





3

SECTION III Time—35 minutes 27 Questions

<u>Directions</u>: Each set of questions in this section is based on a single passage or a pair of passages. The questions are to be answered on the basis of what is <u>stated</u> or <u>implied</u> in the passage or pair of passages. For some questions, more than one of the choices could conceivably answer the question. However, you are to choose the <u>best</u> answer; that is, choose the response that most accurately and completely answers the question and mark that response on your answer sheet.

Complex societies flourished on the central plateau of southern Africa from the ninth through sixteenth centuries. Their regional political centers, called zimbabwes, were city-states enclosed within stone

- (5) walls, which still exist as archaeological monuments. Great Zimbabwe, the largest of these, was the product of a highly stratified society whose ruling class wielded political authority over the whole plateau. By the fourteenth century, the inhabitants of Great Zimbabwe
- (10) enjoyed notable prosperity, obtaining luxury goods such as Chinese glazed pottery and Near Eastern glass from distant trading emporia on Africa's east coast. Scholars often maintain that this prosperity was primarily attributable to Great Zimbabwe's control over
- (15) gold mining on the plateau and the export of gold to the coastal markets. However, it is instead the agricultural basis for the zimbabwe economic system that is actually the most crucial element in understanding Great Zimbabwe's achievements.
- (20) During the fourteenth century, the population of Great Zimbabwe probably exceeded 10,000. This was an extraordinary size for a city at that time in an environment of typical African savanna woodland, because the only system of crop cultivation these
- (25) soils could support was one that involved long fallow periods between plantings, a pattern typically resulting in low population densities and considerable mobility. Moreover, there were no carts or draft animals for transporting grain in bulk to large population centers,
- (30) nor could grain be stored in large quantities for any length of time. The alternative agricultural system that Great Zimbabwe practiced was a complex cattle economy that exploited enormous areas of land for grazing. The population of Great Zimbabwe relied
- (35) heavily on beef for food. In summer, cattle grazed on grass at higher elevations; in winter, the cattle were moved to lower regions unsuitable for grazing in summer because of the risk to the cattle of disease carried by the tsetse fly. This economy demanded large-
- (40) scale coordinated efforts to control distant pastures and to move and protect the cattle as large herds. This favored a pattern of centralized control over the society, with cattle becoming the property of a ruling class.
- Ordinary people were given use of individual

 (45) cattle as an act of royal patronage. Because cattle
 exchange was an essential element in marriage
 contracts, the power of the royal class reached deep into
 everyone's lives. Similarly, the crucial role of cattle also
 explains Great Zimbabwe's successful mining
- (50) industry. Gold is found in scattered deposits throughout

- the region. Some gold could simply be washed from the sand and gravel of rivers that cut through the deposits, and its recovery was a relatively undemanding seasonal village industry. However, the actual mining of the gold
- (55) deposits was dangerous, required considerable labor, and might produce only small yields. It was through its use of cattle as a powerful incentive to laborers that royalty was able to muster the human resources necessary for large-scale gold mining.
- 1. Which one of the following most accurately expresses the main point of the passage?
 - (A) Understanding the basis for the prosperity and social organization of Great Zimbabwe requires an understanding of the dynamics of its cattle economy.
 - (B) The diversity and abundance of natural resources on the central plateau of southern Africa was responsible for the rise and fall of Great Zimbabwe's civilization.
 - (C) The power of the royal class in Great Zimbabwe originally arose from their ownership of the croplands that yielded the food supply.
 - (D) Great Zimbabwe's economic system rested upon the twin pillars of gold mining and the importexport trade.
 - (E) The communal nature of cattle ownership in Great Zimbabwe was largely responsible for the relative prosperity of both laborers and royalty in the region.



