechanism by which *Toxoplasma* is able to parasitize the human body.
 - It introduces information that is essential to understanding the role of *Toxoplasma* in human development.
 - It discusses an outdated scientific model that has been discredited and offers a new model in its place.
4. Which of the following is the most likely outcome for *Toxoplasma* cells that invade the human body?
 - They will be destroyed by the immune system.
 - They will collect in the lymphatic system.
 - They will not reproduce.
 - They will be detected after several weeks.
 - They will be destroyed by other pathogens in the bloodstream.
5. The author mentions "pigs and chickens" in the final paragraph in order to
 - provide specific examples of animals that can carry *Toxoplasma*
 - provide specific examples of animals that are often eaten by cats
 - provide specific examples of other animals whose dendritic cells are exploited by *Toxoplasma*
 - provide specific examples of animals in which *Toxoplasma* can breed
 - provide specific examples of animals that are immune to *Toxoplasma*

Passage 11

Antibiotics are chemical substances that kill or inhibit the growth of bacteria. The success of antibiotics against disease-causing bacteria is one of modern medicine's great achievements. However, many bacteria harmful to humans have developed ways to circumvent the effects of antibiotics, and many infectious diseases are now much more difficult to treat than they were just a few decades ago. Antibiotic resistance is an especially difficult problem for hospitals with critically ill patients who are less able to fight off infections without the help of antibiotics.

Bacteria can develop antibiotic resistance because they have the ability to adapt quickly to new environmental conditions. Most commonly, bacteria share with each other genetic material called resistance plasmids; these shared plasmids, which contain the genetic code enabling antibiotic resistance, can spread throughout a bacterial population to create a strain of resistant bacteria. Less commonly, a natural mutation that enables antibiotic resistance takes place within the chromosome of the bacteria, and the resulting strain of bacteria can reproduce and become dominant via natural selection. In the absence of human involvement, however, bacteria in the wild rarely develop resistance to antibiotics.

In the United States, animals raised on industrial-scale factory farms are routinely administered low levels of antibiotics in their feed not as a cure for ongoing maladies, but primarily as a growth-enhancing agent to produce more meat and also as a prophylactic measure to compensate for overcrowded and unsanitary conditions. Currently, several antibiotics that are used in human medical treatment are administered non-therapeutically to healthy livestock and poultry. Examples include tetracycline, penicillin and erythromycin. This long-term non-therapeutic feeding of antibiotics to animals creates the ideal conditions for the development of antibiotic-resistant bacteria, as it kills the susceptible bacteria while leaving the resistant strains to reproduce and flourish.

Europe is far ahead of the United States in the responsible use of antibiotics: On January 1, 2006, the European Union banned the feeding of all antibiotics to livestock for non-therapeutic purposes. This sweeping policy follows a 1998 ban on the non-therapeutic use of four medically-important antibiotics on animals. The time has come for the United States to follow Europe's lead.

1. Based on the information in the passage, to which of the following practices would the author most likely be opposed?
 - Hospitals are hiring higher numbers of infectious disease specialists than ever before.
 - Many health insurance policies do not or only partially reimburse patients for prescriptions of the newest and most effective antibiotics.
 - The industrial farm industry contributes more than \$100 million to incumbent members of Congress each year.
 - Physicians routinely prescribe antibiotics to patients with viral diseases, even though antibiotics have no effect on viruses.

- Hospitals are enforcing more stringent "hand-hygiene" standards in an effort to reduce infections.
2. Based on the information in the passage, which of the following statements can be inferred?
 - Most industrial farms do not meet the standards for sanitation required by the United States government.
 - If the non-therapeutic use of antibiotics were halted worldwide, there would be no new resistant strains of antibiotic resistant bacteria.
 - European livestock and poultry are raised in more sanitary conditions than are those in the United States.
 - Hospitals are better learning to cope with the growing spread of antibiotic resistant bacteria.
 - It is possible for antibiotic-resistant bacteria in animals to be passed on to humans.
 3. Which of the following best describes what the phrase "prophylactic measure" in the third paragraph means?
 - a measure to cure the animals of any existing infectious diseases
 - a contraceptive measure to prevent the animals from spreading genetic diseases
 - a pre-emptive measure to kill bacteria in the animals before the animals become ill
 - an antiseptic measure to kill surface bacteria in the surrounding environment
 - a measure that creates a physical barrier that protects the animals from the bacteria in the surrounding environment
 4. The passage is primarily concerned with
 - advocating the banning of a practice
 - explaining the mechanism of a process
 - explaining the practices of a particular industry
 - describing the history of a phenomenon
 - weighing the costs versus the benefits of a practice
 5. According to the passage, which of the following describes how bacteria can develop antibiotic resistance?
 - Radiation from medical devices such as x-ray machines weaken the immune system in both humans and animals.
 - Resistant strains developed through genetic engineering dominate a bacterial population through natural selection.
 - Medical practitioners over-prescribe antibiotics in hospitals which encourages bacteria to adapt and form resistant strains.
 - Genetic material containing the resistant trait is shared among a bacterial population.
 - Many antibiotics lose potency and become ineffective over time.

Passage 12

In the early to mid-1980s, a business practice known as a “leveraged buyout” became popular as a method for companies to expand without having to spend any of their own assets. The leveraged buyout was not without its problems, however, and in time it came to represent in the public imagination not only corporate ingenuity and success, but also excess and greed. Many of the main corporate figures of the 1980s saw spectacular rises and, perhaps inevitably, spectacular falls as they abused the leveraged buyout as a means to extraordinary financial gain.

A leveraged buyout entails one company purchasing another using the assets of the purchased company as the collateral to secure the funds needed to buy that company. The leveraged buyout allows companies to take on debt that their own assets would have been insufficient to secure in order to finance expansion. The benefit of the leveraged buyout is obvious: companies with insufficient funds can still expand to compete with larger competitors. The drawbacks, however, became apparent only after the fact: the purchased company must perform extraordinarily well in order to generate the capital to pay off the loans that made the purchase possible in the first place. When the purchased company underperforms, the buyer must somehow find the money to pay off the loans. If such funds are not obtained, the buyer may be forced to sell off the company, or parts thereof, for less than the purchase price. In these cases, the buyer is still responsible for repaying the debt that is not covered by the sale price. Many of these deals resulted in the evisceration of the purchased companies, as subparts were sold to pay down the loans and employees were laid off to reduce costs and increase profits.

The most famous leveraged buyout is probably the 1988 purchase of RJR Nabisco by Kohlberg Kravis Roberts (“KKR”). The purchase price for the corporate giant RJR Nabisco was \$25 billion, almost all of which was borrowed money. The takeover was “hostile,” meaning that RJR Nabisco resisted any overtures from potential buyers. KKR ultimately succeeded by buying a controlling interest in RJR Nabisco, thereby obtaining voting control over the company. By the mid-1990s, though, KKR had seen a reversal of fortune and was forced to sell off RJR Nabisco in order to relieve itself of the crushing debt load.

The 1980s were the heyday of the leveraged buyout, as lending institutions were willing to loan money for these ventures. When the deals turned out to be much riskier in life than on paper, the lenders turned away from the buyouts and returned to the notion that borrowers must possess adequate collateral of their own.

1. The primary purpose of the passage is to
 - criticize the motives of those who use risky financial strategies
 - challenge a common perception of financiers
 - describe the evolution and application of a certain financial device
 - explain the popularity of leveraged buyouts during a certain period
 - argue that leveraged buyouts are detrimental to overall financial health
2. The passage provides support for which of the following statements?
 - Leveraged buyouts are utilized primarily by small companies.
 - Some companies purchased through leveraged buyouts fell short of their buyers’ expectations.
 - Today, no banks or other lending institutions will finance leveraged buyouts.
 - Most leveraged buyouts bring significant financial rewards to the buyers.
 - Leveraged buyouts were responsible for much of the economic growth of the 1980s.
3. The author mentions the RJR Nabisco case most probably in order to emphasize which of the following points?
 - Leveraged buyouts are employed only by high-profile financiers.
 - Leveraged buyouts can be successfully utilized to purchase large companies.
 - RJR Nabisco could have resisted the hostile takeover.
 - Leveraged buyouts carry major risks in addition to their benefits.
 - Kohlberg Kravis Roberts was a leader in the development of the leveraged buyout.

Passage 13

To remain financially sound, health insurance companies must charge higher rates to insure people considered a higher risk. Lacking complete information about individuals, insurers are forced to set a standard rate, based on the average risk of the group, for a particular segment of the population. Consumers in poor health are willing to pay for the insurance, knowing that it will cover their higher-than-average health-care costs. In contrast, healthy consumers often decide to forgo the insurance, reasoning that it is less expensive to pay out-of-pocket for their lower-than-average health-care costs. The result, called "adverse selection," is that the riskier members of a group will comprise the group of insurance applicants, potentially leading to a market failure in which insurance companies cannot afford to offer insurance at any price.

Among people over age sixty-five, even the wealthy can have difficulty obtaining fairly priced medical insurance, simply because of their age. However, those who blame so-called insurance company greed and discrimination against the elderly are ignoring the reality of adverse selection. Younger people generally obtain health insurance through their employers' group insurance plan. Employer's plans obligate all employees to enroll in the plan and effectively pre-screen for general health, as a minimum health level is required to hold a job. Insurance companies can therefore charge a lower premium, based on the lower average risk of the employee pool, without worrying that healthy employees will opt out of the plan. Consumers over sixty-five, typically not employed and thus seeking insurance individually, are necessarily more vulnerable to market failure stemming from adverse selection.

