

Passage 101

Two recent publications offer different assessment of the career of the famous British nurse Florence Nightingale. A book by Anne Summers seeks to debunk the idealizations and present a reality at odds with Nightingale's heroic reputation. According to Summers, Nightingale's importance during the Crimean War has been exaggerated: not until near the war's end did she become supervisor of the female nurses. Additionally, Summers writes that the contribution of the nurses to the relief of the wounded was at best marginal. The prevailing problems of military medicine were caused by army organizational practices, and the addition of a few nurses to the medical staff could be no more than symbolic. Nightingale's place in the national pantheon, Summers asserts, is largely due to the propagandistic efforts of contemporary newspaper reporters.

By contrast, the editors of a new volume of Nightingale's letters view Nightingale as a person who significantly influenced not only her own age but also subsequent generations. They highlight her ongoing efforts to reform sanitary conditions after the war. For example, when she learned that peacetime living conditions in British barracks were so horrible that the death rate of enlisted men far exceeded that of neighboring civilian populations, she succeeded in persuading the government to establish a Royal Commission on the Health of the Army. She used sums raised through public contributions to found a nurses' training hospital in London. Even in administrative matters, the editors assert, her practical intelligence was formidable: as recently as 1947 the British Army's medical services were still using the cost-accounting system she had devised in the 1860's.

I believe that the evidence of her letters supports continued respect for Nightingale's brilliance and creativity. When counseling a village schoolmaster to encourage children to use their faculties of observation, she sounds like a modern educator. Her insistence on classifying the problems of the needy in order to devise appropriate treatments is similar to the approach

of modern social workers. In sum, although Nightingale may not have achieved all of her goals during the Crimean War, her breadth of vision and ability to realize ambitious projects have earned her an eminent place among the ranks of social pioneers.

73. The passage is primarily concerned with evaluating
- (A) the importance of Florence Nightingale's innovations in the field of nursing
 - (B) contrasting approaches to the writing of historical biography
 - (C) contradictory accounts of Florence Nightingale's historical significance
 - (D) the quality of health care in nineteenth-century England
 - (E) the effect of the Crimean War on developments in the field of health care
74. According to the passage, the editors of Nightingale's letters credit her with contributing to which of the following?
- (A) Improving of the survival rate for soldiers in British Army hospitals during the Crimean War
 - (B) The development of a nurses' training curriculum that was far in advance of its day
 - (C) The increase in the number of women doctors practicing in British Army hospitals
 - (D) Establishment of the first facility for training nurses at a major British university
 - (E) The creation of an organization for monitoring the peacetime living conditions of British soldiers
75. The passage suggests which of the following about Nightingale's relationship with the British public of her day?
- (A) She was highly respected, her projects receiving popular and governmental support.
 - (B) She encountered resistance both from the army establishment and the general public.
 - (C) She was supported by the working classes and opposed by the wealthier classes.
 - (D) She was supported by the military establishment but had to fight the governmental bureaucracy.
 - (E) After initially being received with enthusiasm, she was quickly forgotten.
76. The passage suggests which of the following about sanitary conditions in Britain after the Crimean War?
- (A) While not ideal, they were superior to those in other parts of the world.
 - (B) Compared with conditions before the war, they had deteriorated.
 - (C) They were more advanced in rural areas than in the urban centers.
 - (D) They were worse in military camps than in the neighboring civilian populations.

- (E) They were uniformly crude and unsatisfactory throughout England.
77. Which of the following statements regarding the differing interpretations of Nightingale's importance would the author most likely agree?
- (A) Summers misunderstood both the importance of Nightingale's achievements during the Crimean War and her subsequent influence on British policy.
- (B) The editors of Nightingale's letters made some valid points about her practical achievements, but they still exaggerated her influence on subsequent generations.
- (C) Although Summers' account of Nightingale's role in the Crimean War may be accurate, she ignored evidence of Nightingale's subsequent achievement that suggests that her reputation as an eminent social reformer is well deserved.
- (D) The editors of Nightingale's letters mistakenly propagated the outdated idealization of Nightingale that only impedes attempts to arrive at a balance assessment of her true role.
- (E) The evidence of Nightingale's letters supports Summers' conclusions both about Nightingale's activities and about her influence.
78. Which of the following is an assumption underlying the author's assessment of Nightingale's creativity?
- (A) Educational philosophy in Nightingale's day did not normally emphasize developing children's ability to observe.
- (B) Nightingale was the first to notice the poor living conditions in British military barracks in peacetime.
- (C) No educator before Nightingale had thought to enlist the help of village schoolmasters in introducing new teaching techniques.
- (D) Until Nightingale began her work, there was no concept of organized help for the needy in nineteenth-century Britain.
- (E) The British Army's medical services had no cost-accounting system until Nightingale devised one in the 1860's.
79. In the last paragraph, the author is primarily concerned with
- (A) summarizing the arguments about Nightingale presented in the first two paragraphs
- (B) refuting the view of Nightingale's career presented in the preceding paragraph
- (C) analyzing the weaknesses of the evidence presented elsewhere in the passage
- (D) citing evidence to support a view of Nightingale's career
- (E) correcting a factual error occurring in one of the works under review