- According to the passage, one important reason for the use of lands at different elevations for cattle grazing in
- (A) the allocation of different grazing lands to different members of the royalty
- (B) the paucity of grain for feeding cattle
- (C) the importance of protecting the health of the cattle
- (D) the peculiar and difficult topography of the Great Zimbabwe region
- (E) the need to allow grazing land to restore itself during a fallow period
- 3. Based on the passage, the relationship of Great Zimbabwe's cattle economy to the size of Great Zimbabwe's population is most analogous to the relationship between
 - (A) hunting and gathering

Great Zimbabwe was

- (B) irrigation and a farm in a desert
- (C) accounting and marketing
- (D) sports stadiums and athletic contests
- (E) individual stones and a stone wall
- 4. Which one of the following most accurately describes the author's attitude regarding Great Zimbabwe's cattle economy?
 - (A) condemnation of its role in perpetuating powerful centralized control over the society
 - (B) surprise at its lack of diversification
 - (C) skepticism about its effectiveness in sustaining the cohesiveness of the society
 - (D) respect for the intricacy of its workings, but criticism of its inefficiency
 - (E) appreciation of its complexity and extensive integration into various facets of social life





-27- $\mathbf{3}$

- According to the passage, Great Zimbabwe had trade relationships
 - (A) only with smaller zimbabwes on the plateau
 - (B) mainly with states that exported gold
 - (C) with other African regions
 - (D) only with other cattle-herding peoples
 - (E) with neighboring states that could supply grain
- 6. According to the passage, which one of the following was true of Great Zimbabwe's agricultural system?
 - (A) The system was inadequate for the extraordinary size of Great Zimbabwe's population in the fourteenth century.
 - (B) The system was practiced chiefly on land located at lower elevations.
 - (C) The system exemplified effective large-scale food production without extensive political controls.
 - (D) The system was a crucial factor in enabling the region's gold mining activity to reach its large scale.
 - (E) The system promoted the establishment of small areas of intensive seasonal crop cultivation.



Passage A

The path a historical novelist has to tread is clearly beset by dangers. One cannot have medieval characters using correct period language because no one would find the speech readable. Similarly, in depicting

- (5) the lives of real individuals, authors must invent dialogue, as well as other details missing from the historical record; otherwise characters will remain two-dimensional and never develop. In effect, the creation of a good narrative requires the telling of lies.
- (10) Nonetheless there is a clear and important distinction between telling lies and making mistakes. A lie is intentional and purposeful; a mistake is accidental and often unforgivable. The spectrum of historical fiction is therefore not as simple as "accurate"
- (15) equals good" and "inaccurate equals bad." It depends on whether the inaccuracies are constructive lies or accidental mistakes. Effective lies add to the story; mistakes detract from it.
- Of course, some lies go too far and alienate

 (20) the reader. Some are too obvious. But some lying is necessary, and to get away with it, one has to be both subtle and convincing. Shakespeare is a good model in this respect. He distorted the facts freely and knowingly conflated historical characters in historical plays.
- (25) Yet such distortion makes the drama of human lives meaningful and memorable.

Passage B

As a writer of autobiographical texts, I'm always astonished at how falsely I remember things, astonished at how unreliable memory is. And even when I know

- (30) a memory is incorrect, part of my brain cleaves to the wrong, imagined memory. I hold two memories in my head, and the false one is more vivid and more emotionally significant to me than the actual one. Which, then, is the truest memory?
- (35) It's convenient when the actual events adequately convey the emotional experience, but sometimes they don't and the writer has to choose. While I wouldn't be so disingenuous as to argue that a false memory is valid simply because it is vivid, I would argue that there must (40) be a subjective truth to it, an emotional truth.

Ultimately, lying is all but inescapable for a writer attempting to create an artistically coherent autobiography. One reads an autobiography to see how the writer experienced and evaluates his or her own life,

- (45) and a biography to find a more objective view. If false memories have an emotional power for the person who creates them, it's arguably more misleading to omit them than it is to include them.
- My argument grows strained and my tone shrill (50) because I'm unhappy with the patently illogical and unethical position that practical experience has led me to. Nonetheless, the trust a reader brings to reading an autobiography is a trust in a convincingly told tale, not the trust one brings to a newspaper article or a history
- (55) of Assyria, in which aesthetics are secondary to factual accuracy. Autobiography dances on the shifting middle ground between fact and fiction, and different writers will draw their lines on that ground in different places.