1. It can be inferred from the passage that unemployed people
 - always pay higher health insurance premiums than employed people
 - cannot purchase health insurance
 - are not as healthy, on average, as employed people
 - opt out of the workforce for health reasons
 - must work in order to acquire health insurance
2. The author refers to "greed and discrimination" in the second paragraph of the passage in order to
 - provide an example of the way some consumers are treated unfairly
 - explain how medical insurance pricing decisions are justified
 - accuse employers of failing to solve the problem of adverse selection
 - identify causes of adverse selection
 - identify an alternate explanation that the author disputes
3. The primary purpose of the passage is to
 - advocate for change on behalf of consumers
 - explain why a market failure occurs
 - introduce recently discovered information
 - challenge a widely accepted explanation
 - argue that a situation is morally wrong
4. Which of the following best describes the function of the first paragraph within the passage as a whole?
 - It states an opinion that is supported elsewhere in the passage.
 - It outlines a process that is critiqued elsewhere in the passage.
 - It advances an argument that is disputed elsewhere in the passage.
 - It introduces conflicting arguments that are reconciled elsewhere in the passage.
 - It defines a problem that is cited elsewhere in the passage.
5. The passage states which of the following about the cost of health-care?
 - It is generally higher for people with poor health.
 - It is generally higher for full-time workers.
 - It is not fairly priced in the current market.
 - It has been rising in recent years.
 - It will soon be too high for younger workers to afford.

Passage 14

Many musicologists consider jazz the only purely American form of music. Others, however, argue that jazz is rooted in a history similar to that of America itself, a history of confluence.

The immigration of Europeans and the slave trade of West Africans to America resulted in a convergence of cultures, traditions, and art forms, including music. Jazz, first played in New Orleans in the early 1900s, borrowed heavily from the European musical scale and harmonic system. Jazz ensembles were built predominantly on European instruments, such as the trumpet, trombone, saxophone, and piano. The West African influence on jazz was manifested primarily in its performance. Scatting, a technique used by jazz vocalists to mimic the sounds of instruments, had its origin in West African vocal traditions. The emphasis on improvisation in jazz music, in addition to group participation, also came from West African music.

Proponents of the argument that jazz is purely American often point to its genesis in New Orleans as evidence for this perspective. The irony, however, is that the essence of America lies in the plurality of its roots. To deny the rich and complex history of jazz, and the true origins of the art form, is in effect denying the very aspects of the art form that make it undeniably American.

1. It can be inferred from the passage that the author would be less inclined to label jazz an American art form if which of the following were true?
 - New Orleans was not the place where jazz music was first played.
 - Jazz music was first created in New Orleans when four avant-garde musicians from different musical backgrounds came together to experiment with unprecedented musical concepts.
 - With the influx of West Africans to the Americas came a very specific West African musical style that was later renamed "jazz" by Americans who heard this style of music being played in New Orleans.
 - Jazz music actually draws more of its character from South American and Native American traditions than from those of Europe or West Africa.
 - West African musical styles are heavily influenced by the musical traditions of a variety of Middle Eastern cultures.
2. The author of the passage would most likely agree with which of the following statements?
 - Although American football was derived from the English sports of soccer and rugby, it should be called a purely American sport because it was first played in America.
 - Because American football was derived from the English sports of soccer and rugby, it should not be called an American sport.
 - Most sports scholars deny the English origins of American football.
 - What makes American football essentially American is that it was derived from the convergence of English soccer and rugby.
 - Because the essence of America lies in the plurality of its roots, American football should not be called an American sport.
3. Which of the following best outlines the general structure of the passage?
 - The first paragraph presents two sides of an issue; the second paragraph subjectively presents background information relevant to the issue; the third paragraph summarizes the points made earlier in the passage.
 - The first paragraph introduces two differing viewpoints on an issue; the second paragraph objectively presents relevant information; the third paragraph describes the author's opinion on the issue.
 - The first paragraph introduces two differing viewpoints on an issue; the second paragraph gives a comprehensive history of the debate; the third paragraph describes one person's perspective on the debate.
 - The first paragraph presents two sides of an issue; the second paragraph presents newly discovered information relevant to the issue; the third paragraph summarizes the main points presented earlier in the passage.
 - The first paragraph introduces a controversy; the second paragraph presents background information relevant to the controversy; the third paragraph settles the controversy.
4. The author of the passage would most likely agree with which of the following statements?
 - Although American football was derived from the English sports of soccer and rugby, it should be called a purely American sport because it was first played in America.
 - Because American football was derived from the English sports of soccer and rugby, it should not be called an American sport.
 - Most sports scholars deny the English origins of American football.
 - What makes American football essentially American is that it was derived from the convergence of English soccer and rugby.
 - Because the essence of America lies in the plurality of its roots, American football should not be called an American sport.

5. According to the passage, all of the following statements about jazz music are true EXCEPT:
- Jazz music was first played in the twentieth century.
 - Jazz music was first played in New Orleans.
 - The instrumentation used in jazz music includes horns as well as stringed instruments.
 - Impromptu elements are a common characteristic of jazz performance.
 - There is disagreement among musicologists as to whether jazz music should be called an American art form.
6. Which of the following provides the best example of the scatting technique used in jazz performance?
- A female vocalist attempting to vocalize the tone and melodic line just played by a trumpet
 - A male vocalist using the European harmonic system to derive a melodic line
 - A trombone player attempting to imitate the sound of a male vocalist
 - A vocalist improvising a melodic line
 - A call and response between two or more instruments in the ensemble
7. Which of the following elements of jazz most likely has its origin in West African musical traditions?
- the emphasis on a tonal harmonic structure
 - the use of the guitar as one of the primary rhythm instruments
 - melodic lines rooted in the dorian scale
 - the use of many instruments in a jazz ensemble
 - an impromptu call-and-response between two instruments in the ensemble

Passage 15

The recruitment and development of talent is a growing priority for many organizations, and is increasingly regarded as an important competitive advantage. One example of this emphasis on talent development is the creation of so-called 'C' level executive roles—Chief Talent or Personnel Officer—that represent the interests of the Human Resources department. This is a significant change from past years, during which Human Resources was generally considered a lower priority, even a necessary evil, and a destination for executives that did not thrive in other departments.

This change has had an important beneficiary—women. An extraordinarily high proportion of Human Resources departments are run by women, reflecting the composition of the departments themselves. For better or worse, Human Resources positions have long been perceived as natural roles for women, as women are generally regarded as more nurturing and service-oriented than their male counterparts. As these traits are considered core to the functioning of effective Human Resources personnel, the advancement of women within HR departments has been routine and that, in turn, has attracted more women. Additionally, the lifestyle of workers in the Human Resources department is often not as demanding in terms of hours and weekends worked as it is for workers in other departments; many women with children find this appealing.

The preponderance of female heads of Human Resources departments and the higher prioritization of talent development have combined to give many female executives increased authority and influence. Many women, after performing well in a Human Resources capacity, have been given additional responsibilities in other departments. Also, more female executives have been asked to represent their organizations at industry conferences, further increasing their visibility.

1. Which of the following best describes the structure of the passage?
 - An innovative idea is explained, and the unexpected results of the idea's adoption are listed.
 - A new theory is described, and evidence is provided to support this hypothesis.
 - An established practice is challenged, and the results of this challenge are documented.
 - A recent trend is introduced, and an impact of this trend is then explained and examined.
 - A change in emphasis is detailed, and advocates of this change are described.
2. The passage implies that an organization with a Chief Talent Officer:
 - employs a woman in the position
 - regards Human Resources as more important than other departments
 - emphasizes the importance of Human Resources to a greater degree than organizations without such a position
 - enjoys a competitive advantage relative to other organizations
 - is attractive to prospective female employees
3. The passage suggests which of the following about the "additional responsibilities" cited in the second sentence of the third paragraph?
 - They are probably in areas not as traditionally associated with female leadership.
 - They are in departments that used to be run by a man.
 - They are similar to responsibilities that these women have already successfully undertaken.
 - They include speaking at industry conferences on behalf of these women's organizations.
 - They are more important than these women's prior responsibilities in the Human Resources area.
4. The tone of the passage suggests that the author regards the changes described in the passage as:
 - overdue redress for issues historically faced by women
 - a natural result of business and personnel trends
 - an unfortunate continuation of pervasive misconceptions
 - a necessary step in the realignment of management
 - a formidable new impediment to social changes
5. Which of the following best describes the main idea of the passage?
 - Human Resources departments are attractive to women for a number of reasons.
 - Women are more effective at developing and retaining talent than their male counterparts.
 - The increasing emphasis on the recruitment and treatment of talent has benefited many female executives.
 - Women are being promoted to lead Human Resources departments more and more frequently.
 - The recruitment and development of talent is receiving greater attention and emphasis in many organizations.

Passage 16

American economists continually attempt to gauge the health of the economy, both for the gain of the private sector as well as for the global standing of the United States. Different elements of the economy react differently to changes in prosperity. Some elements rise and fall as the economy waxes and wanes. These are known as coincident indicators. Other elements are known as leading indicators and usually show a downturn before the economy does. A third group of elements are known as lagging indicators and lose vigor only after the economy has already begun to slow. Economists can predict the direction of the economy by monitoring these indicators.

Coincident indicators, such as manufacturing and employment rates, are the best gauge of the current state of the economy. A continued shift in these indicators allows economists to determine whether the economy itself is in the process of an upturn or a downturn. These indicators coincide with shifts in the economy because they are dependent on sustained prosperity. But since coincident indicators reflect only the current state of the economy, they are not especially useful in predicting how the economy will perform in the near future. Economists must look to other indicators for that.

The indicators with the greatest predictive power are leading indicators, such as mortgage applications and profit margins. When these indicators rise or fall, economists can often foretell similar changes in the country's economic health. These indicators do not cause changes in the economy. Rather, they often signal changes in economic behavior that lead to shifts in the economic cycle. By contrast, the third type of indicator – lagging indicators – is useless as a harbinger of change. But these indicators can be helpful in confirming the assessments of economists.

Determining which elements of the economy fall into which category of indicator requires analysis of copious data and an understanding of the factors that propel the economy. One must determine which events surrounding a turn in the business cycle actually contributed to the change. Establishing a solid framework for understanding the behavior of these indicators helps economists to avoid miscalculations and to guide the country through periods of slow or negative economic growth.

