

93. Which of the following alternative explanations of the change in the cash value of children would be most likely to be put forward by sociological economists as they are described in the passage?
- The cash value of children rose during the nineteenth century because parents began to increase their emotional investment in the upbringing of their children.
 - The cash value of children rose during the nineteenth century because their expected earnings over the course of a lifetime increased greatly.
 - The cash value of children rose during the nineteenth century because the spread of humanitarian ideals resulted in a wholesale reappraisal of the worth of an individual.
 - The cash value of children rose during the nineteenth century because compulsory education laws reduced the supply, and thus raised the costs, of available child labor.
 - The cash value of children rose during the nineteenth century because of changes in the way negligence law assessed damages in accidental-death cases.
94. The primary purpose of the passage is to
- review the literature in a new academic subfield
 - present the central thesis of a recent book
 - contrast two approaches to analyzing historical change
 - refute a traditional explanation of a social phenomenon
 - encourage further work on a neglected historical topic

95. It can be inferred from the passage that which of the following statements was true of American families over the course of the nineteenth century?
- The average size of families grew considerably.
 - The percentage of families involved in industrial work declined dramatically.
 - Family members became more emotionally bonded to one another.
 - Family members spent an increasing amount of time working with each other.
 - Family members became more economically dependent on each other.
96. Zelizer refers to all of the following as important influences in changing the assessment of children's worth EXCEPT changes in
- the mortality rate
 - the nature of industry
 - the nature of the family
 - attitudes toward reform movements
 - attitudes toward the marketplace

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

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

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

One of the implications of the intuitive style of executive management is that "thinking" is inseparable from acting. Since managers often "know" what is right before they can analyze and explain it, they frequently act first and explain later. Analysis is inextricably tied to action in thinking/acting cycles,

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

Questions 97–102 refer to the passage above.

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

99. Which of the following best exemplifies “an ‘Aha!’ experience” (lines 29–30) as it is presented in the passage?
- (A) A manager risks taking an action whose outcome is unpredictable to discover whether the action changes the problem at hand.
- (B) A manager performs well-learned and familiar behavior patterns in creative and uncharacteristic ways to solve a problem.
- (C) A manager suddenly connects seemingly unrelated facts and experiences to create a pattern relevant to the problem at hand.
- (D) A manager rapidly identifies the methodology used to compile data yielded by systematic analysis.
- (E) A manager swiftly decides which of several sets of tactics to implement in order to deal with the contingencies suggested by a problem.
100. According to the passage, the classical model of decision analysis includes all of the following EXCEPT
- (A) evaluation of a problem
- (B) creation of possible solutions to a problem
- (C) establishment of clear goals to be reached by the decision
- (D) action undertaken in order to discover more information about a problem
- (E) comparison of the probable effects of different solutions to a problem
101. It can be inferred from the passage that which of the following would most probably be one major difference in behavior between Manager X, who uses intuition to reach decisions, and Manager Y, who uses only formal decision analysis?
- (A) Manager X analyzes first and then acts; Manager Y does not.
- (B) Manager X checks possible solutions to a problem by systematic analysis; Manager Y does not.
- (C) Manager X takes action in order to arrive at the solution to a problem; Manager Y does not.
- (D) Manager Y draws on years of hands-on experience in creating a solution to a problem; Manager X does not.
- (E) Manager Y depends on day-to-day tactical maneuvering; Manager X does not.
102. The passage provides support for which of the following statements?
- (A) Managers who rely on intuition are more successful than those who rely on formal decision analysis.
- (B) Managers cannot justify their intuitive decisions.
- (C) Managers’ intuition works contrary to their rational and analytical skills.
- (D) Logical analysis of a problem increases the number of possible solutions.
- (E) Intuition enables managers to employ their practical experience more efficiently.

Line According to a recent theory, Archean-age gold-quartz vein systems were formed more than two billion years ago from magmatic fluids that originated from molten granite-like bodies deep beneath the surface of the Earth. This theory is contrary to the widely held view that the systems were deposited from metamorphic fluids, that is, from fluids that formed during the dehydration of wet sedimentary rocks.

(5) The recently developed theory has considerable practical importance. Most of the gold deposits discovered during the original gold rushes were exposed at the Earth's surface and were found because they had shed trails of alluvial gold that were easily traced by simple prospecting methods. Although these same methods still lead to an occasional discovery, most deposits not yet discovered have gone undetected because they are buried and have no surface expression.

(10) The challenge in exploration is therefore to unravel the subsurface geology of an area and pinpoint the position of buried minerals. Methods widely used today include analysis of aerial images that yield a broad geological overview; geophysical techniques that provide data on the magnetic, electrical, and mineralogical properties of the rocks being investigated; and sensitive chemical tests that are able to detect the subtle chemical halos that often envelop mineralization. However,

(15) none of these high-technology methods are of any value if the sites to which they are applied have never mineralized, and to maximize the chances of discovery the explorer must therefore pay particular attention to selecting the ground formations most likely to be mineralized. Such ground selection relies to varying degrees on conceptual models, which take into account theoretical studies of relevant factors.

(20) These models are constructed primarily from empirical observations of known mineral deposits and from theories of ore-forming processes. The explorer uses the models to identify those geological features that are critical to the formation of the mineralization being modeled, and then tries

(25) to select areas for exploration that exhibit as many of the critical features as possible.

Questions 103–110 refer to the passage above.

103. The author is primarily concerned with
- advocating a return to an older methodology
 - explaining the importance of a recent theory
 - enumerating differences between two widely used methods
 - describing events leading to a discovery
 - challenging the assumptions on which a theory is based
104. According to the passage, the widely held view of Archean-age gold-quartz vein systems is that such systems
- were formed from metamorphic fluids
 - originated in molten granite-like bodies
 - were formed from alluvial deposits
 - generally have surface expression
 - are not discoverable through chemical tests
105. The passage implies that which of the following steps would be the first performed by explorers who wish to maximize their chances of discovering gold?
- Surveying several sites known to have been formed more than two billion years ago
 - Limiting exploration to sites known to have been formed from metamorphic fluid
 - Using an appropriate conceptual model to select a site for further exploration
 - Using geophysical methods to analyze rocks over a broad area
 - Limiting exploration to sites where alluvial gold has previously been found
106. Which of the following statements about discoveries of gold deposits is supported by information in the passage?
- The number of gold discoveries made annually has increased between the time of the original gold rushes and the present.
 - New discoveries of gold deposits are likely to be the result of exploration techniques designed to locate buried mineralization.

- (C) It is unlikely that newly discovered gold deposits will ever yield as much as did those deposits discovered during the original gold rushes.
- (D) Modern explorers are divided on the question of the utility of simple prospecting methods as a source of new discoveries of gold deposits.
- (E) Models based on the theory that gold originated from magmatic fluids have already led to new discoveries of gold deposits.
107. It can be inferred from the passage that which of the following is easiest to detect?
- (A) A gold-quartz vein system originating in magmatic fluids
- (B) A gold-quartz vein system originating in metamorphic fluids
- (C) A gold deposit that is mixed with granite
- (D) A gold deposit that has shed alluvial gold
- (E) A gold deposit that exhibits chemical halos
108. The theory mentioned in line 1 relates to the conceptual models discussed in the passage in which of the following ways?
- (A) It may furnish a valid account of ore-forming processes, and, hence, can support conceptual models that have great practical significance.
- (B) It suggests that certain geological formations, long believed to be mineralized, are in fact mineralized, thus confirming current conceptual models.
- (C) It suggests that there may not be enough similarity across Archean-age gold-quartz vein systems to warrant the formulation of conceptual models.
- (D) It corrects existing theories about the chemical halos of gold deposits, and thus provides a basis for correcting current conceptual models.
- (E) It suggests that simple prospecting methods still have a higher success rate in the discovery of gold deposits than do more modern methods.