Passage 102

A meteor stream is composed of dust particles that have been ejected from a parent comet at a variety of velocities. These particles follow the same orbit as the parent comet, but due to

their differing velocities they slowly gain on or fall behind the disintegrating comet until a shroud of dust surrounds the entire cometary orbit. Astronomers have hypothesized that a meteor stream should broaden with time as the dust particles' individual orbits are perturbed by planetary gravitational fields. A recent computer-modeling experiment tested this hypothesis by tracking the influence of planetary gravitation over a projected 5,000-year period on the positions of a group of hypothetical dust particles. In the model, the particles were randomly distributed throughout a computer simulation of the orbit of an actual meteor stream, the Geminid. The researcher found, as expected, that the computer-model stream broadened with time. Conventional theories, however, predicted that the distribution of particles would be increasingly dense toward the center of a meteor stream. Surprisingly, the computer-model meteor stream gradually came to resemble a thick-walled, hollow pipe.

Whenever the Earth passes through a meteor stream, a meteor shower occurs. Moving at a little over 1,500,000 miles per day around its orbit, the Earth would take, on average, just over a day to cross the hollow, computer-model Geminid stream if the stream were 5,000 years old. Two brief periods of peak meteor activity during the shower would be observed, one as the Earth entered the thick-walled "pipe" and one as it exited. There is no reason why the Earth should always pass through the stream's exact center, so the time interval between the two bursts of activity would vary from one year to the next.

Has the predicted twin-peaked activity been observed for the actual yearly Geminid meteor shower? The Geminid data between 1970 and 1979 show just such a bifurcation, a secondary burst of meteor activity being clearly visible at an average of 19 hours (1,200,000 miles) after the first burst. The time intervals between the bursts suggest the actual Geminid stream is about 3,000 years old.

80. The primary focus of the passage is on which of the following?
- (A) Comparing two scientific theories and contrasting the predictions that each would make concerning a natural phenomenon
 - (B) Describing a new theoretical model and noting that it explains the nature of observations made of a particular natural phenomenon
 - (C) Evaluating the results of a particular scientific experiment and suggesting further areas for research
 - (D) Explaining how two different natural phenomena are related and demonstrating a way to measure them
 - (E) Analyzing recent data derived from observations of an actual phenomenon and constructing a model to explain the data
81. According to the passage, which of the following is an accurate statement concerning meteor streams?
- (A) Meteor streams and comets start out with similar orbits, but only those of meteor streams are perturbed by planetary gravitation.
 - (B) Meteor streams grow as dust particles are attracted by the gravitational fields of comets.
 - (C) Meteor streams are composed of dust particles derived from comets.

- (D) Comets may be composed of several kinds of materials, while meteor streams consist only of large dust particles.
- (E) Once formed, meteor streams hasten the further disintegration of comets.
82. The author states that the research described in the first paragraph was undertaken in order to
- (A) determine the age of an actual meteor stream
 - (B) identify the various structural features of meteor streams
 - (C) explore the nature of a particularly interesting meteor stream
 - (D) test the hypothesis that meteor streams become broader as they age
 - (E) show that a computer model could help in explaining actual astronomical data
83. It can be inferred from the passage that which of the following would most probably be observed during the Earth's passage through a meteor stream if the conventional theories mentioned in line 18 were correct?
- (A) Meteor activity would gradually increase to a single, intense peak, and then gradually decline.
 - (B) Meteor activity would be steady throughout the period of the meteor shower.
 - (C) Meteor activity would rise to a peak at the beginning and at the end of the meteor shower.
 - (D) Random bursts of very high meteor activity would be interspersed with periods of very little activity.
 - (E) In years in which the Earth passed through only the outer areas of a meteor stream, meteor activity would be absent.
84. According to the passage, why do the dust particles in a meteor stream eventually surround a comet's original orbit?
- (A) They are ejected by the comet at differing velocities.
 - (B) Their orbits are uncontrolled by planetary gravitational fields.
 - (C) They become part of the meteor stream at different times.
 - (D) Their velocity slows over time.
 - (E) Their ejection velocity is slower than that of the comet.
85. The passage suggests that which of the following is a prediction concerning meteor streams that can be derived from both the conventional theories mentioned in line 18 and the new computer-derived theory?
- (A) Dust particles in a meteor stream will usually be distributed evenly throughout any cross section of the stream.
 - (B) The orbits of most meteor streams should cross the orbit of the Earth at some point and give rise to a meteor shower.
 - (C) Over time the distribution of dust in a meteor stream will usually become denser at the outside edges of the stream than at the center.