1. The primary purpose of the passage is to
 - compare the utility of various economic indicators
 - explain the process by which economists draw conclusions about key factors of economic change
 - present a conceptual framework used by economists to prescribe economic goals
 - trace the development of a set of economic devices
 - argue for the continued evaluation of economic factors affecting the business cycle
2. The information in the passage suggests that which of the following would most strongly indicate an imminent change in the business cycle?
 - a decrease in the employment rate
 - a decrease in the number of new homes built per month
 - an increase in the number of new automobiles produced each month
 - an increase in the difference between manufacturing costs and retail revenues for large home appliances
 - a decrease in the number of corporate bankruptcies per month
3. According to the passage, the main purpose of economic indicators is which of the following?
 - to facilitate the analysis necessary to maintain forward economic momentum
 - to allow investors to time their investments in sync with economic cycles
 - to foster healthy economic competition among various commercial sectors
 - to bring to light several key factors in economic downturns
 - to promote widespread understanding of economic principles
4. The passage suggests that lagging indicators would be least helpful in determining which of the following?
 - whether predictions based on the behavior of the mortgage market were accurate
 - whether companies ought to cut costs in order to avoid short-term losses
 - whether recent trends in the employment rate were consistent with the overall economic picture
 - whether financial analysts are correct in their assessment of recent economic developments
 - whether the government was justified in taking action to boost the economy

Passage 17

Despite its 1989 designation as a threatened species under the federal Endangered Species Act, the desert tortoise, *Gopherus agassizii*, has declined in numbers by ninety percent since the 1980s. Although federal protection made it illegal to harm desert tortoises or remove them from the wild of the southwestern North American deserts, this measure has been insufficient to reverse the species' decline, and further intervention is required.

Recovery has been slow, partly due to the desert tortoise's low reproductive potential. Females breed only after reaching full size at fifteen to twenty years of age, and even then may only lay eggs when adequate forage is available. Although the number of eggs in each clutch varies, and each female might lay a few clutches in one season, the average mature female produces only a few eggs annually. From these precious eggs, hatchlings emerge wearing soft shells that will harden slowly into protective armor over the next five years. The vulnerable young are entirely neglected by adult tortoises, and only five percent ultimately reach adulthood.

Predators are blamed for most tortoise deaths; ravens, specifically, are estimated to cause more than half of the juvenile tortoise deaths in the Mojave Desert. Tortoise eggs and juveniles, with their delicate shells, can fall prey to many birds, mammals, and other reptiles. For protection from predators, as well as from desert temperature extremes, tortoises of all ages burrow into the earth. However, if rabbits and rodents are scarce, larger mammalian predators may dig tortoises out of their burrows, devouring even mature tortoises despite their hardened shells.

Even with current protections from human interference, the desert tortoise faces a tough recovery, so additional measures must be taken. First, the limited habitat of desert tortoises, with soil suitable for their burrows, must be protected from development. Next, urban expansion often has the unintended effect of increasing raven populations, so aggressive measures to control the birds are necessary to increase desert tortoise hatchling survival rates. Finally, released captive tortoises typically perish, and can pass upper respiratory tract disease into the wild population with devastating consequences, so continuing education of pet tortoise owners is essential.

1. It can be inferred from the passage that the desert tortoise mortality rate would be most likely to decrease if which of the following were true?
 - Desert tortoise burrows were cooler.
 - Male and female tortoises mated more frequently.
 - Adult tortoises provided better care for their young.
 - Forage plants were abundant in the habitat of the desert tortoise.
 - Rabbits were abundant in the habitat of the desert tortoise.
2. The passage mentions each of the following as reasons that the desert tortoise is a threatened species EXCEPT
 - expansion of urban areas near the desert tortoise habitat
 - the low reproductive rate of desert tortoises
 - desert temperature extremes
 - predation by ravens
 - the release of captive tortoises by pet owners
3. The primary intent of the passage is to do which of the following?
 - Describe the lifecycle of a species
 - Advocate future actions
 - Discuss a problem
 - Evaluate past actions
 - Criticize the government
4. Previous efforts to protect the desert tortoise are regarded by the author with
 - weary skepticism
 - complete satisfaction
 - implied opposition
 - qualified approval
 - overt disdain

Passage 18

Scientific advances in the latter half of the twentieth century have allowed researchers to study the chemical activities taking place in the human brain during the sleep cycle in more detail. In the 1970s, Jacobs employed these advances to postulate that dreams and hallucinations share a common neurochemical mechanism with respect to the neurotransmitters serotonin and norepinephrine that accounts for the observable similarities between the two states of mind. To test the theory, researchers attempted to elucidate the role of these transmitters in the normal sleep cycle and the effect of hallucinogenic drugs on them.

Although scientists still have much to discover about the chemical complexities of the brain, serotonin appears important for managing sleep, mood, and appetite, among other important functions, while neurons release norepinephrine to facilitate alertness and mental focus. Both are discharged in high quantities only during waking states. At the onset of sleep, the activity levels of neurons that release both the neurotransmitters drop, allowing the brain first to enter the four non-rapid eye movement (Non-REM) stages of sleep. When the brain is ready to enter the fifth stage, REM, which is associated with dreaming, the levels of these two chemicals drop virtually to zero. The Jacobs hypothesis held that the absence of norepinephrine was required to enable the brain to remain asleep, while the absence of serotonin was necessary to allow dreaming to occur.

Lysergic acid diethylamide, or LSD, is a semi-synthetic psychedelic drug which causes significant alteration of the senses, memories and awareness; at doses higher than 20 micrograms, it can have a hallucinogenic effect. LSD mimics serotonin well enough to be able to bind at most of the neurotransmitter's receptor sites, largely inhibiting normal transmission. In addition, the drug causes the locus ceruleus, a cluster of neurons containing norepinephrine, to greatly accelerate activity. If the drug stimulates norepinephrine, thereby precluding sleep, and inhibits serotonin, which Jacobs had postulated was a necessary condition for dreaming, then the resulting hallucinations could merely be "dreaming while awake." The research thus far is promising but inconclusive; future scientific advances should allow this theory to be tested more rigorously.

1. Which of the following, if true, would most undermine the central premise of the Jacobs hypothesis?
 - LSD does not completely inhibit normal transmission of serotonin.
 - Serotonin is only one of many chemicals that play a role in regulating sleep.
 - Researchers prove conclusively that the level of norepinephrine in the brain is a significant factor in enabling the brain to sleep.
 - Some semi-synthetic hallucinogenic drugs other than LSD do not inhibit serotonin.
 - The first four stages of sleep are as crucial to the process of dreaming as the fifth stage.
2. Which of the following best represents the author's primary goal in writing the passage?
 - to outline a theory and suggest options for further research
 - to act as an advocate for additional research to help elucidate a particular theory's validity
 - to introduce a theoretical construct that has not yet been sufficiently proven
 - to demonstrate the complexities involved in conducting a certain type of scientific research
 - to articulate a hypothesis and lay out the case for proving it
3. According to the passage, all of the following are true EXCEPT
 - Norepinephrine and serotonin are discharged only during waking states.
 - Ingesting more than 20 micrograms of LSD will cause some people to hallucinate.
 - Rapid eye movement is the stage of sleep during which people dream.
 - LSD causes neurons to increase the rate at which they discharge norepinephrine.
 - The absence of serotonin seems to be necessary in order to enable the brain to dream.
4. According to the passage, which of the following is true of the drug lysergic acid diethylamide?
 - Research into the drug is promising but inconclusive.
 - The neuron receptor sites that normally bind serotonin will also bind the drug.
 - The locus ceruleus causes the drug to affect bodily systems more rapidly than normal.
 - The drug stimulates norepinephrine and serotonin.
 - A person who ingests more than 20 micrograms of the drug will have hallucinations.

Passage 19

Dogs are widely employed by the police as biological detection systems to detect the smuggling and storage of drugs. Yet, recent evidence suggests that insects, rather than mammals, may be used more effectively in this capacity. One of the disadvantages of dogs lies in the fact that these animals, like humans, may get bored and lose interest. Other problems may also result from the emotional relationship between a dog and its owner. Insects, on the other hand, remain relatively free of these emotional attachments and, at the same time, possess biological detection mechanisms that are at least as effective as those of mammals.

Insects have olfactory systems that are very similar to those of vertebrates, detecting odors via finger-like protuberances on the antenna, called olfactory sensilla. The odorant molecule passes through pores in the outer cuticle of the sensillum and becomes attached to an odorant binding protein. This protein carries the hydrophobic ligand through the lymph fluid found inside the cell and attaches it to a receptor on the dendritic projections of a sensory nerve cell. Finally, this receptor sends a signal to the central nervous system, allowing for easy detection by researchers.

The position of the insect olfactory organs on the surface of its body allows for direct investigation of the system's response. A technique developed by German biologist Dietrich Schneider in the 1950s became the first method that enabled researchers to record the activity in insect olfactory nerves and identify the compounds that trigger a behavioral response. The recent developments in this direction suggest that the detection mechanisms of insects are likely to be applied in practice in the near future.

1. Which of the following statements can be most reasonably inferred from the passage above?
 - Some police departments have already tested using insects to detect smuggling.
 - The use of dogs to detect smuggling dates back to the nineteenth century.
 - Detection of signals sent by the receptors to the central nervous system is easier in insects than in mammals.
 - In the first half of the twentieth century, there was no reliable method for recording the activity in insect olfactory nerves and identifying the compounds that trigger a behavioral response.
 - The position of the insect olfactory organs on its body varies between flying insects and crawling insects.
2. Which of the following most accurately describes the primary purpose of the passage?
 - To advocate a wider use for the biological detection mechanisms of dogs and other mammals.
 - To describe possible disadvantages involved in the use of dogs' biological detection mechanisms.
 - To describe biological detection mechanisms of insects and suggest that they may provide a viable alternative to those of mammals.
 - To discuss the process used by insects to detect odors.
 - To discuss the methods used by biologists to explore insects' olfactory organs.
3. It can be inferred from the passage that dogs could be used more effectively in detecting drugs if which of the following were true?
 - They could last without food for longer periods of time.
 - They could visually recognize the drugs they are supposed to detect.
 - They could not only smell but also taste the drugs they are asked to detect.
 - They could use finger-like protuberances for detecting odors.
 - They could not develop emotional relationships with people.
4. Which of the following best describes the author's attitude towards the prospects of using insects' biological detection systems in practice?
 - Moderately optimistic
 - Completely neutral
 - Highly doubtful
 - Largely uninterested
 - Mildly pessimistic
5. According to the passage, which of the following roles is played by an odorant binding protein?
 - It sends a signal to the central nervous system.
 - It carries the hydrophobic ligand through the lymph fluid and attaches it to a receptor.
 - It passes through pores in the outer cuticle of the sensillum.
 - It picks up the signal from the olfactory sensilla.
 - It transmits odors via finger-like protuberances on the antenna.