109. According to the passage, methods of exploring for gold that are widely used today are based on which of the following facts?
- (A) Most of the Earth's remaining gold deposits are still molten.
- (B) Most of the Earth's remaining gold deposits are exposed at the surface.
- (C) Most of the Earth's remaining gold deposits are buried and have no surface expression.
- (D) Only one type of gold deposit warrants exploration, since the other types of gold deposits are found in regions difficult to reach.
- (E) Only one type of gold deposit warrants exploration, since the other types of gold deposits are unlikely to yield concentrated quantities of gold.
110. It can be inferred from the passage that the efficiency of model-based gold exploration depends on which of the following?
- I. The closeness of the match between the geological features identified by the model as critical and the actual geological features of a given area
- II. The degree to which the model chosen relies on empirical observation of known mineral deposits rather than on theories of ore-forming processes
- III. The degree to which the model chosen is based on an accurate description of the events leading to mineralization
- (A) I only
- (B) II only
- (C) I and II only
- (D) I and III only
- (E) I, II, and III

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

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

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

Questions 111–116 refer to the passage above.

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

112. The authors' study indicates that, in comparison with the outermost regions of a typical spiral galaxy, the region just outside the nucleus can be characterized as having
 - (A) higher rotational velocity and higher luminosity
 - (B) lower rotational velocity and higher luminosity
 - (C) lower rotational velocity and lower luminosity
 - (D) similar rotational velocity and higher luminosity
 - (E) similar rotational velocity and similar luminosity

113. The passage suggests that the results of the authors' study have changed their ideas about which of the following characteristics of spiral galaxies?
 - I. The relative luminosity of different regions
 - II. The relative rotational velocity of different regions
 - III. The relative distribution of matter in different regions
 - (A) I only
 - (B) II only
 - (C) III only
 - (D) II and III only
 - (E) I, II, and III

114. The authors' suggestion that "as much as 90 percent of the mass of the universe is not radiating at any wavelength with enough intensity to be detected on the Earth" (lines 39–42) would be most weakened if which of the following were discovered to be true?

- (A) Spiral galaxies are less common than types of galaxies that contain little nonluminous matter.
- (B) Luminous and nonluminous matter are composed of the same basic elements.
- (C) The bright nucleus of a typical spiral galaxy also contains some nonluminous matter.
- (D) The density of the observable universe is greater than most previous estimates have suggested.
- (E) Some galaxies do not rotate or rotate too slowly for their rotational velocity to be measured.

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

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

116. The authors propose all of the following as possibly contributing to the "missing matter" in spiral galaxies EXCEPT

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

Line All the cells in a particular plant start out with the same complement of genes. How then can these cells differentiate and form structures as different as roots, stems, leaves, and fruits? The
 (5) answer is that only a small subset of the genes in a particular kind of cell are expressed, or turned on, at a given time. This is accomplished by a complex system of chemical messengers that in plants include hormones and other regulatory molecules.
 (10) Five major hormones have been identified: auxin, abscisic acid, cytokinin, ethylene, and gibberellin. Studies of plants have now identified a new class of regulatory molecules called oligosaccharins.

Unlike the oligosaccharins, the five well-known
 (15) plant hormones are pleiotropic rather than specific; that is, each has more than one effect on the growth and development of plants. The five have so many simultaneous effects that they are not very useful in artificially controlling the growth of crops. Auxin, for instance, stimulates the rate of cell elongation, causes shoots to grow up and roots to grow down, and inhibits the growth of lateral shoots. Auxin also causes the plant to develop a vascular system, to form lateral roots, and to
 (25) produce ethylene.

The pleiotropy of the five well-studied plant hormones is somewhat analogous to that of certain hormones in animals. For example, hormones from the hypothalamus in the brain stimulate the anterior lobe of the pituitary gland to synthesize and release many different hormones, one of which stimulates the release of hormones from the adrenal cortex. These hormones have specific effects on target organs all over the body. One hormone stimulates
 (30) the thyroid gland, for example, another the ovarian follicle cells, and so forth. In other words, there is a hierarchy of hormones.

Such a hierarchy may also exist in plants. Oligosaccharins are fragments of the cell wall released
 (35) by enzymes: different enzymes release different oligosaccharins. There are indications that pleiotropic plant hormones may actually function by activating the enzymes that release these other, more specific chemical messengers from the cell wall.

Questions 117–122 refer to the passage above.

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

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

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

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

About thirty-five percent of the urban black population in the South was engaged in skilled trades. Some were from the old artisan class of
(40) slavery—blacksmiths, masons, carpenters—which had had a monopoly of certain trades, but they were gradually being pushed out by competition, mechanization, and obsolescence. The remaining 65 percent, more recently urbanized, worked in
(45) newly developed industries—tobacco, lumber, coal and iron manufacture, and railroads. Wages in the South, however, were low, and black workers were aware, through labor recruiters and the black

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

Questions 123–128 refer to the passage above.

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

125. According to the passage, which of the following is true of wages in southern cities in 1910?

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

126. The author cites each of the following as possible influences in an African American worker's decision to migrate north in the Great Migration EXCEPT

- (A) wage levels in northern cities
- (B) labor recruiters
- (C) competition from rural workers
- (D) voting rights in northern states
- (E) the African American press

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

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

128. The primary purpose of the passage is to

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

Line 6 Historians sometimes forget that history is continually being made and experienced before it is studied, interpreted, and read. These latter activities have their own history, of course, which (5) may impinge in unexpected ways on public events. It is difficult to predict when “new pasts” will overturn established historical interpretations and change the course of history.

In the fall of 1954, for example, C. Vann (10) Woodward delivered a lecture series at the University of Virginia that challenged the prevailing dogma concerning the history, continuity, and uniformity of racial segregation in the South. He argued that the Jim Crow laws of the late (15) nineteenth and early twentieth centuries not only codified traditional practice but also were a determined effort to erase the considerable progress made by black people during and after Reconstruction in the 1870’s. This revisionist view (20) of Jim Crow legislation grew in part from the research that Woodward had done for the NAACP legal campaign during its preparation for *Brown v. Board of Education*. The Supreme Court had issued its ruling in this epochal desegregation case (25) a few months before Woodward’s lectures.

The lectures were soon published as a book, *The Strange Career of Jim Crow*. Ten years later, in a preface to the second revised edition, (30) Woodward confessed with ironic modesty that the first edition “had begun to suffer under some of the handicaps that might be expected in a history of the American Revolution published in 1776.” That was a bit like hearing Thomas Paine apologize for the (35) timing of his pamphlet *Common Sense*, which had a comparable impact. Although *Common Sense* also had a mass readership, Paine had intended to reach and inspire: he was not a historian, and thus not concerned with accuracy or the dangers of historical anachronism. Yet, like Paine, Woodward (40) had an unerring sense of the revolutionary moment, and of how historical evidence could undermine the mythological tradition that was crushing the dreams of new social possibilities. Martin Luther King Jr. testified to the profound effect of *The Strange (45) Career of Jim Crow* on the civil rights movement by praising the book and quoting it frequently.

Questions 129–134 refer to the passage above.