- 7. Which one of the following is a central topic of each passage?
 - (A) the obligation to suppress creativity in the interest of factual accuracy in certain literary genres
 - (B) the critical distinction between intentional lies and unintentional mistakes in literature
 - (C) the essential role of falsehood in a literary genre that depicts real past events
 - (D) the impossibility of representing the past accurately in works of literature
 - (E) the ethical problems posed by the use of fabrication in a literary genre that depicts real past events
- 8. Passage A, unlike passage B, seeks to advance its argument by
 - (A) examining one particular example in depth
 - (B) criticizing the views of opponents
 - (C) describing the author's own experiences as a writer
 - (D) citing a venerated author as support for the claims being made
 - (E) suggesting that the phenomenon under discussion is ethically questionable
- 9. Which one of the following is a claim that is advanced by the author of passage B, but not by the author of passage A?
 - (A) The position that a good narrative about past events requires some falsehood is ultimately unethical.
 - (B) Though it is often necessary to include lies in certain types of literature, some such lies can be too obvious.
 - (C) There is a significant difference between intentionally told lies and unintentional mistakes.
 - (D) The best writers of autobiographical texts tend to be those who are also accomplished writers of fiction.
 - (E) There is a significant difference between subtle, effective lies and obvious, ineffective lies.



- 10. Which one of the following most accurately describes how the passages are related to each other?
 - (A) Passage A describes an approach that passage B rejects.
 - (B) Passage A outlines a set of general principles that passage B applies to a specific case.
 - (C) Passage A and passage B describe the same set of particulars but come to opposing conclusions about them
 - (D) Passage A and passage B advance arguments that are roughly parallel but apply them to somewhat different contexts.
 - (E) Passage A and passage B endorse the same principles but arrive at conflicting interpretations of what they mean in practice.
- 11. Which one of the following is a principle applied to historical fiction in passage A that the author of passage B would be most likely to regard as NOT applicable to the genre of autobiography as well?
 - (A) A mistake, as opposed to an intentional lie, is often unforgivable.
 - (B) The creation of a good narrative requires the telling of lies.
 - (C) Knowingly presenting false details is ultimately unethical.
 - (D) Lying successfully requires an author to be both subtle and convincing.
 - (E) Skillful distortion can make the drama of human lives meaningful and memorable.





- 12. Both authors would be likely to disagree with which one of the following?
 - (A) The truth of a given description is independent of its emotional vividness.
 - (B) Unintentional mistakes tend to detract from a story more than intentional lies do.
 - (C) Most writers usually succeed in presenting their fabrications subtly and convincingly.
 - (D) The tendency of authors to introduce falsehoods into their narratives increases over time.
 - (E) Readers expect complete factual accuracy when they read.
- 13. Which one of the following comes closest to capturing what the author of passage B means to suggest in asking, at the end of the first paragraph, "Which, then, is the truest memory?"
 - (A) In autobiographical writing, is there ultimately any sense to the concept of truth at all?
 - (B) Given the unreliable nature of memory, is it possible for autobiographical authors to know whether they are representing facts accurately?
 - (C) If there are gaps in an autobiographical author's memories, should that author acknowledge the gaps or fill them with plausible fabrications?
 - (D) Should autobiographical authors concern themselves with the question of what is a "true" representation of events from their lives?
 - (E) Does truth in autobiographical writing consist in the accurate representation of the facts, or in the accurate representation of subjective experience?





3

- For nearly a century after the discovery in the 1880s that a bacterium, *Vibrio cholerae*, causes cholera, scientists believed that it traveled to new geographic regions only via human hosts and that
- (5) epidemics typically occurred when the bacteria spread through contamination, by human waste, of food and unchlorinated water supplies. But scientists wondered where the bacteria went during the many years between epidemics. How could the disease arise seemingly
- (10) spontaneously around the world, often where it was thought to have been eradicated?

In the 1970s, microbiologist Rita Colwell's claim that she had isolated *V. cholerae* from the Chesapeake Bay in the eastern United States met