Passage 20

In the 1950s, reading was taught to young children primarily through the use of simple primers depicting the middle-class non-adventures of "*Dick and Jane*." Rudolph Fletch's bestselling 1955 book *Why Johnny Can't Read* attacked these primers, calling them "horrible, stupid, insipid, ... tasteless little readers" and asserting that such boring stories gave no incentive for children to read on their own and learn to "sound out" each word phonetically. Fletch also bemoaned the fact that there was not a single book in bookstores that first and second graders could read by themselves.

In response, a publisher commissioned Theodore Geisel, who wrote children's books under the pen name "*Dr. Seuss*," to write a book that "a first grader can't put down." Geisel was given a list of a few hundred words considered important and asked to make a book out of them. Nine months later, Geisel, using only 220 different words, delivered *The Cat in the Hat*, a whimsical story about two bored children left at home with their talking fish who are suddenly visited by a havoc-creating six-foot-tall talking cat. In addition, Geisel wrote the entire book in a rhyming verse, making it fun to read aloud. *The Cat in the Hat* was a tremendous success and vaulted Geisel into instant celebrity. Another publisher bet Geisel that he could not write an entire book using only 50 different words. Geisel won the bet by publishing the classic *Green Eggs and Ham*.

The Dr. Seuss books revolutionized the children's book industry by proving that it was possible to create engaging books with a limited vocabulary. Geisel has been credited with killing off "*Dick and Jane*," replacing them with clever rhymes, plot twists and rebellious heroes who do the unexpected. Now one in four American children receives a *Dr. Seuss* title as his or her first book.

The main function of the first paragraph is

- to introduce Fletch's approach to writing children's books
- to describe the "Dick and Jane" primers used in most school
- to advocate the increase of children's books in bookstores
- to establish the premise that the status quo in the early 1950s was not satisfactory for teaching children how to read
- to praise Fletch's 1955 book *Why Johnny Can't Read*

The author provides a brief synopsis of the plot of *The Cat in the Hat* primarily in order to

- introduce the reader to the various characters in the book
- contrast the story of *The Cat in the Hat* with those of the "boring" primers of the era
- demonstrate how bizarre the plot of the book is
- assert that talking cats and fish exist
- warn parents that leaving children home alone can be dangerous

The primary purpose of this passage is to

- describe how Geisel changed the children's book industry
- support the conclusions of Fletch
- compare and contrast the philosophies of Fletch and Geisel
- demonstrate the popularity of Geisel's books
- summarize the state of the children's book industry

Passage 21

Commonplace items sometimes play surprising roles in world development. For example, though most people today associate nutmeg with simple baked goods, this common spice once altered the course of political history. For centuries, the nutmeg tree grew only in the Banda Islands, a small chain in the southwest Pacific. Locals harvested the aromatic nuts of the tree and sold them to traders. Eventually these nuts, from which the spice is made, ended up as a luxury item in the European market, via Venetian spice merchants. Eager to establish a monopoly over this valuable spice, the Dutch attacked the Bandas, subjugating the native people in a mostly successful attempt to control the nutmeg trade.

However, one island in the Banda chain remained in the hands of the British and was the object of much conflict between the Netherlands and England. After many battles, the British offered to cede control of the island in exchange for New Amsterdam, a Dutch outpost on the east coast of North America. At the time, the Dutch, inveterate traders, were more interested in the spice trade than in the mercantile value of New Amsterdam and so accepted the offer. In 1667, the Treaty of Breda gave the Dutch complete control of the Banda Islands, and thus of the nutmeg trade, and gave the British New Amsterdam, which they promptly renamed New York.

1. The second paragraph performs which of the following functions in the passage?
 - It offers specific information to complete the logic of the author's claims.
 - It summarizes and evaluates the evidence given thus far.
 - It presents the author's main point to explain a unique situation.
 - It cites a particular case to demonstrate the importance of historical change.
 - It discusses the necessary outcome of the author's assertions.
2. Which of the following, if true, most strengthens the claim that New Amsterdam would have remained a Dutch possession if not for the conflict over nutmeg?
 - Attempts to cultivate nutmeg trees outside of the Banda Islands had failed.
 - Few people lived in New Amsterdam before it was ceded to the British.
 - The British controlled trade in other valuable spices, such as cloves.
 - New Amsterdam served as a trading center for furs exported to Europe.
 - The Netherlands controlled no North American territories other than New Amsterdam.
3. Which of the following is mentioned in the passage as a reason for the initial interest of the Netherlands in the Banda Islands?
 - Increased economic competition with Britain
 - Disappointment with the economic development of New Amsterdam
 - Frustration with the practices of Venetian spice merchants
 - Failure to cultivate nutmeg in other locations
 - Desire to restrict access to a commodity
4. The passage suggests which of the following about the Banda Islands?
 - The British arrived in the islands before the Dutch.
 - Nutmeg was the only spice that grew on the islands.
 - Natives of the islands produced nutmeg from the nuts of the nutmeg tree.
 - The Banda Islands are still in the possession of the Dutch.
 - The local economy of the islands depended completely on nutmeg.
5. In the passage, the author is primarily interested in
 - tracing the history of a major city
 - discussing the role of spices in world development
 - offering a specific example to support a general claim
 - arguing for continued research into political history
 - presenting an innovative view of a commonplace item

Passage 22

The movement for women's rights traces its origin to the first half of the nineteenth century. The Seneca Falls Convention, held in Seneca Falls, New York in July of 1848, is commonly regarded as the beginning of the women's rights movement in the United States. This conference was preceded by a series of ground-breaking events that made possible this seminal milestone in the history of American women.

The idea for the convention emerged during the 1840 World Anti-Slavery Convention in London, a conference that precluded its female delegates from participation in discussions. Lucretia Mott, a famous women's rights activist, wrote in her diary that calling the 1840 convention a "world" convention "was a mere poetical license." She had accompanied her husband to London but had to sit behind a partition with other women activists, including Elizabeth Cady Stanton, who later became one of the main forces behind the Seneca Falls Convention.

During the early 1840s, Elizabeth Cady Stanton composed the Declaration of Sentiments, a document modeled after the Declaration of Independence, declaring the rights of women. At the time of its composition, the Declaration of Sentiments was so bold that when Elizabeth Stanton showed the draft to her husband, he stated that if she read it at the Seneca Falls Convention, he would have to leave town. The Declaration contained several new resolutions. It proclaimed that all men and women are born equal and stated that no man could withhold a woman's rights, take her property, or preclude her from the right to vote. This Declaration also became the foundation for the Seneca Falls Convention.

On July 19-20, 1848, the Seneca Falls Convention brought together 240 delegates between ages 22 and 60, including forty men, who spent the two days at the conference debating, refining and voting on the Declaration of Sentiments. Most of the declaration's resolutions received unanimous support and were officially endorsed. Later in 1848, the Seneca Falls convention was followed by an even larger meeting in Rochester, New York. Thereafter, national women's conventions were held annually, contributing to the growing momentum in the movement for women's rights.

1. Which of the following best describes the main purpose of the passage above?
 - To compare the origin of the women's rights movement with the current-day situation.
 - To support further expansion of women's rights in the United States.
 - To criticize the nineteenth-century restrictions on women's rights.
 - To explain the reasons for the opposition to the Seneca Falls Convention.
 - To discuss the origin of the women's rights movement.
2. The passage provides information about each of the following, EXCEPT
 - the days on which the Seneca Falls Convention was held
 - the month in which the convention in Rochester was held
 - the year in which the World Anti-Slavery Convention was held
 - the number of candidates participating in the Seneca Falls Convention
 - the location of the World Anti-Slavery Convention
3. The second paragraph of the passage plays which of the following roles?
 - Provides details about the Declaration of Sentiments.
 - Discusses the events leading to the World Anti-Slavery Convention.
 - Describes the position of Lucretia Mott's husband towards her attendance of the World Anti-Slavery Convention.
 - Demonstrates how the World Anti-Slavery Convention may have contributed to the momentum behind the movement for women's rights.
 - Explains the reasons for the limited participation of women in the World Anti-Slavery Convention.
4. Which of the following can be most reasonably inferred from the passage?
 - Most of the delegates of the Seneca Falls Convention subsequently attended the 1848 convention in Rochester, New York.
 - The Declaration of Sentiments stated that women must not be confined to housekeeping occupations.
 - The Seneca Falls Convention gathered more than 190 women, none of whom were younger than 20 years old.
 - The husband of Elizabeth Cady Stanton left town after she read the Declaration of Sentiments at the Seneca Falls Convention.
 - Most delegates at the 1840 World Anti-Slavery Convention were men.

Passage 23

One often hears that biographies are autobiographies, that the biographer is always writing about himself. On the contrary, serious biographers seek and welcome the unfamiliar, however troublesome to account for. Ron Chernow, the author of rich biographies of the American businessmen J.P. Morgan and John D. Rockefeller, remarks that biographers "like to stub their toes on hard, uncomfortable facts strewn in their paths." Such encounters with the unaccountable are opportunities for breaking out and breaking through, in new directions, to fresh understanding.

One also often hears that biographers must like their subjects. That would of course rule out such vastly important subjects as Hitler or Stalin. In practice, the biographer must like the subject not as a person but as a subject. Some are good subjects for the author, some bad. And what makes one subject better than another for any particular biographer varies dramatically. Some of the reasons are purely practical. Does the subject need a biography? Are the materials available? How much time is needed? A biographer's knowledge and ability also determine the choice. Great scientists are great subjects, but can one write about their achievements with insight and authority? Personal idiosyncrasies matter, too. Biographers tend to be attracted to subjects who display particular personality traits, whether they be ambition, cruelty, ingenuity, or any other characteristic that separates a potential subject from the multitudes.