129. The “new pasts” mentioned in line 6 can best be described as the
- occurrence of events extremely similar to past events
 - history of the activities of studying, interpreting, and reading new historical writing
 - change in people’s understanding of the past due to more recent historical writing
 - overturning of established historical interpretations by politically motivated politicians
 - difficulty of predicting when a given historical interpretation will be overturned
130. It can be inferred from the passage that the “prevailing dogma” (lines 11–12) held that
- Jim Crow laws were passed to give legal status to well-established discriminatory practices in the South
 - Jim Crow laws were passed to establish order and uniformity in the discriminatory practices of different southern states
 - Jim Crow laws were passed to erase the social gains that black people had achieved since Reconstruction
 - the continuity of racial segregation in the South was disrupted by passage of Jim Crow laws
 - the Jim Crow laws of the late nineteenth and early twentieth centuries were passed to reverse the effect of earlier Jim Crow laws

131. Which of the following is the best example of writing that is likely to be subject to the kinds of “handicaps” referred to in line 31?
- (A) A history of an auto manufacturing plant written by an employee during an auto buying boom
 - (B) A critique of a statewide school-desegregation plan written by an elementary school teacher in that state
 - (C) A newspaper article assessing the historical importance of a United States president written shortly after the president has taken office
 - (D) A scientific paper describing the benefits of a certain surgical technique written by the surgeon who developed the technique
 - (E) Diary entries narrating the events of a battle written by a soldier who participated in the battle
132. The passage suggests that C. Vann Woodward and Thomas Paine were similar in all of the following ways EXCEPT
- (A) both had works published in the midst of important historical events
 - (B) both wrote works that enjoyed widespread popularity
 - (C) both exhibited an understanding of the relevance of historical evidence to contemporary issues
 - (D) the works of both had a significant effect on events following their publication
 - (E) both were able to set aside worries about historical anachronism in order to reach and inspire

133. The attitude of the author of the passage toward the work of C. Vann Woodward is best described as one of
- (A) respectful regard
 - (B) qualified approbation
 - (C) implied skepticism
 - (D) pointed criticism
 - (E) fervent advocacy
134. Which of the following best describes the new idea expressed by C. Vann Woodward in his University of Virginia lectures in 1954?
- (A) Southern racial segregation was continuous and uniform.
 - (B) Black people made considerable progress only after Reconstruction.
 - (C) Jim Crow legislation was conventional in nature.
 - (D) Jim Crow laws did not go as far in codifying traditional practice as they might have.
 - (E) Jim Crow laws did much more than merely reinforce a tradition of segregation.

The function of capital markets is to facilitate an exchange of funds among all participants, and yet in practice we find that certain participants are not on a par with others. Members of society have varying degrees of market strength in terms of information they bring to a transaction, as well as of purchasing power and creditworthiness, as defined by lenders.

For example, within minority communities, capital markets do not properly fulfill their functions; they do not provide access to the aggregate flow of funds in the United States. The financial system does not generate the credit or investment vehicles needed for underwriting economic development in minority areas. The problem underlying this dysfunction is found in a rationing mechanism affecting both the available alternatives for investment and the amount of financial resources. This creates a distributive mechanism penalizing members of minority groups because of their socioeconomic differences from others. The existing system expresses definite socially based investment preferences that result from the previous allocation of income and that influence the allocation of resources for the present and future. The system tends to increase the inequality of income distribution. And, in the United States economy, a greater inequality of income distribution leads to a greater concentration of capital in certain types of investments.

Most traditional financial-market analysis studies ignore financial markets' deficiencies in allocation because of analysts' inherent preferences for the simple model of perfect competition. Conventional financial analysis pays limited attention to issues of market structure and dynamics, relative costs of information, and problems of income distribution. Market participants are viewed as acting as entirely independent and homogeneous individuals with perfect foresight about capital-market behavior. Also, it is assumed that each individual in the community at large has the same access to the market and the same opportunity to transact and to express the preference appropriate to his or her individual interest. Moreover, it is assumed that transaction costs for various types of financial instruments (stocks, bonds, etc.) are equally known and equally divided among all community members.

Questions 135–141 refer to the passage above.

135. The main point made by the passage is that
- financial markets provide for an optimum allocation of resources among all competing participants by balancing supply and demand
 - the allocation of financial resources takes place among separate individual participants, each of whom has access to the market
 - the existence of certain factors adversely affecting members of minority groups shows that financial markets do not function as conventional theory says they function
 - investments in minority communities can be made by the use of various alternative financial instruments, such as stocks and bonds
 - since transaction costs for stocks, bonds, and other financial instruments are not equally apportioned among all minority-group members, the financial market is subject to criticism
136. The passage states that traditional studies of the financial market overlook imbalances in the allocation of financial resources because
- an optimum allocation of resources is the final result of competition among participants
 - those performing the studies choose an oversimplified description of the influences on competition
 - such imbalances do not appear in the statistics usually compiled to measure the market's behavior
 - the analysts who study the market are unwilling to accept criticism of their methods as biased
 - socioeconomic differences form the basis of a rationing mechanism that puts minority groups at a disadvantage

137. The author's main point is argued by ~~the author's position~~ by
- giving examples that support a conventional generalization
 - showing that the view opposite to the author's is self-contradictory
 - criticizing the presuppositions of a proposed plan
 - showing that omissions in a theoretical description make it inapplicable in certain cases
 - demonstrating that an alternative hypothesis more closely fits the data
138. A difference in which of the following would be an example of inequality in transaction costs as alluded to in lines 44–48?
- Maximum amounts of loans extended by a bank to businesses in different areas
 - Fees charged to large and small investors for purchasing stocks
 - Prices of similar goods offered in large and small stores in an area
 - Stipends paid to different attorneys for preparing legal suits for damages
 - Exchange rates in dollars for currencies of different countries
139. Which of the following can be inferred about minority communities on the basis of the passage?
- They provide a significant portion of the funds that become available for investment in the financial market.
 - They are penalized by the tax system, which increases the inequality of the distribution of income between investors and wage earners.
 - They do not receive the share of the amount of funds available for investment that would be expected according to traditional financial-market analysis.
 - They are not granted governmental subsidies to assist in underwriting the cost of economic development.
 - They provide the same access to alternative sources of credit to finance businesses as do majority communities.
140. According to the passage, a questionable assumption of the conventional theory about the operation of financial markets is that
- creditworthiness as determined by lenders is a factor determining market access
 - market structure and market dynamics depend on income distribution
 - a scarcity of alternative sources of funds would result from taking socioeconomic factors into consideration
 - those who engage in financial-market transactions are perfectly well informed about the market
 - inequalities in income distribution are increased by the functioning of the financial market
141. According to the passage, analysts have conventionally tended to view those who participate in financial markets as
- judging investment preferences in terms of the good of society as a whole
 - influencing the allocation of funds through prior ownership of certain kinds of assets
 - varying in market power with respect to one another
 - basing judgments about future events mainly on chance
 - having equal opportunities to engage in transactions

7.5 Reading Comprehension Answer Key

1. C	32. C	63. B	94. B	125. A
2. B	33. B	64. D	94. C	126. D
3. B	34. A	65. C	96. D	127. C
4. B	35. C	66. A	97. D	128. D
5. E	36. B	67. C	98. D	129. C
6. A	37. E	68. E	99. C	130. A
7. C	38. D	69. B	100. D	131. C
8. E	39. A	70. D	101. C	132. E
9. B	40. D	71. D	102. E	133. A
10. D	41. B	72. B	103. B	134. E
11. D	42. C	73. C	104. A	135. C
12. A	43. C	74. B	105. C	136. B
13. B	44. D	75. E	106. B	137. D
14. E	45. D	76. E	107. D	138. B
15. E	46. A	77. A	108. A	139. C
16. C	47. E	78. E	109. C	140. D
17. D	48. B	79. C	110. D	141. E
18. B	49. A	80. B	111. C	
19. E	50. A	81. C	112. D	
20. B	51. C	82. D	113. D	
21. D	52. B	83. A	114. A	
22. E	53. E	84. A	115. C	
23. D	54. E	85. A	116. D	
24. D	55. A	86. A	117. B	
25. C	56. A	87. D	118. D	
26. A	57. D	88. C	119. A	
27. E	58. B	89. E	120. E	
28. C	59. D	90. B	121. E	
29. C	60. E	91. A	122. C	
30. C	61. D	92. C	123. D	
31. E	62. D	93. B	124. C	

7.6 Reading Comprehension Answer Explanations

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

Questions 1–7 refer to the passage on page 346.