- (D) Meteor showers caused by older meteor streams should be, on average, longer in duration than those caused by very young meteor streams.
 - (E) The individual dust particles in older meteor streams should be, on average, smaller than those that compose younger meteor streams.
86. It can be inferred from the last paragraph of the passage that which of the following must be true of the Earth as it orbits the Sun?
- (A) Most meteor streams it encounters are more than 2,000 years old.
 - (B) When passing through a meteor stream, it usually passes near to the stream's center.
 - (C) It crosses the Geminid meteor stream once every year.
 - (D) It usually takes over a day to cross the actual Geminid meteor stream.
 - (E) It accounts for most of the gravitational perturbation affecting the Geminid meteor stream.
87. Which of the following is an assumption underlying the last sentence of the passage?
- (A) In each of the years between 1970 and 1979, the Earth took exactly 19 hours to cross the Geminid meteor stream.
 - (B) The comet associated with the Geminid meteor stream has totally disintegrated.
 - (C) The Geminid meteor stream should continue to exist for at least 5,000 years.
 - (D) The Geminid meteor stream has not broadened as rapidly as the conventional theories would have predicted.
 - (E) The computer-model Geminid meteor stream provides an accurate representation of the development of the actual Geminid stream.

Passage 103

The new school of political history that emerged in the 1960's and 1970's sought to go beyond the traditional focus of political historians on leaders and government institutions by examining directly the political practices of ordinary citizens. Like the old approach, however, this new approach excluded women. The very techniques these historians used to uncover mass political behavior in the nineteenth-century United States—quantitative analyses of election returns, for example—were useless in analyzing the political activities of women, who were denied the vote until 1920.

By redefining "political activity," historian Paula Baker has developed a political history that includes women. She concludes that among ordinary citizens, political activism by women in the nineteenth century prefigured trends in twentieth-century politics. Defining "politics" as "any action taken to affect the course of behavior of government or of the community," Baker concludes that, while voting and holding office were restricted to men, women in the nineteenth century organized themselves into societies committed to social issues such as temperance and poverty. In other words, Baker contends, women activists were early

practitioners of nonpartisan, issue-oriented politics and thus were more interested in enlisting lawmakers, regardless of their party affiliation, on behalf of certain issues than in ensuring that one party or another won an election. In the twentieth century, more men drew closer to women's ideas about politics and took up modes of issue-oriented politics that Baker sees women as having pioneered.

131. The primary purpose of the passage is to
- (A) enumerate reason why both traditional scholarly methods and newer scholarly methods have limitations
 - (B) identify a shortcoming in a scholarly approach and describe an alternative approach
 - (C) provide empirical data to support a long-held scholarly assumption
 - (D) compare two scholarly publications on the basis of their authors' backgrounds
 - (E) attempt to provide a partial answer to a long-standing scholarly dilemma
132. The passage suggests which of the following concerning the techniques used by the new political historians described in the first paragraph of the passage?
- (A) They involved the extensive use of the biographies of political party leaders and political theoreticians.
 - (B) They were conceived by political historians who were reacting against the political climates of the 1960s and 1970s.
 - (C) They were of more use in analyzing the positions of United States political parties in the nineteenth century than in analyzing the positions of those in the twentieth century.
 - (D) They were of more use in analyzing the political behavior of nineteenth-century voters than in analyzing the political activities of those who could not vote during that period.
 - (E) They were devised as a means of tracing the influence of nineteenth-century political trends on twentieth-century political trends.
133. It can be inferred that the author of the passage quotes Baker directly in the second paragraph primarily in order to
- (A) clarify a position before providing an alternative of that position
 - (B) differentiate between a novel definition and traditional definitions
 - (C) provide an example of a point agreed on by different generations of scholars
 - (D) provide an example of the prose style of an important historian
 - (E) amplify a definition given in the first paragraph
134. According to the passage, Paula Baker and the new political historians of the 1960's and 1970's shared which of the following?
- (A) A commitment to interest-group politics
 - (B) A disregard for political theory and ideology
 - (C) An interest in the ways in which nineteenth-century politics prefigured

contemporary politics

(D) A reliance on such quantitative techniques as the analysis of election returns

(E) An emphasis on the political involvement of ordinary citizens

135. Which of the following best describes the structure of the first paragraph of the passage?

(A) Two scholarly approaches are compared, and a shortcoming common to both is identified.

(B) Two rival schools of thought are contrasted, and a third is alluded to.

(C) An outmoded scholarly approach is described, and a corrective approach is called for.

(D) An argument is outlined, and counterarguments are mentioned.

(E) A historical era is described in terms of its political trends.

136. The information in the passage suggests that a pre-1960's political historian would have been most likely to undertake which of the following studies?