In choosing a subject, the biographer's main question should be, "Can an effective book be made out of this person's life?" Day after day for years, the biographer will try to untangle chronology, compress relationships without distorting them, and keep the main narrative clear while carrying forward several intricate strands of the subject's life. What pushes most biographers on in this endeavor is not necessarily affection for the subject but the feeling that they are writing a good book.

1. It can be inferred that the author makes which of the following assumptions about biographies?
 - Their main purpose is to inform readers about key aspects of the subjects' personalities.
 - Only subjects who share traits with biographers make good subjects for biographies.
 - Compelling biographies cannot be written about ordinary citizens.
 - The biographer's credibility with readers is a factor in the critical success of a biography.
 - Practical considerations are most important in the selection of a subject for a biography.
2. The author is primarily concerned with
 - persuading biographers to change their methods
 - refuting some common beliefs about a particular literary genre
 - arguing against continued reform of a historical endeavor
 - refuting an outdated theory of a particular literary genre
 - describing the working methods of certain authors
3. The author mentions Ron Chernow most probably in order to
 - provide a counterexample to a general claim about biography
 - illustrate a questionable assertion regarding biography
 - establish a favorable comparison with an established biographer
 - underscore the importance of research in biography
 - challenge a new approach to biography

Passage 24

As Internet marketing has matured, it has driven two trends: a narrower focus on pitching specific consumer groups and a more robust effort to measure the outcomes of marketing campaigns. In the pre-Internet world, advertisers were content to pay for television commercials whose audience was relatively broad and whose effect was not easily quantifiable. While a company might use viewership ratings to get general data about the size and demographics of the audience for its commercials, there was no way to measure the extent to which these commercials translated into actual sales.

In contrast, many companies are now moving their marketing dollars away from traditional advertising outlets towards Internet-based campaigns that can target specific consumer groups and quantify the return on marketing investments. For example, pay-per-click search engines allow companies to pay for small text advertisements that are displayed only when users search for specific words relevant to the products and services sold by that company. A company is charged only when a consumer clicks on the ad and is directed to the company's website, thereby ensuring that the company's advertising dollars are spent capturing consumers that demonstrate some interest in its offerings. Further, using sophisticated web-analytic technology, companies can track a consumer's online behavior and determine the exact amount of any online purchases made.

Though hailed as more cost-effective, Internet advertising has its limits. Proponents of print media argue that newspaper ads more effectively promote brand awareness and thereby provide better value. Further, fraud, intense competition, and the rise of ancillary services—such as firms that companies must hire to navigate complex web-tracking tools—render Internet marketing more costly than some companies realize.

1. Each of the following can be inferred from the passage as a possible consequence of the rise of Internet marketing EXCEPT
 - a decrease in the percentage of marketing dollars spent on television advertising
 - an increased emphasis on measuring the specific outcomes of ad campaigns
 - the appearance of new marketing-related service firms
 - a decreased emphasis on "brand awareness" as a major marketing goal
 - the emergence of "pay-per-click" search engines
2. The author of the passage would be most likely to agree with which of the following statements?
 - Companies should invest their marketing dollars only in campaigns that can target very specific consumer groups.
 - Traditional advertising outlets are usually not worth the cost for large companies.
 - Companies can significantly decrease their overall marketing expenditures by shifting to the use of pay-per-click search engines.
 - For companies that place a premium on precisely measuring the return on their advertising investment, Internet ads will likely be more effective than traditional outlets.
 - Contrary to popular belief, advertising in traditional outlets is actually less expensive than advertising on the Internet.
3. Which of the following can be inferred from the passage about the use of pay-per-click search engines ads?
 - Most consumers that respond to these ads translate directly into paying customers.
 - Companies will incur relatively little cost for ads that attract minimal interest from consumers.
 - Companies with the most impressive websites will draw the most attention to their ads.
 - Companies with the best brands benefit the most from the ads.
 - Companies that use these ads always have web-analytic technology on their websites.
4. The third paragraph of the passage serves to
 - point out possible disadvantages of Internet advertising
 - demonstrate the cost-effectiveness of Internet advertising
 - argue against proponents of print media
 - provide further detail on the specific example mentioned in the second paragraph
 - contrast newspaper ads with television commercials

Passage 25

Before the age of space exploration, the size and composition of the moon's core were astronomical mysteries. Astronomers assumed that the moon's core was smaller than that of the Earth, in both relative and absolute terms — the radius of the Earth's core is 55 percent of the overall radius of the Earth and the core's mass is 32 percent of the Earth's overall mass — but they had no way to verify their assumption. However, data gathered by Lunar Prospector have now given astronomers the ability to determine that the moon's core accounts for 20 percent of the moon's radius and for a mere 2 percent of its overall mass.

The data have been used in two ways. In the first method, scientists measured minute variations in radio signals from Lunar Prospector as the craft moved towards or away from the Earth. These variations allowed scientists to detect even the slightest changes in the craft's velocity while the craft orbited the moon. These changes resulted from inconsistency in the gravitational pull of the moon on the craft, and permitted scientists to create a "gravity map" of both near and far sides of the moon. This map, in turn, revealed to scientists the distribution of the moon's internal mass. Scientists were then able to determine that the moon has a small, metallic core, which, if composed mostly of iron, has a radius of approximately 350 kilometers. The second method involved examining the faint magnetic field generated within the moon itself by the moon's monthly passage through the tail of the Earth's magnetosphere. This approach confirmed the results obtained through examination of the gravity map.

The size and composition of the moon's core are not academic concerns; they have serious implications for our understanding of the moon's origins. For example, if the moon and Earth developed as distinct entities, the sizes of their cores should be more comparable. In actuality, it seems that the moon was once part of the Earth and broke away at an early stage in the Earth's evolution, perhaps as the result of a major asteroid impact. The impact could have loosened iron that had not already sunk to the core of the Earth, allowing it to form the core around which the moon eventually coalesced.

1. The primary purpose of the passage is best expressed as
 - The author discusses the method of data utilization that proved that the moon was once part of the earth.
 - The author discusses the methods of data utilization that changed scientists' opinions about the relative sizes of the earth's and moon's cores.
 - The passage studies the method that, using data about radii and core mass, led to important implications about the origin of the planets.
 - The passage studies the use of scientific methods to analyze data and confirm a hypothesis and references possible deductions.
 - The passage discusses the implications following from the size of the Earth's core.
2. According to the passage, scientists employed one research method that measured
 - changes in a spacecraft's velocity as it returned to Earth
 - changes in the gravitational pull on the Lunar Prospector as it orbited the moon
 - changes in the moon's gravity as it orbited the earth
 - changes in a spacecraft's radio signals as it changed position relative to the earth
 - changes in the moon's gravitational pull over time
3. The author mentioned "gravity map" in the second paragraph in order to
 - illustrate the method used to correct the Lunar Prospector's velocity
 - confirm the results obtained by examining the moon's magnetic field
 - detail a step in the investigation of the composition of a specific orbiting body
 - detail a step in the investigation of the effects of gravity on the moon and earth
 - explain a step in the process of confirming a new hypothesis and discarding an older theory
4. It can be inferred from the passage that
 - the earth's core contributes a higher proportion of both the earth's total radius and its total mass than the core of the moon contributes to its own total radius and mass
 - a comparison of the earth's and moon's cores suggests that the earth did break away from the moon
 - scientists will eventually be able to use the gravity map to further the proof that a major asteroid impact caused the earth and moon to separate
 - because the earth and moon were once joined, it is probable that scientists will eventually discover fossils and other evidence on the moon that indicates that a major asteroid impact caused the extinction of the dinosaurs
 - the moon's core has a higher ratio of iron in its composition than does the earth's

Passage 26

New research by Paul Fildes and K. Whitaker challenges the theory that strains of bacteria can be “trained” to mutate by withholding a metabolite necessary for their regular function. In particular, they consider the case of bacteria typhosum, which needs tryptophan in order to reproduce. Earlier researchers had grown the bacteria in a medium somewhat deficient in tryptophan and observed the growth of mutant strains of the bacteria which did not need tryptophan in order to reproduce.

Fildes and Whitaker argue that the withholding of tryptophan did not induce these mutant strains of bacteria. Rather, these mutants were already present in the original sample of bacteria typhosum, albeit in a concentration too small to detect. In experimenting with the bacteria grown in agar cultures, they found that by plating out huge quantities of the bacteria, one could locate mutant strains. Because of the possibility that the lack of uniformity of the agar cultures had in fact trained mutant strains, they conducted similar experiments with liquid cultures and again found that mutant strains of the bacteria were present in the original sampling. From these experiments, Fildes and Whitaker conclude that the mutants are of genetic origin and are not induced by environmental training. They asserted that the concentration of tryptophan is unrelated to the appearance of these mutants in the bacteria.

To confirm these results, Fildes and Whitaker used an innovative plating technique using pile fabrics, such as velvet or velveteen, to accurately imprint the growth found on an original agar plate to a series of replica agar plates. The process entails taking the original agar plate, inverting it onto the velvet while using light finger pressure to transfer growth, and then imprinting the fabric, with its pattern of growth, on the new agar plates. By using this replica plating method, Fildes and Whitaker demonstrated that the mutants were in fact genetically present or preadapted, as the locations of the mutant strains of bacteria on the replica plates were identical to the locations of the mutant strains on the original agar plate.