1. Which of the following most accurately states the main idea of the passage?
 - (A) Naked mole rat colonies are the only known examples of cooperatively breeding vertebrate societies.
 - (B) Naked mole rat colonies exhibit social organization based on a rigid caste system.
 - (C) Behavior in naked mole rat colonies may well be a close vertebrate analogue to behavior in eusocial insect societies.
 - (D) The mating habits of naked mole rats differ from those of any other vertebrate species.
 - (E) The basis for the division of labor among naked mole rats is the same as that among eusocial insects.

Main idea

Main idea questions require a true statement about the major focus of the passage. From its opening sentence, this passage depends on a comparison between eusocial insect societies and naked mole rat colonies. Thus, the statement of the main idea must include both those species. The answer to a main idea question should never contain incorrect statements of fact.

- A Insects and mole rats are not compared; incorrect statement contradicts lines 36–37.
- B Species are not compared; incorrect statement contradicts lines 23–27.
- C **Correct.** This statement of the main idea does include both species, and it is consistent with the facts presented in the passage.
- D Mole rats are compared to other vertebrate species rather than to insect societies; incorrect statement contradicts lines 33–36.

- E While mole rats are compared to insect societies, the comparison is done incorrectly, contradicting the third paragraph.

The correct answer is C.

2. The passage suggests that Jarvis's work has called into question which of the following explanatory variables for naked mole rat behavior?
 - (A) Size
 - (B) Age
 - (C) Reproductive status
 - (D) Rate of growth
 - (E) Previously exhibited behavior

Inference

The fact that an inference must be made is indicated by the word *suggests* in the question. What does the passage say about Jarvis's work? It is mentioned in just one sentence in the passage (lines 33–35); Jarvis posits that growth rate may affect how long any individual rat performs a task, *regardless of its age*. Thus, it can be inferred that the variable that Jarvis's work calls into question is age.

- A Jarvis's work discusses rate of growth rather than size.
- B **Correct.** Jarvis's work tends to discount age as a determining factor in rat behavior.
- C Reproductive status is not mentioned in connection to Jarvis's work.
- D Rate of growth is the factor that determines what tasks the rats do and for how long.
- E Previously exhibited behavior is not discussed in the context of Jarvis's work.

The correct answer is B.

3. It can be inferred from the passage that the performance of tasks in naked mole rat colonies differs from task performance in eusocial insect societies in which of the following ways?
- (A) In naked mole rat colonies, all tasks are performed cooperatively.
 (B) In naked mole rat colonies, the performance of tasks is less rigidly determined by body shape.
 (C) In naked mole rat colonies, breeding is limited to the largest animals.
 (D) In eusocial insect societies, reproduction is limited to a single female.
 (E) In eusocial insect societies, the distribution of tasks is based on body size.

Inference

An inference is drawn from stated information. To answer this question, compare what the passage says about task-performance roles in eusocial insect societies and in naked mole rat colonies. These roles are described in the third paragraph. The insects have *rigid caste systems*, and an individual's role is defined by *its behavior, body shape, and physiology* (lines 22–23). In contrast, roles in naked mole rat colonies are related to *reproductive status... body size, and perhaps age* (lines 25–27); body shape is not mentioned. Thus it is logical to infer that body shape is less critical for the definition of the role of the naked mole rat, if it does indeed have any bearing on its role.

- A The passage does not indicate that all tasks are performed cooperatively.
 B **Correct.** While body shape is one of the factors that determine roles in eusocial insect societies, the same is not true of naked mole rat colonies.
 C Since no information is given about the breeders' size in insect societies, no comparison may be made.
 D No difference is found because reproduction is limited to a single female in both insect and naked mole rat societies.
 E *Behavior, body shape, and physiology* determine tasks in the insect societies, not body size.

The correct answer is B.

4. According to the passage, which of the following is a supposition rather than a fact concerning the queen in a naked mole rat colony?
- (A) She is the largest member of the colony.
 (B) She exerts chemical control over the colony.
 (C) She mates with more than one male.
 (D) She attains her status through aggression.
 (E) She is the only breeding female.

Supporting ideas

This question's wording indicates that the answer involves information that is explicitly stated in the passage. The second paragraph describes the naked mole rat queen as the largest member of the colony, maintaining her breeding status *through a mixture of behavioral and, presumably, chemical control* (lines 15–16). The word *presumably* indicates that the queen's chemical control is a supposition rather than a fact.

- A Lines 13–14 indicates her size as a fact.
 B **Correct.** The queen's chemical control of the society is presumed rather than documented.
 C Lines 26–27 state her mating habits as a fact.
 D Lines 16–20 cite the *violent fighting* that leads to a new queen's takeover as a fact.
 E Lines 10–13 state her unique reproductive status as a fact.

The correct answer is B.

5. The passage supports which of the following inferences about breeding among *Lycaon pictus*?
- (A) The largest female in the social group does not maintain reproductive status by means of behavioral control.
 (B) An individual's ability to breed is related primarily to its rate of growth.
 (C) Breeding is the only task performed by the breeding female.
 (D) Breeding in the social group is not cooperative.
 (E) Breeding is not dominated by a single pair of dogs.

Inference

Since this question asks about an inference, the answer is not directly stated in the passage; it must instead be derived from the information given. Examine what the passage says about *Lycaon pictus* and then look at each of the suggested inferences. The wild dog is mentioned as an exception to the rule that *most cooperatively breeding vertebrates... are dominated by a pair of breeders rather than by a single breeding female* (lines 37–40). It is reasonable to infer that breeding among these wild dogs is not dominated by a pair of breeders.

- A The naked mole rat queen does maintain her status through behavioral control; however, this has no bearing on the behavior of these wild dogs.
- B Rate of growth is discussed in the context of task distribution in naked mole rat colonies; the passage indicates no connection to breeding among wild dogs.
- C The passage offers no evidence that breeding is the female wild dog's only task.
- D *Lycaon pictus* is included in the group of *cooperatively breeding vertebrates*.
- E **Correct.** This wild dog is an exception to the rule that *most cooperatively breeding vertebrates... are dominated by a pair of breeders*.

The correct answer is E.

6. According to the passage, naked mole rat colonies may differ from all other known vertebrate groups in which of the following ways?
- (A) Naked mole rats exhibit an extreme form of altruism.
 - (B) Naked mole rats are cooperative breeders.
 - (C) Among naked mole rats, many males are permitted to breed with a single dominant female.
 - (D) Among naked mole rats, different tasks are performed at different times in an individual's life.
 - (E) Among naked mole rats, fighting results in the selection of a breeding female.

Supporting ideas

The use of the phrase *according to the passage* indicates that the answer to this question is explicitly stated. Look at the introduction of the passage (lines 1–8), where the subject is first raised. Scientists were unaware of any vertebrate species that acted in the altruistic pattern typical of eusocial insect species, but recently they have determined that the naked mole rat may behave with the same *extreme form of altruism*.