(A) An analysis of voting trends among women voters of the 1920's

(B) A study of male voters' gradual ideological shift from party politics to issue-oriented politics

(C) A biography of an influential nineteenth-century minister of foreign affairs

(D) An analysis of narratives written by previously unrecognized women activists

(E) A study of voting trends among naturalized immigrant laborers in a nineteenth-century logging camp

Passage 104

New observations about the age of some globular clusters in our Milky Way galaxy have cast doubt on a long-held theory about how the galaxy was formed. The Milky Way contains about 125 globular clusters (compact groups of anywhere from several tens of thousands to perhaps a million stars) distributed in a roughly spherical halo around the galactic nucleus. The stars in these clusters are believed to have been born during the formation of the galaxy, and so may be considered relics of the original galactic nebula, holding vital clues to the way the formation took place.

The conventional theory of the formation of the galaxy contends that roughly 12 to 13 billion years ago the Milky Way formed over a relatively short time (about 200 million years) when a spherical cloud of gas collapsed under the pressure of its own gravity into a disc surrounded by a halo. Such a rapid formation of the galaxy would mean that all stars in the halo should be very nearly the same age.

However, the astronomer Michael Bolte has found considerable variation in the ages of globular clusters. One of the clusters studied by Bolte is 2 billions years older than most other clusters in the galaxy, while another is 2 billion years younger. A colleague of Bolte contends that the cluster called Palomar 12 is 5 billion years younger than most other globular clusters.

To explain the age differences among the globular clusters, astronomers are taking a second look at “renegade” theories. One such newly fashionable theory, first put forward by Richard Larson in the early 1970’s, argues that the halo of the Milky Way formed over a period of a billion or more years as hundreds of small gas clouds drifted about, collided, lost orbital energy, and finally collapsed into a centrally condensed elliptical system. Larson’s conception of a “lumpy and turbulent” protogalaxy is complemented by computer modeling done in the 1970’s by mathematician Alan Toomre, which suggests that closely interacting spiral galaxies could lose enough orbital energy to merge into a single galaxy.

137. The passage is primarily concerned with discussing
- (A) the importance of determining the age of globular clusters in assessing when the Milky Way galaxy was formed
 - (B) recent changes in the procedure used by astronomers to study the formation of the Milky Way galaxy
 - (C) current disputes among astronomers regarding the size and form of the Milky Way galaxy
 - (D) the effect of new discoveries regarding globular clusters on theories about the formation of the Milky Way galaxy
 - (E) the origin, nature, and significance of groups of stars known as globular clusters
138. According to the passage, one way in which Larson’s theory and the conventional theory of the formation of the Milky Way galaxy differs is in their assessment of the
- (A) amount of time it took to form the galaxy
 - (B) size of the galaxy immediately after its formation
 - (C) particular gas involved in the formation of the galaxy
 - (D) importance of the age of globular clusters in determining how the galaxy was formed
 - (E) shape of the halo that formed around the galaxy
139. Which of the following, if true, would be most useful in supporting the conclusions drawn from recent observations about globular clusters?
- (A) There is firm evidence that the absolute age of the Milky Way galaxy is between 10 and 17 billion years.
 - (B) A survey reveals that a galaxy close to the Milky Way galaxy contains globular clusters of ages close to the age of Palomar 12.
 - (C) A mathematical model proves that small gas clouds move in regular patterns.
 - (D) Space probes indicate that the stars in the Milky Way galaxy are composed of several different types of gas.
 - (E) A study of over 1,500 individual stars in the halo of the Milky Way galaxy indicates wide discrepancies in their ages.

140. If Bolte and his colleague are both correct, it can be inferred that the globular cluster Palomar 12 is approximately
- (A) 5 billion years younger than any other cluster in the galaxy
 - (B) the same age as most other clusters in the galaxy
 - (C) 7 billion years younger than another cluster in the galaxy
 - (D) 12 billion years younger than most other clusters in the galaxy
 - (E) 2 billion years younger than most other clusters in the galaxy
141. The passage suggests that Toomre's work complements Larson's theory because it
- (A) specifies more precisely the time frame proposed by Larson
 - (B) subtly alters Larson's theory to make it more plausible
 - (C) supplements Larson's hypothesis with direct astronomical observations
 - (D) provides theoretical support for the ideas suggested by Larson
 - (E) expands Larson's theory to make it more widely applicable
142. Which of the following most accurately states a finding of Bolte's research, as described in the passage?
- (A) The globular clusters in the Milky Way galaxy are 2 billion years older than predicted by the conventional theory.
 - (B) The ages of at least some globular clusters in the Milky Way galaxy differ by at least 4 billion years.
 - (C) One of the globular clusters in the Milky Way galaxy is 5 billion years younger than most others.
 - (D) The globular clusters in the Milky Way galaxy are significantly older than the individual stars in the halo.
 - (E) Most globular clusters in the Milky Way galaxy are between 11 and 15 billion years old.
143. The author of the passage puts the word "renegade" (line 29) in quotation marks most probably in order to
- (A) emphasize the lack of support for the theories in question
 - (B) contrast the controversial quality of the theories in question with the respectable character of their formulators
 - (C) generate skepticism about the theories in question
 - (D) ridicule the scientists who once doubted the theories in question
 - (E) indicate that the theories in question are no longer as unconventional as they once seemed

Passage 105

During the 1960's and 1970's, the primary economic development strategy of local

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

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

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

144. The primary purpose of the passage is to

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

145. 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?