1. According to the passage, Fildes and Whitaker conducted the experiment with liquid culture because
 - agar culture contained tryptophan
 - liquid culture allowed for easier plating
 - agar culture could not support a sufficiently large number of bacteria
 - liquid culture offered a more consistent medium
 - agar culture did not adhere well to pile fabric
2. It can be inferred from the passage that the replica plating method is effective for which of the following reasons?
 - It allows researchers to determine the relative sizes of different populations of bacteria.
 - It shows that no new mutant strains developed after transfer from the original agar plate.
 - It eliminates the possibility that the agar culture was contaminated by a different type of bacteria.
 - It demonstrates that no tryptophan was present in the original agar culture.
 - It establishes that the original agar culture contained the necessary metabolites for bacterial reproduction.
3. Which of the following most accurately states the purpose of the passage?
 - To defend a scientific hypothesis from attack by an innovative technique
 - To describe a process by which bacteria can be trained to mutate
 - To present the results of an experiment designed to test an established theory
 - To argue against an established protocol on the grounds that it is outdated
 - To challenge a scientific technique used to prove a questionable theory

Passage 27

When they first arrived in America as slaves in the 1600s, Africans joined a society that was divided between master and white servants brought from Europe. In most parts of the South, some of these first African slaves became free either through escape or through emancipation by their owners. It is therefore a misconception that all African Americans in the pre-Civil War South were slaves. Many researchers have also assumed that these free African Americans were the offspring of white slave owners who took advantage of their female slaves. However, these cases represent only a small minority of free African Americans in the South. Most free African Americans were actually the descendants of African American men and white servant women.

In fact, despite the efforts of the various colonial legislatures, white servant women continued to bear children by African American fathers through the late seventeenth century and well into the eighteenth century. It appears that such births were the primary source of the increase in the free African American population for this period. Over two hundred African American families in Virginia descended from white women. Forty-six families descended from freed slaves, twenty-nine from Indians, and sixteen from white men who married or had children by free African American women. It is likely that the majority of the remaining families descended from white women since they first appear in court records in the mid-eighteenth century, when slaves could not be freed without legislative approval, and there is no record of legislative approval for their emancipations.

The history of free African Americans families in colonial New York and New Jersey, by contrast, is quite different from that of free African Americans in the South. Most were descended from slaves freed by the Dutch West India Company between 1644 and 1664 or by individual owners. Researchers have studied these families, especially a group of fourteen families that scholars have traced through at least three generations. None of the fourteen families appears to be descended from a white servant woman and an African American man. However, Lutheran church records from the eighteenth century show that a few such couples had children baptized.

1. Which of the following can be inferred from the passage?
 - No free African Americans in the American colonies were the offspring of white slave owners.
 - Some colonial legislatures passed laws to prevent interbreeding between white colonists and African Americans.
 - White servants were not as numerous as African American slaves in early America.
 - Most African Americans in the South were born into slavery.
 - Records exist to document all births of free African Americans in colonial America.
2. The passage suggests which of the following about African American slaves in the late 1700s?
 - They could not own land without consent of local white landowners.
 - They were barred from practicing certain trades.
 - They could buy their freedom from their owners.
 - They sometimes had children with white women even while enslaved.
 - There were none in colonial New York or New Jersey.
3. The passage suggests which of the following about African American families in colonial New York and New Jersey?
 - They were not descended from white servant women and African American men.
 - They were less numerous than African American families in the colonial South.
 - Most of them were started between 1644 and 1664.
 - They began with an initial group of fourteen families.
 - Some of them may have descended from white servant women.
4. The author of the passage is primarily interested in
 - defending an accepted position on colonial history
 - analyzing an unproven hypothesis regarding slavery
 - presenting an alternate view of a historical period
 - critiquing an outdated theory of colonial development
 - describing the culmination of a historical trend.
5. According to the passage, which of the following is a difference between free African Americans in colonial New York and New Jersey and free African Americans in the colonial South?
 - Those in New York and New Jersey were primarily descended from freed slaves while those in the South were primarily descended from white women.
 - Those in New York and New Jersey were primarily descended from white women while those in the South were primarily descended from freed slaves
 - Both groups of African Americans were primarily descended from freed slaves, but those in the North had been freed earlier.
 - Both groups of African Americans were primarily descended from freed slaves, but those in the South had been freed earlier.
 - Those in the South could be freed only with legislative permission.

Passage 28

The fall of the Berlin Wall represented a political victory of the free market against a centrally planned economy. Though highly interventionist and dependent on international defense and industrial subsidy, West Germany was a model of economic expansion in the post-war era. East Germany, while relatively successful in comparison with other Eastern Bloc nations, was far behind West Germany with regard to the buying power of its people. It was hard to avoid obvious comparisons such as the fact that 1 in 4 East Germans did not even have an indoor toilet. Western German authorities were therefore committed to rapid integration of the two Germanys without resorting to massive controls on internal migration, external capital controls, or continuation of a large state-owned industrial sector.

Other nations were already wary of a united Germany. France, a perpetual competitor, saw Germany's size advantage increase overnight. In Gross Domestic Product ("GDP") alone, an historical size advantage of 23% jumped to nearly 30%, with stronger growth promised when East Germany was fully integrated.

Within Germany, there should have been no doubt that integration would be costly. The question was whether the government was up to the task. In Italy, for example, the central government has invested tremendous resources in promoting the economy of its under-performing Southern region. In contrast, in the United States, the local population bears the burden of varying economic performance. For example, the American South is allowed to exist with much higher rates of poverty and lower education than the rest of the nation.

Rather than allow East Germany to fall into total disrepair, with millions fleeing to the West and a long-term negative impact on national GDP growth, West German authorities decided to try to spend their way out of the crisis, creating almost overnight an infrastructure in East Germany to provide a standard of living comparable to that in West Germany. The goal was to take an under-performing country and raise it to "first world" standards in only a few years. This goal would have been preposterous had not West Germany possessed the resources to accomplish the task.

1. According to the author, which of the following is the principal reason that German reunification could succeed?
 - The additional population from East Germany gave the reunified Germany an economic advantage over other European nations.
 - East Germany had not been as impoverished as other Eastern Bloc countries.
 - West Germany did not plan to control internal migration from East Germany.
 - West Germany patterned its economic plan after a successful Italian model.
 - West Germany was a materially stable country.
2. The author mentions the United States most probably in order to
 - argue against a commonly held belief about market economies
 - provide an example of a situation seen as undesirable
 - suggest an advantageous solution to an economic problem
 - illustrate an economic principle called into question
 - demonstrate the positive consequences of economic freedom
3. Which of the following best describes the way the first paragraph functions in the context of the passage?
 - A specific example is presented to illustrate the main elements of a general economic theory.
 - Evidence is presented in support of a revision of a commonly held view.
 - Information that is necessary for understanding the main argument of the passage is presented.
 - Questions are raised which are answered in subsequent paragraphs.
 - A qualified view of the author's main point is contrasted with a less specific view.
4. The passage suggests which of the following about the relationship between West Germany and France?
 - Historically, the economy of West Germany had been more stable than that of France.
 - The Gross Domestic Product of West Germany had always been greater than that of France.
 - The size of West Germany's population gave it an advantage over France in international trade.
 - France did not view its economic position relative to West Germany as immutable.
 - West Germany planned to use reunification to bolster its economic advantage over France.

Passage 29

In April 1841, medical missionary Reverend Peter Parker, M.D., addressed an enthusiastic audience gathered at a special meeting of the Boston Medical Association. His subject was "the condition and prospects of the hospitals of China." He described his own work at the hospital he had established in the foreign factory district outside the city walls of Canton where he offered free treatment for both rich and poor. At P'u Ai I Yuan (Hospital of Universal Love, as it was known in Chinese) Parker and his colleagues used western surgical techniques as a means to facilitate religious conversion. Medicine, Parker believed, could be the "handmaid of religious truth," and he held regular religious services for his patients.

While he had, at best, modest success attracting converts to Christianity, the hospital had fostered tremendous goodwill among the Chinese. It was a bright spot amid the gloomy period of Western-Chinese tension that led to the outbreak of the Opium Wars between Great Britain and China. Forced to flee Canton because of these rising hostilities, Parker returned to the United States to raise money and interest in his operations. In the spring of 1841, he spoke to many religious societies, a few medical bodies, and even the United States Congress, where he preached to members of the House and Senate and lobbied legislators on the need for diplomatic relations with China. In his talks, Parker described the state of medical and surgical knowledge—or, rather, scientific ignorance—in China. Despite the surgical feats of legendary ancient doctors such as Hua T'ō of the third century A.D., surgery did not develop to any great extent in China. Some accounts attribute this to Confucian precepts about the integrity of the body and proscriptions against any form of mutilation or dismemberment; others emphasize the pharmacological tendencies within traditional Chinese medicine and a preference for moxas and other caustic plasters.

Whatever the cause, it was undoubtedly the case that Parker's surgical practice tapped into a huge unmet need. Almost as soon as he opened his Ophthalmic Hospital in Canton, as it was known in English, he acquired a reputation as a surgeon of such skill that the hospital quickly became a general hospital. Parker and his small staff handled thousands of cases each year, treating more than fifty thousand cases by the 1850s. His hospital became the model for other medical missions, and Parker and his British colleagues formed the Medical Missionary Society of China to coordinate the efforts of all the western hospitals springing up in the trading ports of Asia. Parker earned his reputation performing operations to remove tumors and cataracts—forms of surgery with relatively good odds of success and ones that could be accomplished quickly, important in an era without anesthetics. Because of the absence of surgery in China, a large number of patients were afflicted with mature tumors (typically five to thirty-five years old) of a size seldom seen in Europe or the United States. Parker was able to help these patients in ways previously thought impossible in China. He has thus been credited with bringing Western medicine to the most populous country on Earth.

1. The author mentions Hua T'ō in the third paragraph most probably in order to
 - underscore the need for modernization of nineteenth century Chinese medicine
 - trace the history of important figures in Chinese medicine
 - call attention to the lack of leading physicians in nineteenth century China
 - celebrate the historical achievements of Chinese physicians
 - defend Chinese medicine against unfair criticism
2. According to the passage, all of the following are true of Peter Parker EXCEPT
 - He was skilled as a surgeon.
 - He believed that the poor deserved quality medical treatment.
 - He felt disdain for the medical practices of nineteenth century China.
 - He lobbied intensely to bring Western medical knowledge to China.
 - He did not achieve his missionary goals in China.
3. The primary purpose of the passage is to
 - discuss the status of the medical profession in China before the arrival of Peter Parker
 - argue that China could not have gained modern medical knowledge without the influence of Peter Parker
 - demonstrate the need in China before the nineteenth century for outside medical knowledge
 - challenge the predominant view of nineteenth century Chinese medicine
 - examine the circumstances of the introduction of Western medicine to nineteenth century China

Passage 30

A clone is a genetically identical copy of a living organism. Human clones are nothing new; they occur naturally in the recognizable form of identical twins. Not until the successful cloning of a sheep called Dolly, however, has the possibility of intentionally producing an identical copy of a human been considered seriously.