- A **Correct.** Unlike any other group of vertebrates, naked mole rats demonstrate altruistic behavior, sacrificing individual opportunities to survive and reproduce for the good of the group.
- B Lines 36–37 assert that other vertebrates are cooperative breeders.
- C Lines 26–27 say *a few males*, not many, breed with the queen; the passage does not say that naked mole rats are the only vertebrates that have a single breeding female.
- D Tasks performed by other vertebrates are not discussed, so it is not possible to know whether naked mole rat behavior is unique.
- E The passage does not indicate that this fighting is characteristic of mole rats alone.

The correct answer is A.

7. One function of the third paragraph of the passage is to
- (A) state a conclusion about facts presented in an earlier paragraph
 - (B) introduce information that is contradicted by information in the fourth paragraph
 - (C) qualify the extent to which two previously mentioned groups might be similar
 - (D) show the chain of reasoning that led to the conclusions of a specific study
 - (E) demonstrate that, of three explanatory factors offered, two may be of equal significance

Logical structure

For this question, it is necessary to consider the third paragraph in the context of the whole passage, not in isolation from it. The first two paragraphs draw the similarities between eusocial insect societies and naked mole rat colonies. The third paragraph focuses on the differences between the two groups and describes the rat behavior in more detail.

- A The third paragraph presents facts rather than conclusions.
- B The fourth paragraph describes other vertebrates; it does not contradict the information provided in the third paragraph.
- C Correct.** After emphasizing their similarities previously in the passage, the author turns to examine the differences between the two groups in the third paragraph.
- D The only specific study mentioned is Jarvis's work, which provides new information for the passage, not a conclusion.
- E The third paragraph provides information about behavior, not explanations of varying significance.

The correct answer is C.

Questions 8–12 refer to the passage on page 348.

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

Main idea

This question depends on understanding the passage as a whole. The first paragraph reports the findings of a recent study. The second paragraph examines possible explanations for the findings, ruling out all but one of them.

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

The correct answer is E.

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

Supporting ideas

Skim the passage to find a comparison of La Brea area carnivores with those from other areas. In lines 15–17, the numbers of tooth fractures, or *breakage data*, of Pleistocene carnivores at the La Brea site are compared with those at other sites. The carnivores at the La Brea site had about the same frequency of tooth fractures as the carnivores at other sites.

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

The correct answer is B.

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

Supporting ideas

As indicated by the phrase *according to the passage*, this question asks about information explicitly stated in the passage. After dismissing three possible causes of the tooth fractures, the author turns to the explanation researchers find *most plausible: more contact between the teeth of predators and the bones of prey due to more thorough consumption of carcasses* (lines 22–24).

- Lines 10–12 dismiss aging as the cause.
- Lines 12–15 rule out poor preservation within the pits.
- Preservation after removal from the pits is not discussed.
- Correct.** Carnivores' tooth fractures were most likely caused by contact with the bones of their prey.
- Line 28 mentions *competition over kills*, but does not link it to tooth fractures.

The correct answer is D.

11. The researchers' conclusion concerning the absence of demographic bias would be most seriously undermined if it were found that
- the older an individual carnivore is, the more likely it is to have a large number of tooth fractures
 - the average age at death of a present-day carnivore is greater than was the average age at death of a Pleistocene carnivore
 - in Pleistocene carnivore species, older individuals consumed carcasses as thoroughly as did younger individuals

- the methods used to determine animals' ages in fossil samples tend to misidentify many older individuals as younger individuals
- data concerning the ages of fossil samples cannot provide reliable information about behavioral differences between extinct carnivores and present-day carnivores

Logical structure

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

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

The correct answer is D.

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

Logical structure

This question refers to the preservational bias explanation that the researchers reject (lines 12–15). Two extinct species had no tooth fractures. Thus, the breakage was almost certainly NOT caused by abrasion in the pits because the teeth of those two species would have showed fractures as well. If the researchers had not discovered the exception of the two species, then they could not have ruled out the possibility that the tooth breakage was caused by damage within the pits.

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

The correct answer is A.

Questions 13–15 refer to the passage on page 350.

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

Main Idea

After identifying in the first paragraph two problems that the field of archaeology faces, the author begins the second paragraph by explicitly stating the purpose of the essay: *I would propose that scientific archaeological expeditions and governmental authorities sell excavated artifacts on the open market.* According to the author, this proposal would benefit the field of archaeology (lines 14–16) at the same time that it would reduce illegal digging for antiquities (lines 16–21).

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

The correct answer is B.

14. The author implies that all of the following statements about duplicate artifacts are true EXCEPT
- A market for such artifacts already exists
 - Such artifacts seldom have scientific value
 - There is likely to be a continuing supply of such artifacts
 - Museums are well supplied with examples of such artifacts
 - Such artifacts frequently exceed in quality those already cataloged in museum collections

Inference

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

- In the closing sentence of the passage, the author implies the market already exists.
- In lines 25–36, the author denies the scientific value of every artifact.
- The author says museum basements are not big enough for artifacts *likely to be discovered in the future* (lines 41–43).
- The fifth paragraph shows that museum basements are *bulging* with artifacts.
- Correct.** The passage does not support the assertion that the quality of duplicate objects is higher than that of museum pieces.

The correct answer is E.

15. Which of the following is mentioned in the passage as a disadvantage of storing artifacts in museum basements?
- Museum officials rarely allow scholars access to such artifacts.
 - Space that could be better used for display is taken up for storage.
 - Artifacts discovered in one excavation often become separated from each other.
 - Such artifacts are often damaged by variations in temperature and humidity.
 - Such artifacts often remain uncataloged and thus cannot be located once they are put in storage.

Supporting ideas

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

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

The correct answer is E.

Questions 16–20 refer to the passage on page 352.

16. The primary purpose of the passage is to
- explain and critique the methods used by early statisticians
 - compare and contrast a historical situation with a current-day one
 - describe and explain a historical change
 - discuss historical opposition to an established institution
 - trace the origin of a contemporary controversy

Main idea

To determine the primary purpose, consider the passage as a whole. The first sentence explains that during the nineteenth century, occupational information about women in the U.S. census *became more detailed and precise in response to social changes* (lines 1–5). Following a chronological order, the rest of the passage shows how and why the information changed.

- A The passage is more concerned with presenting information acquired from the census than with critiquing the methods used to obtain it.
- B No comparison to a present-day census is made.
- C Correct.** The passage describes a change from 1840 to 1890 and gives reasons for this change.
- D Lines 25–29 show that two groups pressed for greater accuracy, but that cannot be considered *historical opposition* since the groups did not oppose the census itself.
- E No contemporary controversy is mentioned.

The correct answer is C.

17. Each of the following aspects of nineteenth-century United States censuses is mentioned in the passage EXCEPT the
- (A) year in which data on occupations began to be analyzed by gender
 - (B) year in which specific information began to be collected on individuals in addition to the head of the household
 - (C) year in which overlap between women employed outside the home and women keeping house was first calculated
 - (D) way in which the 1890 census measured women's income levels and educational backgrounds
 - (E) way in which household members were counted in the 1840 census

Supporting ideas

Use the process of elimination to find the correct answer by checking the possible responses against the information *mentioned in the passage*. Skim the text to locate the necessary information; skimming for specific years is relatively easy because the years stand out visually from the rest of the text. The correct answer is the one piece of information NOT included in the passage.

- A Lines 19–20 indicate that it was 1870.
- B Lines 16–19 indicate that it was 1850.
- C Lines 25–26 indicate that it was 1890.
- D Correct.** The passage does not discuss income levels or educational background.
- E Lines 5–12 explain that the 1840 census used *simple enumeration* of all household members.

The correct answer is D.