- (A) They lost many of their most innovative personnel to small entrepreneurial enterprises.
- (B) They experienced a major decline in profits during the 1960's and 1970's.
- (C) They could provide real economic benefits to the areas in which they were located.
- (D) They employed workers who had no specialized skills.
- (E) They actively interfered with local entrepreneurial ventures.

146. The tone of the passage suggests that the author is most optimistic about the economic development potential of which of the following groups?

- (A) Local governments
- (B) High-technology promoters
- (C) Local entrepreneurs
- (D) Manufacturing-industry managers
- (E) Economic development strategists

147. The passage does NOT state which of the following about local entrepreneurs?

- (A) They are found nearly everywhere.
- (B) They encourage further entrepreneurship.
- (C) They attract out-of-town investors.
- (D) They employ local workers.
- (E) They are established in their communities.

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

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

Passage 106

Researchers compared the number of tooth fractures in present-day carnivores with tooth fractures in carnivores that lived 36,000 to 10,000 years ago and that were preserved in the Rancho La Brea tar pits in Los Angeles. The breakage frequencies in the extinct species were strikingly higher than those in the present-day species.

In considering possible explanations for this finding, the researchers dismissed demographic bias because older individuals were not overrepresented in the fossil samples. They rejected preservational bias because a total absence of breakage in two extinct species demonstrated that the fractures were not the result of abrasion within the pits. They ruled out local bias because breakage data obtained from other Pleistocene sites were similar to the La Brea data. The explanation they consider most plausible is behavioral differences between extinct and present-day carnivores—in particular, more contact between the teeth of predators and the bones of prey due to more thorough consumption of carcasses by the extinct species. Such thorough carcass consumption implies to the researchers either that prey availability was low, at least seasonally, or that there was intense competition over kills and a high rate of carcass theft due to relatively high predator densities.

231. The primary purpose of the passage is to

- (A) present several explanations for a well-known fact
- (B) suggest alternative method of 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
232. The passage suggests that, 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 more densely
 - (D) consumed their preys more thoroughly
 - (E) found it harder to obtain sufficiency prey
233. According to the passage, the researchers believes that the high frequency of tooth breakage in carnivores found at La Brea was caused primarily by
- (A) the aging process in individual carnivores
 - (B) contact between the fossils in the pits
 - (C) poor preservation of the fossils after they were removed from the pits
 - (D) the impact of carnivores' teeth against the bones of their prey
 - (E) the impact of carnivores' teeth against the bones of other carnivores during fights over kills
234. The researchers' conclusion concerning the absence of demographic bias would be most seriously undermined if it were found that
- (A) the older as individual carnivore is, the more likely it is to have a large number of tooth fractures
 - (B) the average age at death of a present-day carnivores is greater than was the average age at death of a Pleistocene carnivore
 - (C) in Pleistocene carnivore species, older individuals consumed carcasses as thoroughly as did younger individuals
 - (D) the methods used to determine animals' ages in fossil samples tend to misidentify many older individuals as younger individuals
 - (E) data concerning the ages of fossil samples cannot provide reliable information about behavioral differences between extinct carnivores and present-day carnivores
235. The passage suggests that if the researchers had not found that two extinct carnivore species were free of tooth breakage, the researchers would have concluded that
- (A) the difference in breakage frequencies could have been the result of damage to the fossil remains in the La Brea pits
 - (B) the fossils in other Pleistocene sites could have higher breakage frequencies than do the fossils in the La Brea pits

- (C) Pleistocene carnivore species probably behaved very similarly to one another with respect to consumption of carcass
- (D) all Pleistocene carnivores species differed behaviorally from present-day carnivore species
- (E) predator densities during the Pleistocene era were extremely high

Passage 107

During the nineteenth-century, occupational information about women that was provided by the United States census—a population count conducted each decade—became more detailed and precise in response to social changes. Through 1840, simple enumeration by household mirrored a home-based agricultural economy and hierarchical social order: the head of the household (presumed male or absent) was specified by name, whereas other household members were only indicated by the total number of persons counted in various categories, including occupational categories. Like farms, most enterprises were family-run, so that the census measured economic activity as an attribute of the entire household, rather than of individuals.