Production of a human clone would most likely utilize the same basic methodology that resulted in Dolly. A human egg would be retrieved from an individual, and its genetic material (DNA) would be removed and replaced with DNA derived from any adult human cell type. This would bypass the need for fertilization of the egg by the sperm in order to obtain a full complement of DNA. In a laboratory dish, the egg would then undergo several cell divisions. Placed into a uterus, the resulting embryo would grow and, with luck, develop until birth.

Although this cloning technique is conceptually and procedurally simple, its success rate has been extremely low. The birth of one Dolly, for instance, required the preparation of 277 re-nucleated eggs, followed by the implantation of 29 resulting best embryos. The low success rate can be attributed to the difference between the young DNA of a normally fertilized egg and the genetic material of the re-nucleated egg, which is mature and of defined destiny – it has already committed itself to a particular physiological role. In order for proper fetal development to occur, mature DNA must be coaxed into reverting to its youthful state, a complex process that will be difficult to achieve for the human species.

Beyond the practical difficulties of intentional human cloning, scientists, politicians, and others have raised serious ethical concerns about this practice. For example, there is a chance that the cloning procedure would adversely affect the developing embryo. There also might be deleterious effects on the long-term health of the clone. Proponents of human cloning counter that human sexual reproduction is not a risk-free affair either. Even if human cloning could be made safe, the motivations behind producing human clones do not fall clearly on one side of the ethical divide. While proponents stress potentially appealing motivations – a man and a woman who are both carriers of a genetic disease can use cloning to assure that their child will not be afflicted with the disorder – critics argue that the practice could and likely would be used for unethical ends, such as to select for certain traits, such as hair/eye color or sexual orientation, for example.

1. The primary purpose of the passage is to
 - dismiss a new scientific method as unethical
 - defend a medical procedure against unwarranted attack
 - explain a process and its ramifications
 - describe a hypothesis and its negative consequences
 - analyze the possible outcomes of a new medical approach
2. The author of the passage mentions Dolly most probably in order to
 - suggest that human cloning is feasible
 - show that the ethical concerns against cloning are misguided
 - argue that nonhuman cloning is less efficient than human cloning
 - establish a basis for an argument against human cloning
 - refute a counterargument in favor of human cloning.
3. According to the passage, which of the following is a potential obstacle to human cloning?
 - Lack of adequately prepared human eggs
 - Predetermination of DNA function within the adult body
 - Shortage of funding for additional research
 - Inability to pinpoint specific biological relationships within an egg
 - Unpredictability of chemical reactions within the uterus
4. The passage suggests which of the following?
 - Human cloning is reachable within ten years.
 - The cloning of nonhuman animals has always been successful.
 - The eggs of nonhuman animals are easier to obtain than human eggs.
 - DNA taken from an adult human cell contains DNA from both parents.
 - Human DNA is less predictable than nonhuman DNA.
5. Which of the following is NOT given in the passage as a reason not to pursue human cloning?
 - The unknown effects of cloning on adult human clones.
 - The potential harm to cloned embryos.
 - The chance that cloning will be used to select for only certain socially advantageous characteristics.
 - The technical difficulty of obtaining suitable DNA.
 - The exorbitant costs associated with the medical procedures used in cloning.

Passage 31

In recent years, a class of drugs known as COX-2 inhibitors has gotten much publicity for the drugs' power to relieve inflammation and pain. These drugs are relatively new to the pharmaceutical industry, their mechanisms of action having been discovered only in 1971. That year, John Vane discovered the relationship between nonsteroidal anti-inflammatory drugs, such as aspirin, and a group of molecules, called prostaglandins, responsible for producing the sensation of pain in the human body, among other functions.

Prostaglandins were first discovered in the 1930s and are now known to be generated by most mammalian tissues in response to external stimuli. Unlike classical hormones that are synthesized in one tissue but act on a distant one, prostaglandins act on the cells that produce them or on cells located close to the prostaglandins' cells of origin. Aspirin alleviates pain by inhibiting the function of an enzyme called cyclooxygenase or COX; this inhibition prevents the production of prostaglandins. The three forms of this enzyme, COX-1, COX-2, and COX-3, all stimulate the production of prostaglandins, but each serves a different purpose. COX-1 functions to protect the stomach from irritating gastric acids. COX-2 functions to induce inflammation in injured tissue and COX-3 functions to control the sensation of pain. Aspirin and other similar drugs, such as naproxen, inhibit both COX-1 and COX-2, sometimes producing or aggravating stomach ulcers in patients who take them.

In order to eliminate the side effects of aspirin and related drugs, several pharmaceutical companies in the 1990s developed drugs that inhibited only COX-2. However, side effects almost always cropped up, even after clinical trials that seemed to indicate none. This often occurs because trials are conducted within very limited parameters; once the drug has been approved for mass distribution, however, the number of people taking it and the length of time that it is taken increase dramatically. Several COX-2 drugs that have been popular in recent years fit this pattern: initially successful in clinical trials, subsequent studies showed them to have serious, potentially lethal side effects.

Though prostaglandin chemistry and enzymology have been studied for half a century, pinpointing the exact role of the molecules in physiological processes still remains a challenge for researchers. Hence it is not surprising that recent therapeutic attempts to interfere with the formation of certain prostaglandins have produced unexpected side effects. It now seems that the hype surrounding COX-2 drugs may have been premature.

1. The passage suggest which the following about COX-2 inhibitors?
 - They fail to protect the stomach from gastric acids that can cause irritation, but protect the body from tissue inflammation.
 - They produce similar side effects as those caused by Naproxen.
 - They were introduced approximately 20 years after the relationship between aspirin and prostaglandins was discovered.
 - They stimulate production of prostaglandins that cause tissue inflammation.
 - They are generated by external stimuli and act on the cells that produce them.
2. According to the passage, all of the following are true of prostaglandins EXCEPT:
 - They were discovered in the 1930s.
 - They are generated by most mammalian tissues.
 - They produce the sensation of pain in the body, but are also responsible for other bodily functions.
 - They cause side effects that clinical trials failed to detect.
 - Their production is affected by enzymes COX-1, COX-2, and COX-3.
3. The author mentions that prostaglandins are generated in response to external stimuli primarily in order to support the contention that
 - Prostaglandins can produce or aggravate stomach ulcers.
 - Prostaglandins act in the same tissue that produces them.
 - Prostaglandins prevent the enzyme cyclooxygenase from functioning.
 - Prostaglandins are significantly different from most mammalian hormones.
 - Prostaglandins are responsible for the human sensation of pain.
4. The primary purpose of this passage is to
 - explain the therapeutic benefits of a new type of pain reliever
 - initiate a debate concerning the benefits of COX-2 inhibitors
 - warn the public that clinical trials cannot ensure drug safety
 - describe the impetus for and result of COX-2 inhibitors' introduction
 - introduce research findings to support COX-2 inhibitors over COX-1 inhibitors

Passage 32

The bond between the domestic dog and humans is such that the dog exists in every part of the world inhabited by people. The relationship between the two species stretches back tens of thousands of years, to the first domestication of the wolf. Every modern breed of domestic dog, of which there are more than 400 today, is descended from this wild ancestor. Prehistoric humans had contact with other wild canids, such as jackals, foxes, dholes, and African hunting dogs, but only the wolf possessed the characteristics that allowed for integration into human life, which implies social assimilation, as opposed to mere domestication, which requires only a taming of wild instincts in the animal. So while dogs have been integrated, animals such as cows, sheep, and goats have not.

The traits in the wolf that allowed for integration are threefold. First, the wolf is a highly social animal, living in packs, akin to the social networks of humans. In the absence of this behavior, it would have been difficult for the first captive wolf pups to remain in a human settlement, constantly surrounded by other creatures. Wild canids such as the jackal and fox are solitary animals and would not have adapted easily, if at all, to social living. Second, wolves possess a system of social stratification remarkably similar to that of humans: each member of the group is aware of its rank in the chain of dominance and is loyal to higher-ranking members. Humans exploited this innate sensitivity to hierarchy by raising wolf cubs to be submissive. Third, wolves are highly intelligent creatures, able to learn tasks quickly. Without this attribute, the wolf would have been of little use to early man, since it does not provide meat, milk, or wool. The more intelligent the captive wolf, the more likely humans would have sought to breed it, resulting in perpetuation of this inborn intelligence and culminating in the remarkable cognitive abilities of modern dogs.

The development of different breeds from the wolf appears to have begun as early as 2000 B.C. in ancient Egypt and parts of western Asia. The first recorded instances of physically distinct breeds come from these areas. In Egypt, dogs resembling modern greyhounds were prevalent, while in western Asia dogs resembling modern mastiffs were common. The distinct body types of these breeds perhaps reflect the different purposes for which they were bred: greyhounds for chasing swift prey, such as hares, and mastiffs for grappling with larger prey, such as boars or antelope. But this is only speculation; the historical record from this period is too sparse to allow certainty on the matter.

1. Which of the following most accurately states the main idea of the passage?
 - Humans value dogs more than they value any other domestic animal.
 - The domestication of the wolf has no parallel in any other animal.
 - Certain desirable traits not present in other animals allowed the wolf to become the modern dog.
 - Domestication of the wolf has been unquestionably successful.
 - Wolves are similar to humans in several important aspects.
2. The passage suggests which of the following about the modern dog?
 - It is the best social companion of all domesticated animals.
 - Its intelligence is unsurpassed among household animals.
 - It cannot survive outside of a social environment.
 - Its body type always reflects the purpose for which it was bred.
 - It perceives humans as superior to itself.
3. All of the following statements are supported by the passage EXCEPT:
 - Sheep are not part of the social fabric of human life.
 - It is not possible to domesticate jackals or foxes.
 - Submissiveness is a desirable trait in domesticated animals.
 - Humans tended to domesticate those animals that provided some benefit to them.
 - The purpose of early breeds of dog is not known.