18. It can be inferred from the passage that the 1840 United States census provided a count of which of the following?
- (A) Women who worked exclusively in the home
 - (B) People engaged in nonfarming occupations
 - (C) People engaged in social movements
 - (D) Women engaged in family-run enterprises
 - (E) Men engaged in agriculture

Inference

Since this question asks for an inference, the answer is not directly stated in the passage; it must instead be derived from the information given. This question depends on a careful review of lines 5–15, which state that the 1840 census counted the head of the household as an individual, and that it counted everyone else in the household by categories, including occupational categories. Thus it is reasonable to infer that the 1840 census provided an overall count of people engaged in occupations, both farming and nonfarming.

- A Lines 24–29 reveal that a count of women who worked exclusively at home was not made until 1890.
- B **Correct.** The 1840 census categorized household members by occupation, so it would have provided a count of people working in nonfarming occupations.
- C The 1840 census counted households by occupations, not by participation in social movements.
- D Lines 19–20 show that occupational categories were not analyzed by gender until 1870.
- E Occupations were analyzed by gender only in 1870 (lines 19–20).

The correct answer is B.

19. The author uses the adjective “simple” in line 6 most probably to emphasize that the
- (A) collection of census information became progressively more difficult throughout the nineteenth century
- (B) technology for tabulating census information was rudimentary during the first half of the nineteenth century
- (C) home-based agricultural economy of the early nineteenth century was easier to analyze than the later industrial economy
- (D) economic role of women was better defined in the early nineteenth century than in the late nineteenth century
- (E) information collected by early nineteenth-century censuses was limited in its amount of detail

Logical structure

Understanding an author’s word choice often means examining not just the use of the word itself but the broader context in which it is used. The first sentence says that census information became *more detailed and precise* during the nineteenth century. The next sentence starts with the earliest census described in the passage, which used a method of *simple enumeration*. The author uses *simple* to emphasize the contrast between the general, unspecified information on headcounts recorded in 1840 and the more *detailed and precise* information recorded later.

- A The passage does not address the difficulty of collecting census information.
- B The passage does not describe the technology for tabulating census information.
- C The passage does not compare the ease of analyzing data.
- D The use of *simple* does not call attention to the changes in women’s status recorded in the census.
- E **Correct.** The author’s word choice emphasizes the lack of detail that characterized early nineteenth-century censuses.

The correct answer is E.

20. The passage suggests which of the following about the “women’s advocates and women statisticians” mentioned in lines 28–29?
- (A) They wanted to call attention to the lack of pay for women who worked in the home.
- (B) They believed that previous census information was inadequate and did not reflect certain economic changes in the United States.
- (C) They had begun to press for changes in census-taking methods as part of their participation in the antislavery movement.
- (D) They thought that census statistics about women would be more accurate if more women were employed as census officials.
- (E) They had conducted independent studies that disputed the official statistics provided by previous United States censuses.

Inference

The use of the word *suggests* in the question indicates that the answer involves an inference. Begin by looking at what the text says about the *women’s advocates and women statisticians*. Lines 28–29 show that they wanted *more thorough and accurate accounting of women’s occupations and wages*, which implies that they must have felt that previous censuses were inadequate in reporting this information. Lines 25–27 show that they were motivated to press for these additions in part because they believed that the economic changes occurring after *the rapid entry of women into the paid labor force* were not reflected in the census.

- A Lines 25–29 cite the motives attributed to the two groups; lack of pay for women working at home is not included.
- B **Correct.** They pressed for a more accurate, thorough census because they believed that previously collected information was inadequate and failed to reflect the economic changes wrought by women's rapid entry into the paid labor force.
- C The passage does not identify the women's advocates and women statisticians in 1890 as participants in the antislavery movement, which is discussed in the context of the 1850 census.
- D The passage does not show that they thought the greater accuracy they sought would be achieved with more women as census officials.
- E No independent, statistical studies are mentioned in the passage.

The correct answer is B.

Questions 21–26 refer to the passage on page 354.

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

Main idea

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

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

The correct answer is D.

22. According to the passage, today's successful firms, unlike successful firms in the past, may earn the greatest profits by

- (A) investing in research to produce cheaper versions of existing technology
 (B) being the first to market a competing technology
 (C) adapting rapidly to a technological standard previously set by a competing firm
 (D) establishing technological leadership in order to shape product definitions in advance of competing firms
 (E) emphasizing the development of methods for the mass production and distribution of a new technology

Supporting ideas

The phrase *according to the passage* indicates that the answer is explicitly stated in the passage. The question requires finishing a statement about firms in general; this is a clue to look at the first paragraph, the only place where firms in general are discussed. A contrast is drawn between past (lines 1–4) and present (lines 5–7) conditions. The companies that earn the greatest profits may be those that lead in *developing integrated approaches for successful mass production and distribution*.

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

The correct answer is E.

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

Supporting ideas

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

- A The passage does not suggest that consumers believed in the technical superiority of the VHS format.
- B No evidence in the passage indicates that consumers believed the VHS format was less expensive.
- C The passage does not support the view that consumers thought that VHS was the first format.
- D **Correct.** The passage says that consumers believed prerecorded tapes were more available in the VHS format than in Beta.

- E No information in the passage shows that consumers believed the Beta format would stop being produced.

The correct answer is D.

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

Inference

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

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

The correct answer is D.

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

Application

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

- The alignment between producers of competing, rather than mutually dependent, products is not analogous.
- This exclusive alignment would instead be analogous to one between a VHS manufacturer and a manufacturer of one of the parts of the VHS machine.

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

The correct answer is C.

26. Which of the following best describes the relation of the first paragraph to the passage as a whole?
- It makes a general observation to be exemplified.
 - It outlines a process to be analyzed.
 - It poses a question to be answered.
 - It advances an argument to be disputed.
 - It introduces conflicting arguments to be reconciled.

Logical Structure

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

- A. Correct.** The first paragraph offers a general statement about all firms, and the subsequent paragraphs use an extended example to demonstrate that statement.
- B. The passage does not describe a process or invite further analysis.
- C. The author is making a declaration (lines 5–7) rather than posing a question.
- D. The first paragraph advances an argument; however, it is supported, not disputed, by the rest of the passage.

- E The first paragraph contrasts past and present conditions, but does not show conflicting arguments.

The correct answer is A.

Questions 27–31 refer to the passage on page 356.

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

Main idea

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

- High-technology development is only one of three kinds of economic development the passage discusses.
- The private sector is not mentioned in the passage.
- The passage acknowledges problems but does not counter criticism.
- The passage examines the efforts to attract new industry in the first two paragraphs, but not in the third.

- E **Correct.** The passage describes and evaluates strategies and programs used by local governments to stimulate economic growth in their areas.

The correct answer is E.

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

Inference

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

- No information in the passage supports such a loss of personnel.
- The passage does not describe the industries' loss of profits.
- Correct.** Local governments tried to attract manufacturing industries because they were a significant boon to the local economy.
- The second paragraph mentions the *specially trained fraction of the manufacturing workforce* (lines 20–21) suitable for high-tech jobs, but that does not imply that workers in manufacturing industries were unskilled.
- The passage offers no evidence of this interference.

The correct answer is C.

29. The tone of the passage suggests that the author is most optimistic about the economic development potential of which of the following groups?
- Local governments
 - High-technology promoters
 - Local entrepreneurs
 - Manufacturing industry managers
 - Economic development strategists

Tone

To answer this question about the author's attitude, look at what the author says when evaluating the ways local governments try to stimulate economic growth. In the first two paragraphs, the author points out serious disadvantages in attracting manufacturing (lines 3–10) and high-technology industries (lines 17–20). The final paragraph, however, offers only advantages to promoting local entrepreneurship. The author does not mention any disadvantages here, which implies that the author is most optimistic about this third strategy, which *both provides jobs and fosters further entrepreneurship*.