The 1850 census, partly responding to antislavery and women's rights movements, initiated the collection of specific information about each individual in a household. Not until 1870 was occupational information analyzed by gender: the census superintendent reported 1.8 million women employed outside the home in "gainful and reputable occupations." In addition, he arbitrarily attributed to each family one woman "keeping house." Overlap between the two groups was not calculated until 1890, when the rapid entry of women into the paid labor force and social issues arising from industrialization were causing women's advocates and women statisticians to press for more thorough and accurate accounting of women's occupations and wages.

236. The primary purpose of the passage is to
- (A) explain and critique the methods used by early statisticians
 - (B) compare and contrast a historical situation with a current-day one
 - (C) describe and explain a historical change
 - (D) discuss historical opposition to an established institution
 - (E) trace the origin of a contemporary controversy
237. 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
238. 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
239. The author uses the adjective “simple” in line 5 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-nineteen-century censuses was limited in its amount of detail
240. The passage suggests which of the following about the “women’s advocates and women statisticians” mentioned in lines 27-28?
- (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.

Passage 108

The modern multinational corporation is described as having originated when the owner-managers of nineteenth-century British firms carrying on international trade were replaced by teams of salaried managers organized into hierarchies. Increases in the volume of transactions in such firms are commonly believed to have necessitated this structural change. Nineteenth-century inventions like the steamship and the telegraph, by facilitating coordination

of managerial activities, are described as key factors. Sixteenth- and seventeenth-century chartered trading companies, despite the international scope of their activities, are usually considered irrelevant to this discussion: the volume of their transactions is assumed to have been too low and the communications and transport of their day too primitive to make comparisons with modern multinationals interesting.

In reality, however, early trading companies successfully purchased and outfitted ships, built and operated offices and warehouses, manufactured trade goods for use abroad, maintained trading posts and production facilities overseas, procured goods for import, and sold those goods both at home and in other countries. The large volume of transactions associated with these activities seems to have necessitated hierarchical management structures well before the advent of modern communications and transportation. For example, in the Hudson's Bay Company, each far-flung trading outpost was managed by a salaried agent, who carried out the trade with the Native Americans, managed day-to-day operations, and oversaw the post's workers and servants. One chief agent, answerable to the Court of Directors in London through the correspondence committee, was appointed with control over all of the agents on the bay.

The early trading companies did differ strikingly from modern multinationals in many respects. They depended heavily on the national governments of their home countries and thus characteristically acted abroad to promote national interests. Their top managers were typically owners with a substantial minority share, whereas senior managers' holdings in modern multinationals are usually insignificant. They operated in a pre-industrial world, grafting a system of capitalist international trade onto a pre-modern system of artisan and peasant production. Despite these differences, however, early trading companies organized effectively in remarkably modern ways and merit further study as analogues of more modern structures.

241. The author's main point is that

- (A) modern multinationals originated in the sixteenth and seventeenth centuries with the establishment of chartered trading companies
- (B) the success of early chartered trading companies, like that of modern multinationals, depended primarily on their ability to carry out complex operations
- (C) early chartered trading companies should be more seriously considered by scholars studying the origins of modern multinationals
- (D) scholars are quite mistaken concerning the origins of modern multinationals
- (E) the management structures of early chartered trading companies are fundamentally the same as those of modern multinationals

242. According to the passage, early chartered trading companies are usually described as

- (A) irrelevant to a discussion of the origins of the modern multinational corporation
- (B) interesting but ultimately too unusually to be good subjects for economic study

- (C) analogues of nineteenth-century British trading firms
- (D) rudimentary and very early forms of the modern multinational corporation
- (E) important national institutions because they existed to further the political aims of the governments of their home countries

243. It can be inferred from the passage that the author would characterize the activities engaged in by early chartered trading companies as being
- (A) complex enough in scope to require a substantial amount of planning and coordination on the part of management
 - (B) too simple to be considered similar to those of a modern multinational corporation
 - (C) as intricate as those carried out by the largest multinational corporations today
 - (D) often unprofitable due to slow communications and unreliable means of transportation
 - (E) hampered by the political demands imposed on them by the governments of their home countries
244. The author lists the various activities of early chartered trading companies in order to
- (A) analyze the various ways in which these activities contributed to changes in management structure in such companies
 - (B) demonstrate that the volume of business transactions of such companies exceeded that of earlier firms
 - (C) refute the view that the volume of business undertaken by such companies was relatively low
 - (D) emphasize the international scope of these companies' operations
 - (E) support the argument that such firms coordinated such activities by using available means of communication and transport
245. With which of the following generalizations regarding management structures would the author of the passage most probably agree?
- (A) Hierarchical management structures are the most efficient management structures possible in a modern context.
 - (B) Firms that routinely have a high volume of business transactions find it necessary to adopt hierarchical management structures.
 - (C) Hierarchical management structures cannot be successfully implemented without modern communications and transportation.
 - (D) Modern multinational firms with a relatively small volume of business transactions usually do not have hierarchically organized management structures.
 - (E) Companies that adopt hierarchical management structures usually do so in order to facilitate expansion into foreign trade.