Passage 33

Concord staked its claim to be the birthplace of Independence during the celebration of “America’s jubilee” on April 19, 1825, the fiftieth anniversary of Concord Fight. Concord in 1825 was an expansive town of nineteen hundred inhabitants, thriving with crafts and trade in the village and surrounded by farms prospering on demand from rising urban centers in the long boom that accompanied the opening phase of the Industrial Revolution in the Northeast. It also occupied a prominent place on the political landscape; as a shire town, where the county courts convened, it had risen into a leading center of Middlesex County, and its politicians were major players on that stage. Economic and political ambitions, as well as pride in the past, drove the insistence that Concord was the “first site of forcible resistance to British aggression.”

A decade later, by the mid-1830s, with over two thousand inhabitants, Concord was probably at its political and economic pinnacle. The central village hosted some nine stores, forty shops, four hotels and taverns, four doctors and four lawyers, a variety of county associations, a printing office and a post office. Manufacturing was humming, too, with a growing mill village in the west part of town, along the quick-running Assabet River, and rising production of carriages and chaises, boots and shoes, bricks, guns, bellows, and pencils.

But a good many people were left out of the prosperity. In what was still a farming town, 64 percent of adult males were landless, while the top tenth of taxpayers, some fifty men, controlled nearly half the wealth. Those who failed to obtain a stake in society, native and newcomer alike, quickly moved on. The ties that once joined neighbors together were fraying. On the farms, the old work customs — the huskings, roof-raising, and apple bees — by which people cooperated to complete essential chores gave way to modern capitalist arrangements. When men needed help, they hired it, and paid the going rate, which no longer included the traditional ration of grog. With a new zeal for temperance, employers abandoned the custom of drinking with workers in what had been a ritual display of camaraderie. There was no point in pretending to common bonds.

With the loosening of familiar obligations came unprecedented opportunities for personal autonomy and voluntary choice. Massachusetts inaugurated a new era of religious pluralism in 1834, ending two centuries of mandatory support for local churches. Even in Concord, a slim majority approved the change, and as soon as it became law, townspeople deserted the two existing churches — the Unitarian flock of the Reverend Ripley and an orthodox Calvinist congregation started in 1826 — in droves. The Sabbath no longer brought all ranks and orders together in obligatory devotion to the Word of God. Instead, townspeople gathered in an expanding array of voluntary associations — libraries, lyceums, charitable and

missionary groups, Masonic lodges, antislavery and temperance societies, among others — to promote diverse projects for the common good. The privileged classes, particularly the village elite, were remarkably active in these campaigns. But even as they pulled back from customary roles and withdrew into private associations, they continued to exercise public power.

1. The passage suggests which of the following about members of the village elite in post-1834 Concord?
 - Private associations had forced them to relinquish political power.
 - Politically, they were more in favor of religious pluralism than were non-elite citizens.
 - They ceased all Sabbath worship once religious pluralism became law in Massachusetts.
 - Many had abandoned the Unitarian and Calvinist churches in favor of non-church activities.
 - They utilized their wealth to found a growing number of diverse projects for the common good.
2. The primary purpose of this passage is to
 - argue that religious and political freedom in Concord was beneficial to the city’s economic development
 - depict the lifestyle of Concord’s elite citizens during the 19th century
 - argue that social alienation was necessary for Concord’s economic and political development in the 19th century
 - define Concord’s place in American history post-Independence
 - describe 19th century Concord’s key economic and political changes, along with their impact on societal norms
3. According to the passage, which of the following is true of 18th-century Massachusetts residents?
 - Most were landless and ultimately forced to move on.
 - They numbered over two thousand.
 - They were forced to support local churches.
 - Some celebrated “America’s Jubilee”.
 - They occupied prominent positions in Middlesex County courts.

Passage 34

Sarah Meyers McGinty, in her useful new book *Power Talk: Using Language to Build Authority and Influence*, argues that while the simple lingual act of declaring power does not help a powerless person gain influence, well-considered linguistic techniques and maneuvers do. McGinty does not dispute the importance of factors such as expertise and ability in determining stature, but argues persuasively that these power determinants amount to little in a person unable to communicate effectively. Management theorists share McGinty's view that communication is essential for success and many surveys have shown that the ability to communicate effectively is the characteristic judged by managers to be most critical in determining promotability.

McGinty divides speech into two categories: "language from the center" and "language from the edge". In McGinty's words, "Language from the center makes a speaker sound like a leader." McGinty suggests that not only is language from the center for those in high positions of power, but it is also for those of lower ranks who wish to gain more power and credibility. A speaker using language from the center exhibits the following: he directs rather than responds; he makes statements rather than asks questions; he contradicts, argues, and disagrees; he uses his experience persuasively; and he maintains an air of impersonality in the workplace. McGinty suggests that the use of language from the center can alter or create a new balance of power. These assertions are supported by studies that show that people accept leadership from those they perceive to be experts.

Language from the edge stands in stark contrast to language from the center. Language from the edge is careful, exploratory, and inquiring. It is inclusive, deferential, and collaborative. A speaker using language from the edge responds rather than directs; asks questions; strives to make others feel heard and protected; and avoids argument. The main purpose of language from the center is to claim authority for a speaker, while language from the edge strives to build consensus and trust. McGinty argues that true power comes from a deep understanding of when to use which style and the ability to use both as necessary.

What distinguishes McGinty's discussion of effective communication is her focus on communication skills as a way of gaining power; this contrasts with most general management theory, which focuses on communication skills as a way of preventing misunderstandings, avoiding conflict, and fostering interpersonal relationships. McGinty, however, holds that language not only helps maintain relationships but also lends authority. According to *Power Talk*, effective communication skill "is an understanding of how situation shapes speech and how speech shapes situation" and "an understanding of how speech styles and the forces that affect those styles . . . can build your authority, and enhance your credibility and impact."

1. The passage suggests that McGinty would be most likely to agree with which of the following?
 - Language from the center is more effective than language from the edge.
 - Managers who use language from the edge are not authoritative.
 - Powerful people are both authoritative and inclusive.
 - The only way to become powerful is to learn to use language from the center.
 - Language from the edge is used primarily by low-level employees.
2. The primary focus of the passage is on which of the following?
 - Demonstrating the effectiveness of a certain framework in the business world
 - Explaining the advantages and disadvantages of a proposed approach to business communication
 - Analyzing the details of a controversial theory of business
 - Presenting a new model of business communication
 - Defending an outdated method of personnel management
3. The passage suggests that which of the following would be an example of someone using language from the center?
 - A low-level employee requesting help on a project beyond his capabilities
 - A manager explaining the benefits of a new procedure by drawing on the procedure's success in another setting
 - A low-level employee believing that he has been wrongly criticized by his supervisors
 - A manager soliciting opinions from his workforce regarding a proposed change
 - A low-level employee refusing to alter his behavior despite repeated warnings
4. Which of the following best describes the relation of the fourth paragraph to the passage as a whole?
 - It summarizes and contextualizes McGinty's argument.
 - It questions the usefulness of McGinty's thesis.
 - It casts doubt on the universality of management theory.
 - It supports an alternative view of McGinty's proposal.
 - It offers additional support for McGinty's conclusions.

Passage 35

In recent years much attention has been paid to distilling those factors that create a positive work environment for corporate employees. The goal ultimately is to discover what allows some companies to foster high employee morale while other companies struggle with poor productivity and high managerial turnover. Several theories have been posited, but none has drawn as much interest from the corporate world, or has as much promise, as value congruence, which measures the "fit" between an employee's values and those of co-workers and the company itself.

Value congruence can be broken into three main subcategories: person-environment ("P-E"), person-person ("P-P"), and perceptual fit ("PF"). Person-environment congruence refers to a harmony between the personal values of the employee and corporate culture of the company in which he or she works. Someone with a high P-E congruence feels personally in tune with his company's stated policies and goals. Conversely, someone with a low P-E congruence feels a sense of disharmony between his own values and the stated policies and goals of his company. A high P-P congruence indicates a sense of solidarity with one's co-workers in terms of shared values and goals. A low P-P congruence indicates a sense of isolation from co-workers brought about by an absence of shared values. Finally, strong PF suggests a strong correspondence between the values that an employee perceives his company to have (whether or not the company actually does) and the values that his co-workers perceive the company to have (again, whether or not it actually does). A weak PF implies that an employee's perception of his company's values differs significantly from that of his co-workers.

Research has shown that P-E and PF congruence are important measures of employee satisfaction, commitment, and likelihood of turnover, while P-P congruence has little bearing on these parameters. Moreover, PF is especially important in establishing harmonious relations between workers and managers. These measures give corporations a robust paradigm for long-term personnel planning and productivity potentials: they allow companies to discover dysfunctional work relationships and clarify misperceived company policies and goals. With these tools in hand, companies can look forward to increased employee satisfaction and, ultimately, improved company performance.

1. According to the passage, which of the following was a motivation in the creation of the system of value congruence?
 - a desire to minimize the liability of upper management for employee dissatisfaction
 - a desire to help companies to improve their internal harmony
 - a desire to allow employees to increase their earning potential
 - a desire to foster awareness of factors influencing managerial success
 - a desire to eliminate discrepancies between a company's goals and the values of its employees
2. The passage suggests that perceptual fit congruence would be most useful in determining which of the following?
 - whether a company ought to make its policies and goals more transparent
 - whether a company ought to provide sensitivity training for its management
 - whether a company ought to create more opportunities for interaction among workers
 - whether a company ought to address employee grievances more directly
 - whether a company ought to implement a more elaborate orientation program for new employees
3. The primary focus of the passage is on which of the following?
 - Comparing a new theory of corporate performance to a discredited theory and predicting the usefulness of the new theory.
 - Illustrating a new approach to measuring employee satisfaction through a detailed analysis of a particular case.
 - Challenging an old view of employee commitment and suggesting that a new paradigm is necessary.
 - Promoting a new method of measuring the likelihood of corporate success by explaining its benefits.
 - Defending a proposed system of corporate analysis through examples of its success.