- The local governments are part of the discussion of all three strategies, not just the one about which the author is most optimistic.
- In lines 17–20, the author points out the *shortcomings* of high-technology development.
- Correct.** The author has only good things to say about local entrepreneurs.
- The author does not discuss managers of manufacturing industries.
- Other than local governments, the author does not mention economic development strategists.

The correct answer is C.

30. The passage does NOT state which of the following about local entrepreneurs?
- They are found nearly everywhere.
 - They encourage further entrepreneurship.
 - They attract out-of-town investors.
 - They employ local workers.
 - They are established in their communities.

Supporting ideas

Use the process of elimination to discover the only characteristic of local entrepreneurs that is NOT explicitly stated in the passage. To do this, check each answer choice against the description of local entrepreneurs found in lines 23–30 of the passage.

- Lines 26–28 do identify them as *a nearly ubiquitous resource*, meaning that they are found in most places.
- Lines 32–33 say they create an environment that *fosters further entrepreneurship*.
- Correct.** Out-of-town investors are not mentioned in the passage.
- Lines 31–32 say that *industry and talent are kept at home* and that they create an environment that *provides jobs*.
- Lines 28–29 describe them as having *roots in their communities*.

The correct answer is C.

31. The author of the passage mentions which of the following as an advantage of high-technology development?

- It encourages the modernization of existing manufacturing facilities.
- It promotes healthy competition between rival industries.
- It encourages the growth of related industries.
- It takes full advantage of the existing workforce.
- It does not advantage one local workforce at the expense of another.

Supporting ideas

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

- A The passage does not describe modernization of facilities.
- B Competition between rival industries is not mentioned in the passage.
- C The growth of related industries is not cited as an advantage.
- D Lines 19–21 explain that high-tech manufacturing firms employ only a fraction of the workforce.
- E **Correct.** Competing for a new industry means that local governments are not trying to attract to their towns an industry established in another town, thus harming that other town's local economy.

The correct answer is E.

Questions 32–36 refer to the passage on page 358.

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

Main idea

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

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

- E The author points out problems in the definitions rather than providing clarifications of the definitions themselves.

The correct answer is C.

33. In comparing the United States government's definition of services with the classical definition, the author suggests that the classical definition is
- (A) more pragmatic
 - (B) more difficult to apply
 - (C) less ambiguous
 - (D) more widely used
 - (E) more arbitrary

Inference

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

- A The United States government's definition is *more practical* or pragmatic.
- B **Correct.** Citing two cases in which the classical definition does not apply, the author implies that this definition is harder to apply than the government's.
- C The author calls the classical definition *broader*, citing this definition of a service as *an intangible something*.
- D The author does not say that the classical definition is more widely used.
- E The author calls the government's definition arbitrary.

The correct answer is B.

34. The passage suggests which of the following about service workers in the United States?
- The number of service workers may be underestimated by the definition of services used by the government.
 - There were fewer service workers than agricultural workers before 1988.
 - The number of service workers was almost equal to the number of workers employed in manufacturing until 1988.
 - Most service workers are employed in service occupations rather than in service industries.
 - Most service workers are employed in occupations where they provide services that do not fall under the classical definition of services.

Inference

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

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

The correct answer is A.

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

Supporting ideas

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

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

The correct answer is C.

36. The author refers to “service workers employed by manufacturers” (lines 23–24) primarily in order to point out
- a type of worker not covered by the United States government’s system of classifying occupations
 - a flaw in the United States government’s definition of services
 - a factor that has influenced the growth of the service economy in the United States
 - a type of worker who is classified on the basis of work performed rather than on the basis of the company’s final product
 - the diversity of the workers who are referred to as service workers

Logical structure

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

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

The correct answer is B.

Questions 37–42 refer to the passage on page 360.

37. The primary purpose of the passage is to
- argue against those scientists who maintain that animal populations tend to fluctuate
 - compare and contrast the density-dependent and epideictic theories of population control
 - provide examples of some of the ways in which animals exercise reproductive restraint to control their own numbers
 - suggest that theories of population control that concentrate on the social behavior of animals are more open to debate than are theories that do not
 - summarize a number of scientific theories that attempt to explain why animal populations do not exceed certain limits

Main idea

A review of the whole passage shows that the author is primarily concerned with presenting three different theories to explain the relative stability of animal populations. After explaining the question in the first paragraph, the author summarizes the density-independent theory in the second paragraph, the density-dependent theory in the third, and the Wynne-Edwards theory in the final paragraph.

- The passage accepts without challenge the premise that animal populations do tend to fluctuate to a *trivial* extent from year to year.
- The author discusses three theories, not two.
- Theories are summarized, but no supporting examples are cited in this passage.
- The author acknowledges the challenges to the theories, but does not indicate that one theory is more open to debate than another.
- Correct.** The author examines three theories that account for the *relative constancy* of animal populations.

The correct answer is E.

38. It can be inferred from the passage that proponents of the density-dependent theory of population control have not yet been able to
 (A) use their theory to explain the population growth of organisms with short life cycles
 (B) reproduce the results of the study of Christian and Davis
 (C) explain adequately why the numbers of a population can increase as the population's rate of growth decreases
 (D) make sufficiently accurate predictions about the effects of crowding
 (E) demonstrate how predator populations are themselves regulated

Inference

The author summarizes the density-dependent theory in the third paragraph, noting at the conclusion of the discussion, *one challenge for density-dependent theorists is to develop models that would allow the precise prediction of crowding.* It is logical to infer from this that these theorists' current predictive models do not offer an optimal, or even satisfactory, degree of precision.

- A Organisms with short life cycles are discussed in the context of the density-independent theory.
 B No mention is made of attempts to reproduce the study results.
 C As the third paragraph illustrates, the theory explains why *the rate of growth of a population in a region decreases as the number of animals increases.*
 D **Correct.** The theorists have not yet been able to make accurate predictions about the effects of crowding.
 E The theory does not specifically address the regulation of predator populations.

The correct answer is D.

39. Which of the following, if true, would best support the density-dependent theory of population control as it is described in the passage?

- (A) As the number of foxes in Minnesota decreases, the growth rate of this population of foxes begins to increase.
 (B) As the number of woodpeckers in Vermont decreases, the growth rate of this population of woodpeckers also begins to decrease.
 (C) As the number of prairie dogs in Oklahoma increases, the growth rate of this population of prairie dogs also begins to increase.
 (D) After the number of beavers in Tennessee decreases, the number of predators of these beavers begins to increase.
 (E) After the number of eagles in Montana decreases, the food supply of this population of eagles also begins to decrease.

Application

The density-dependent theory argues that *the rate of growth of a population decreases as the number of animals increases.* Regulation of a high-density population is managed by a diminishing food supply, greater opportunities for predators, and physiological control mechanisms that may inhibit sexual activity and sexual maturation.

- A **Correct.** The high-density theory holds that an increase in numbers results in a decrease in growth rate (lines 18–21); thus, the inverse shown in this example is equally true: a decrease in numbers results in an increased rate of population growth.
 B According to this theory, it is an increase in numbers, rather than a decrease, that results in a decreased rate of population growth.
 C The theory would argue that as the number increased, the growth rate would decrease, not increase.
 D The theory argues that predators take advantage of high-density populations when a population increases, not decreases.
 E A decreased food supply occurs when an increased population competes for it.

The correct answer is A.