- (15) with great skepticism, as no biologists believed *V. cholerae* could persist without a human host, and no cholera outbreaks were occurring anywhere near the Chesapeake. Indeed, there had been no cholera epidemics anywhere in the United States since 1911.
- (20) But, noting that most historic cholera outbreaks have happened along seacoasts, Colwell suspected that *V. cholerae* could somehow survive in seawater and that perhaps the bacteria were not always detectable by traditional culture methods—that is, that they could not
- (25) always be cultured (i.e., grown) in a petri dish. Later that decade, a small cholera outbreak near New Orleans in the southern United States allowed Colwell to test this hypothesis. She used a new detection method on water from the local bayous from which people with
- (30) cholera had eaten crab. This method uses an antibody that latches onto a key component of the bacterium's cell membrane. Linked to that antibody is a molecule that fluoresces bright green under ultraviolet light if the *V. cholerae* bacterium is present. Her tests showed
- (35) that the bacteria were in the bayous. Furthermore, in a study in Asia, Colwell's antibody test detected the bacteria in 51 of 52 suspect water samples, whereas culture techniques found them in only 7 of the same 52 samples.
- (40) Colwell's further studies revealed that *V. cholerae*, like some other bacteria, goes into a dormant, sporelike state when environmental conditions do not favor reproduction; in this state, the bacterium's metabolic rate plummets and the bacterium shrinks some
- (45) 15- to 300-fold. It stops reproducing and therefore cannot be cultured. This "viable but nonculturable" state, says Colwell, functions as a survival mechanism, enabling *V. cholerae* to persist in a wide range of conditions and habitats far from human hosts. Though
- (50) no one knows exactly what conditions awaken *V. cholerae* from dormancy, Colwell notes that seasonal peaks in sea-surface temperatures in the Bay of Bengal in south Asia correlate closely with peaks in that region's cholera cases. If, as Colwell believes, the
- (55) bacteria are persisting in the water all along, it is possible that changes in seawater temperature or salinity are what enable them to spread among humans again.

- . The passage provides information that is most helpful in answering which one of the following questions?
 - (A) Why did Colwell suspect that the ocean served as the environmental reservoir for V. cholerae?
 - (B) What other bacteria are capable of entering a dormant state similar to that of *V. cholerae*?
 - (C) Does ultraviolet light as used in Colwell's test have any effects on the reproduction of *V. cholerae*?
 - (D) Is V. cholerae harmful to shellfish that transmit it?
 - (E) How does Colwell intend to determine the conditions that awaken *V. cholerae* from dormancy?
- 15. The passage suggests that biologists were skeptical of Colwell's claim to have isolated *V. cholerae* from the Chesapeake Bay because they believed that
 - (A) V. cholerae could not always be cultured in a petri dish
 - (B) V. cholerae bacteria were unable to persist in seawater
 - (C) V. cholerae bacteria were unculturable in their dormant state
 - (D) Colwell's new method of detecting V. cholerae was flawed
 - (E) the only *V. cholerae* bacteria in Chesapeake Bay were to be found in crabs
- 16. It can be inferred from the passage that which one of the following best explains the discrepancy in the findings reported in the last sentence of the second paragraph?
 - (A) V. cholerae cannot always be grown in a petri dish.
 - (B) V. cholerae's ability to bond with antibodies is limited.
 - (C) V. cholerae responds primarily to changes in temperature and salinity.
 - (D) V. cholerae cannot be cultured using samples taken from sources other than human tissue or waste.
 - (E) V. cholerae's cell membrane normally contains a molecule that fluoresces under ultraviolet light.





- 17. The passage suggests that if *V. cholerae* bacteria undetectable by traditional culture methods inevitably caused cholera in humans who ingested them, then which one of the following is most likely to be true?
 - (A) Human antibodies that usually latch onto V. cholerae's cell membrane were unable to do so in these cases.
 - (B) The human body's temperature is the temperature the ocean must reach to awaken *V. cholerae* bacteria from their dormant state.
 - (C) In their dormant state, *V. cholerae* bacteria are able to survive in chlorinated water systems.
 - (D) The infected humans had been infected with cholera at some point earlier in their lives.
 - (E) The human body is an environment in which dormant *V. cholerae* bacteria can awaken.
- 18. Which one of the following is most strongly supported by the passage?
 - (A) V. cholerae bacteria in the Bay of Bengal are more likely to be detectable by traditional culture methods when sea-surface temperatures there are at seasonal peaks.
 - (B) When the salinity of seawater in the Bay of Bengal decreases, *V. cholerae* bacteria are likely to reproduce there and cause cholera outbreaks.
 - (C) Although *V. cholerae* can persist in seawater, it still requires human hosts in order to spread along a seacoast.
 - (D) Bacteria that are taken from a human host are harder to detect using traditional culture methods than are bacteria taken from seawater.
 - (E) Antibodies are less likely to bond to the cell membrane of V. cholerae when the bacterium is in a dormant state.