246. The passage suggests that modern multinationals differ from early chartered trading companies in that
- (A) the top managers of modern multinationals own stock in their own companies rather than simply receiving a salary
 - (B) modern multinationals depend on a system of capitalist international trade rather than on less modern trading systems
 - (C) modern multinationals have operations in a number of different foreign countries rather than merely in one or two
 - (D) the operations of modern multinationals are highly profitable despite the more stringent environmental and safety regulations of modern governments
 - (E) the overseas operations of modern multinationals are not governed by the national interests of their home countries
247. The author mentions the artisan and peasant production systems of early chartered trading companies as an example of
- (A) an area of operations of these companies that was unhampered by rudimentary systems of communications and transport
 - (B) a similarity that allows fruitful comparison of these companies with modern multinationals
 - (C) a positive achievement of these companies in the face of various difficulties
 - (D) a system that could not have emerged in the absence of management hierarchies
 - (E) a characteristic that distinguishes these companies from modern multinationals
248. The passage suggests that one of the reasons that early chartered trading companies deserve comparison with early modern multinationals is
- (A) the degree to which they both depended on new technology
 - (B) the similar nature of their management structures
 - (C) similarities in their top managements' degree of ownership in the company
 - (D) their common dependence on political stability abroad in order to carry on foreign operations
 - (E) their common tendency to revolutionize systems of production

Passage 109

In an unfinished but highly suggestive series of essays, the late Sarah Eisenstein has focused attention on the evolution of working women's values from the turn of the century to the First World War. Eisenstein argues that turn-of-the-century women neither wholly accepted nor rejected what she calls the dominant "ideology of domesticity," but rather took this and other available ideologies—feminism, socialism, trade unionism—and modified or adapted them in light of their own experiences and needs. In thus maintaining that wage-work helped to produce a new "consciousness" among women, Eisenstein to some extent challenges the

recent, controversial proposal by Leslie Tentler that for women the work experience only served to reinforce the attractiveness of the dominant ideology. According to the Tentler, the degrading conditions under which many female wage earners worked made them view the family as a source of power and esteem available nowhere else in their social world. In contrast, Eisenstein's study insists that wage-work had other implications for women's identities and consciousness. Most importantly, her work aims to demonstrate that wage-work enabled women to become aware of themselves as a distinct social group capable of defining their collective circumstance. Eisenstein insists that as a group working-class women were not able to come to collective consciousness of their situation until they began entering the labor force, because domestic work tended to isolate them from one another.

Unfortunately, Eisenstein's unfinished study does not develop these ideas in sufficient depth or detail, offering tantalizing hints rather than an exhaustive analysis. Whatever Eisenstein's overall plan may have been, in its current form her study suffers from the limited nature of the sources she depended on. She uses the speeches and writings of reformers and labor organizers, who she acknowledges were far from representative, as the voice of the typical woman worker. And there is less than adequate attention given to the differing values of immigrant groups that made up a significant proportion of the population under investigation. While raising important questions, Eisenstein's essays do not provide definitive answer, and it remains for others to take up the challenges they offer.

249. The primary purpose of the passage is to
- (A) criticize a scholar's assumptions and methodology
 - (B) evaluate an approach to women's study
 - (C) compare two sociological theories
 - (D) correct a misconception about feminist theory
 - (E) defend an unpopular ideology
250. It can be inferred from the passage that, in Eisenstein's view, working women at the turn of the century had which of the following attitudes toward the dominant ideology of their time?
- (A) They resented the dominant ideology as degrading.
 - (B) They preferred the dominant ideology to other available ideologies.
 - (C) They began to view the dominant ideology more favorably as a result of their experiences in the labor force.
 - (D) They accepted some but not all aspects of the dominant ideology.
 - (E) They believed that the dominant ideology isolated them from one another.
251. Which of the following best describes the organization of the first paragraph of the passage?
- (A) A chronological account of a historical development is presented, and then future developments are predicted.
 - (B) A term is defined according to several different schools of thought, and then a new definition is formulated.