40. According to the Wynne-Edwards theory as it is described in the passage, epideictic behavior displays serve the function of

- (A) determining roosting aggregations
 (B) locating food
 (C) attracting predators
 (D) regulating sexual activity
 (E) triggering hormonal changes

Supporting ideas

This question is based on information specifically stated in the passage. According to the Wynne-Edwards theory, epideictic behavior displays provide organisms with information on population size in a region so that they can... exercise reproductive restraint (lines 45–47).

- A Roosting aggregations are cited as an example of an epideictic behavior display.
 B The function of the display is to *exercise reproductive restraint*, not locate food.
 C The function of the display is to *exercise reproductive restraint*, not attract predators.
D Correct. Epideictic behavior displays are said to encourage animals to *exercise reproductive restraint*, thus regulating sexual activity.
 E Hormonal changes are proposed by the density-dependent theory, not the Wynne-Edwards theory.

The correct answer is D.

41. The challenge posed to the Wynne-Edwards theory by several studies is regarded by the author with
 (A) complete indifference
 (B) qualified acceptance
 (C) skeptical amusement
 (D) perplexed astonishment
 (E) agitated dismay

Tone

To determine the author's attitude, it is necessary to examine closely the words the author chooses to convey information. The author says that the theory *has been challenged, with some justification, by several studies*. The inclusion of the parenthetical expression *with some justification* implies that the author agrees with these studies that there are weaknesses in the Wynne-Edwards theory. However, the careful wording of *some justification* suggests that the author does not wholly agree with the challengers, only partially.

Thus, the author's attitude can be construed as one of partial or qualified acceptance.

- A** The author is not indifferent to the challenges, finding instead some basis for them.
B Correct. The author accepts the challenges posed by the studies, finding *some justification* for them, but does not agree fully with those challenges.
 C The author takes the challenges to the theory seriously, acknowledging there is *some justification* for them.
 D The author betrays no surprise at the challenges to the theory, but rather accepts them.
 E The author is not dismayed at the challenges that are offered *with some justification*.

The correct answer is B.

42. Which of the following statements would provide the most logical continuation of the final paragraph of the passage?
 (A) Thus Wynne-Edwards's theory raises serious questions about the constancy of animal population in a region.
 (B) Because Wynne-Edwards's theory is able to explain more kinds of animal behavior than is the density-dependent theory, epideictic explanations of population regulation are now widely accepted.
 (C) The results of one study, for instance, have suggested that group vocalizing is more often used to defend territory than to provide information about population density.
 (D) Some of these studies have, in fact, worked out a systematic and complex code of social behavior that can regulate population size.
 (E) One study, for example, has demonstrated that birds are more likely to use winter-roosting aggregations than group vocalizing in order to provide information on population size.

Application

This question asks the reader to determine what would logically follow from the last sentence in the paragraph describing the Wynne-Edwards theory. The last sentence mentions studies that challenge the Wynne-Edwards theory, leading the reader to expect specific examples from one or more of those studies. Such examples might attack a weakness of the Wynne-Edwards theory or offer an alternate explanation.

- A The Wynne-Edwards theory attempts to explain, not raise questions about, the constancy of animal populations.
- B The author has not compared the two theories; rather than being widely accepted, Wynne-Edwards theory has been challenged by several studies.
- C Correct.** The last sentence discusses studies that challenge the theory. This statement follows logically by showing that one such study interprets the epideictic display of group vocalizing as having a different purpose than that proposed by the Wynne-Edwards theory.
- D The studies mentioned in the last sentence challenge the Wynne-Edwards theory, leading the reader to expect an explanation of specific points of disagreement, but the studies in this statement instead agree with the theory.
- E The studies mentioned in the last sentence challenge the Wynne-Edwards theory, so the reader anticipates an explanation of the specific points of the challenge, but this example supports the theory, simply showing that one population prefers one kind of epideictic display to another.

The correct answer is C.

Questions 43–47 refer to the passage on page 362.

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

Main idea

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

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

The correct answer is C.

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

Logical structure

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

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

The correct answer is D.

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

- (E) By making it more likely that the readings professors assign to students in their courses will be drawn solely from primary sources

Inference

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

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

The correct answer is D.

46. The passage implies that which of the following was true of introductory courses in Asian American studies a few decades ago?
- The range of different textbooks that could be assigned for such courses was extremely limited.
 - The texts assigned as readings in such courses were often not very challenging for students.
 - Students often complained about the texts assigned to them in such courses.
 - Such courses were offered only at schools whose libraries were rich in primary sources.
 - Such courses were the only means then available by which people in the United States could acquire knowledge of the field.

Inference

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

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

The correct answer is A.

47. According to the passage, the existence of good one-volume reference works about Asian Americans could result in
- increased agreement among professors of Asian American studies regarding the quality of the sources available in their field
 - an increase in the number of students signing up for introductory courses in Asian American studies
 - increased accuracy in writings that concern Asian American history and culture
 - the use of introductory texts about Asian American history and culture in courses outside the field of Asian American studies
 - the inclusion of a wider range of Asian American material in introductory reading lists in Asian American studies

Supporting ideas

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

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

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

The correct answer is E.

Questions 48–50 refer to the passage on page 364.

48. The passage suggests that combing and carding differ from weaving in that combing and carding are
- low-skill jobs performed primarily by women employees
 - low-skill jobs that were not performed in the home
 - low-skill jobs performed by both male and female employees
 - high-skill jobs performed outside the home
 - high-skill jobs performed by both male and female employees

Inference

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

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

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

The correct answer is B.

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

Logical structure

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

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

The correct answer is A.

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

Logical structure

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

- A **Correct.** This statement reflects the author's generally positive evaluation, as well as concerns about insufficiencies.
- B The author articulates the theory without difficulty and does not criticize it as difficult to articulate.
- C To substantiate the theory means to provide evidence that verifies the theory; the author accepts the verification of gender segregation and so would not call the theory *poorly substantiated*.
- D The author would not call a theory *useful* if it were seriously flawed.
- E The author does not discuss the theory in relation to recent research.

The correct answer is A.

Questions 51–57 refer to the passage on page 366.

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

Main idea

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

- A The author uses statistical analyses as the basis of an explanation, but the analyses act only as support for the larger purpose of explaining a trend; no further studies are proposed.
- B The author explores possible reasons for a recent development but recommends ways to curb or change that development; the author does not predict the consequences if the situation is left unchanged or the recommendations unmet.
- C Correct.** The author examines possible reasons for the rise in temporary employment and makes specific recommendations to change the current situation.
- D The author discusses possible reasons for a trend, not theories about a phenomenon; no theory is advocated.
- E The author makes recommendations but does not describe their consequences.

The correct answer is C.

52. According to the passage, which of the following is true of the "factors affecting employers" that are mentioned in lines 10–13?
- (A) Most experts cite them as having initiated the growth in temporary employment that occurred during the 1980's.
 - (B) They may account for the increase in the total number of temporary workers during the 1980's.
 - (C) They were less important than demographic change in accounting for the increase of temporary employment during the 1980's.
 - (D) They included a sharp increase in the cost of labor during the 1980's.
 - (E) They are more difficult to account for than are other factors involved in the growth of temporary employment during the 1980's.

Supporting ideas

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

- A Some observers attribute the rise to the composition of the workforce; the passage does not identify what most experts believe.
- B Correct.** The factors affecting employers may explain the rise in temporary employment.
- C These factors were more important than demographic changes in explaining the rise.
- D Such a sharp increase is unlikely because of labor's reduced bargaining strength and employers' greater control over the terms of employment at this time.
- E The author readily explains the two factors as product demand and labor's reduced bargaining strength.

The correct answer is B.

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