- 19. Which one of the following most accurately expresses the main purpose of the final paragraph of the passage?
 - (A) to identify future directions for research within a field of study and describe the obstacles that researchers will need to overcome
 - (B) to answer a question raised earlier in the passage and provide new evidence that gives rise to further questions
 - (C) to evaluate the effect an innovative methodology described earlier in the passage is likely to have on future research
 - (D) to offer recommendations concerning future uses of an innovative methodology described earlier in the passage
 - (E) to enumerate the effects of a biological phenomenon described in the previous paragraph and describe the limits of current knowledge regarding it
- 20. The passage suggests that Colwell most likely holds which one of the following views regarding *V. cholerae*?
 - (A) In most cases, *V. cholerae* bacteria do not travel to new locations via human hosts, but rather move through the ocean.
 - (B) In most cases, *V. cholerae* requires a human host in order to awaken and return from dormancy to a culturable state.
 - (C) Cholera outbreaks are never caused by the introduction of active *V. cholerae* bacteria into a new location, but rather by *V. cholerae* awakening from dormancy.
 - (D) Use of Colwell's new detection technique on the water samples she obtained from the Chesapeake Bay would have revealed the presence of *V. cholerae*.
 - (E) Water samples from coastal regions throughout Asia, if subjected to Colwell's new detection technique, would reveal the presence of *V. cholerae*.



3>



3

- In the absence of international statutes prohibiting nations from causing each other environmental damage, scholars of international environmental law typically focus on trying to identify and clarify norms of
- (5) "customary international law": that body of commonly accepted—but not formalized—legal principles that is manifest in the behavior of nations toward one another. Two environmental principles are often held to be established norms of customary international law. One
- (10) of these principles proscribes transboundary harm:
 nations should prohibit activities within their borders
 that cause significant environmental harm beyond those
 borders. The other is the closely allied precautionary
 principle, which requires nations to exercise due care
- (15) to avoid putting other nations at significant risk of environmental harm.

In debating whether a given principle should be classified as a norm of customary international law for the purposes of deciding international cases,

- (20) scholars of international environmental law generally accept an established criterion: principles are norms only if nations customarily abide by the principles in actual practice rather than merely affirming them as desirable standards. In fact, however, many purported
- (25) "norms" of customary international environmental law, including the duty to prevent transboundary harm and the precautionary principle, do not reflect the actual behavior of many nations. Although systematic empirical studies are lacking, experience shows that
- (30) harmful pollutants constantly cross most international borders, and that nations have only rarely attempted to remedy this situation.

Even though nations only rarely abide by these environmental "norms," they nevertheless routinely

- (35) profess to accept them. Similarly, while scholars discussing customary international law claim to focus on what nations do, their debates are almost invariably based on what nations profess. In reality, international environmental "norms" primarily reflect the evaluative
- (40) standards that nations use to justify their own actions and criticize those of other nations. Hence these environmental "norms" are not properly classifiable as norms of customary international law. They might more accurately be characterized as an ideological system,
- (45) since they merely represent some collective ideals of the international community.

In light of this fact, those scholars who seek in customary international law a firm grounding for decisions in international environmental cases are

- (50) misdirecting their efforts. This is especially true given that international treaties and direct negotiations, rather than international court decisions, are now the principal means of resolving international environmental disputes. It would be more productive for scholars to
- (55) study such disputes from perspectives more consonant with this trend. Specifically, attention should be directed toward how the affirmation of core environmental principles can contribute to negotiations and treaty formation. This approach would promote progress
- (60) toward agreements that could effectively hold nations to appropriate standards of environmental conduct.