- (C) A theory is presented, an alternative viewpoint is introduced, and then the reasoning behind the initial theory is summarized.
 - (D) A tentative proposal is made, reasons for and against it are weighed, and then a modified version of the proposal is offered.
 - (E) A controversy is described, its historical implications are assessed, and then a compromise is suggested.
252. Which of the following would the author of the passage be most likely to approve as a continuation of Eisenstein's study?
- (A) An oral history of prominent women labor organizers
 - (B) An analysis of letters and diaries written by typical female wage earners at the turn of the century
 - (C) An assessment of what different social and political groups defined as the dominant ideology in the early twentieth century
 - (D) A theoretical study of how socialism and feminism influenced one another at the turn of the century
 - (E) A documentary account of labor's role in the introduction of women into the labor force

Passage 110

Neotropical coastal mangrove forests are usually "zonal," with certain mangrove species found predominantly in the seaward portion of the habitat and other mangrove species on the more landward portions of the coast. The earliest research on mangrove forests produced descriptions of species distribution from shore to land, without exploring the causes of the distributions.

The idea that zonation is caused by plant succession was first expressed by J. H. Davis in a study of Florida mangrove forests. According to Davis' scheme, the shoreline is being extended in a seaward direction because of the "land-building" role of mangroves, which, by trapping sediments over time, extend the shore. As a habitat gradually becomes more inland as the shore extends, the "land-building" species are replaced. This continuous process of accretion and succession would be interrupted only by hurricanes or storm flushings.

Recently the universal application of Davis' succession paradigm has been challenged. It appears that in areas where weak currents and weak tidal energies allow the accumulation of sediments, mangroves will follow land formation and accelerate the rate of soil accretion; succession will proceed according to Davis' scheme. But on stable coastlines, the distribution of mangrove species results in other patterns of zonation; "land building" does not occur.

To find a principle that explains the various distribution patterns, several researchers have looked to salinity and its effects on mangrove. While mangroves can develop in fresh water, they can also thrive in salinities as high as 2.5 times that of seawater. However, those mangrove species found in freshwater habitats do well only in the absence of competition, thus suggesting that salinity tolerance is a critical factor in competitive success among mangrove species. Research suggests that mangroves will normally dominate highly saline regions,

although not because they require salt. Rather, they are metabolically efficient (and hence grow well) in portions of an environment whose high salinity excludes plants adapted to lower salinities. Tides create different degrees of salinity along a coastline. The characteristic mangrove species of each zone should exhibit a higher metabolic efficiency at that salinity than will any potential invader, including other species of mangrove.

253. The primary of the purpose of the passage is to
- (A) refute the idea that the zonation exhibited in mangrove forests is caused by adaptation to salinity
 - (B) describe the pattern of zonation typically found in Florida mangrove forests
 - (C) argue that Davis' succession paradigm cannot be successfully applied to Florida mangrove forests
 - (D) discuss hypotheses that attempt to explain the zonation of coastal mangrove forests
 - (E) establish that plants that do well in saline forest environments require salt to achieve maximum metabolic efficiency
254. According to the passage, the earliest research on mangrove forest produced which of the following?
- (A) Data that implied random patterns of mangrove species distribution
 - (B) Descriptions of species distributions suggesting zonation
 - (C) Descriptions of the development of mangrove forests over time
 - (D) Reclassification of species formerly thought to be identical
 - (E) Data that confirmed the "land-building" role of mangroves
255. It can be inferred from the passage that Davis' paradigm does NOT apply to which of the following?
- (A) The shoreline of Florida mangrove forests first studies by Davis
 - (B) A shoreline in an area with weak currents
 - (C) A shoreline in an area with weak tidal energy
 - (D) A shoreline extended by "land-building" species of mangrove
 - (E) A shoreline in which few sediments can accumulate
256. Information in the passage indicates that the author would most probably regard which of following statements as INCORRECT?
- (A) Coastal mangrove forests are usually zonal.
 - (B) Hurricanes interrupt the process of accretion and succession that extends existing shorelines.
 - (C) Species of plants that thrive in a saline habitat require salt to flourish.
 - (D) Plants with the highest metabolic efficiency in a given habitat tend to exclude other plants from that habitat.
 - (E) Shoreline in areas with weak currents and tides are more likely to be extended through the process of accumulation of sediment than are shorelines with strong currents and tides.

Answer Key

Passage 101

73. C	74. E	75. A	76. D	77. C
78. A	79. D	80.	81.	82.

Passage 102

80. B	81. C	82. D	83. A	84. A
85. D	86. C	87. E	88.	89.

Passage 103

131. B	132. D	133. B	134. E	135. A
136. C	137.	138.	139.	140.

Passage 104

137. D	138. A	139. E	140. C	141. D
142. B	143. E	144.	145.	146.

Passage 105

144. E	145. C	146. C	147. C	148. E
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Passage 106

231. E	232. B	233. D	234. D	235. A
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Passage 107

236. C	237. D	238. B	239. E	240. B
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Passage 108

241. C	242. A	243. A	244. C	245. B
246. E	247. E	248. B	249.	250.

Passage 109

249. B	250. D	251. C	252. B	253.
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Passage 110

253. D	254. B	255. E	256. C	257.
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