- . Which one of the following most accurately expresses the main point of the passage?
 - (A) Preventing transboundary harm is often at odds with the economic interests of many nations.
 - (B) International law is an ideological system of collective ideals reflecting what nations do rather than what they profess.
 - (C) Many scholars believe that passing international laws to prohibit environmental damage is less effective than negotiating and forming treaties between nations.
 - (D) The debate regarding which environmental norms are part of customary international law is critical in deciding which nations have violated laws governing transboundary harm.
 - (E) Solutions to international environmental conflicts are more likely to be found in treaties and direct negotiations than in judicial decisions that are based on customary international law.
- 22. Which one of the following statements is most strongly supported by information in the passage?
 - (A) Because of their long-standing preoccupation with principles of customary law, international courts are well prepared to make balanced decisions concerning transboundary pollution.
 - (B) The precautionary principle is not concerned with a government's relationship to private industries under its jurisdiction.
 - (C) Nations are rarely held legally accountable for violations of principles that are commonly considered by scholars to be norms of customary international environmental law.
 - (D) Most violations of customary international environmental law result from disagreements about what constitutes customary law.
 - (E) Established norms of customary international environmental law that primarily address transboundary airborne pollutants are outdated.
- 23. The author claims that which one of the following is true of the precautionary principle and the principle that nations should prevent transboundary harm?
 - (A) They have commonly been used as models for drafting formalized statutes.
 - (B) They reflect standards that nations use to criticize other nations.
 - (C) Scholars have not reached a consensus concerning how to distinguish them from other environmental principles.
 - (D) Scholars have debated whether their status as part of international law tends to inhibit negotiations.
 - (E) They are often held to be firmly established models for environmental treaty formation.





- 24. Which one of the following most accurately describes the relationship between the final paragraph and the first paragraph?
 - (A) In the final paragraph, the author opposes a scholarly approach mentioned in the first paragraph, proposes an alternative to that approach, and argues for that proposal.
 - (B) In the final paragraph, the author questions the legal significance of two principles mentioned in the first paragraph, proposes alternative principles, and defends the new principles.
 - (C) In the final paragraph, the author considers a critique of a practice mentioned in the first paragraph, explores further implications of that critique, but finally accepts the original practice.
 - (D) In the final paragraph, the author criticizes scholars for focusing on a particular issue and argues that those scholars should instead focus on the legal status of two principles mentioned in the first paragraph.
 - (E) In the final paragraph, the author reaffirms a claim about legal scholars that is made in the first paragraph, attributes a proposal to those scholars, and argues for a way of carrying out that proposal.
- 25. It can be inferred that both the author and the scholars mentioned in the passage would be most likely to agree with which one of the following statements?
 - (A) Until extensive empirical studies determine the rate of international conformity to principles of international environmental law, environmental treaties will be largely ineffective.
 - (B) Judicial decisions that are grounded in customary international law have proven less effective than direct negotiations in resolving international environmental disputes.
 - (C) If it is difficult to ascertain whether a particular nation generally acts in accordance with the precautionary principle, that principle is not a norm of customary law for the nation in question.
 - (D) If it can be shown conclusively that nations generally do not act in accordance with a principle, that principle cannot be legitimately considered a norm of customary international law.
 - (E) Until a large percentage of nations enact treaties embodying the norms of customary international environmental law, there will be no reliable basis for deciding international environmental disputes.

- 26. The author's mention of harmful pollutants crossing international borders (last sentence of the second paragraph) functions primarily as
 - (A) an example of the author's contention that debates concerning customary international law put too little emphasis on environmental issues
 - (B) a means of suggesting that stronger enforcement of existing international environmental laws is needed
 - (C) evidence offered by the author in support of the claim that treaties and negotiations are largely ineffective in protecting the environment
 - (D) an acknowledgment that, in spite of the author's general disagreement with certain scholars mentioned earlier in the second paragraph, their environmental concerns are justified
 - (E) support for the author's claim that certain international environmental principles do not meet a criterion for being considered norms of customary international law
- 27. The author states that there is a dearth of systematic empirical investigation into which one of the following?
 - (A) the extent to which the actions of nations conform to principles of customary international environmental law
 - (B) the proportion of international environmental disputes that are remedied by treaties and negotiations as compared with those that are remedied by the application of customary international environmental law
 - (C) the relative success rates of different attempted legal remedies for the problem of international transboundary pollution
 - (D) the extent to which the pollution currently crossing international boundaries is in violation of negotiated international treaties
 - (E) the extent to which scholars of international environmental law agree about which principles are norms of customary international environmental law