

SECTION II

Time—35 minutes

26 Questions

Directions: The questions in this section are based on the reasoning contained in brief statements or passages. For some questions, more than one of the choices could conceivably answer the question. However, you are to choose the best answer; that is, the response that most accurately and completely answers the question. You should not make assumptions that are by commonsense standards implausible, superfluous, or incompatible with the passage. After you have chosen the best answer, blacken the corresponding space on your answer sheet.

1. Company president: Grievance procedures should allow the grievant and the respondent to select a mediator who will attempt to work out a resolution. Grievances are costly and mediation could help to resolve many of them. However, beginning mediation fairly late in the process, as our human resources department proposes, would be relatively ineffective.

Which one of the following, if true, most helps to justify the company president's criticism of the human resources department's proposal?

- (A) People who file grievances are unreasonable and would resist listening to a mediator.
- (B) Many disagreements are already being solved without the intervention of a mediator.
- (C) Adversaries' positions tend to harden as a dispute wears on, making compromise less likely.
- (D) Respondents tend to be supervisors who cannot give in to employees without losing authority.
- (E) The mediation process itself is likely to cost as much in time and money as the present grievance procedures.

2. The solidity of bridge piers built on pilings depends largely on how deep the pilings are driven. Prior to 1700, pilings were driven to "refusal," that is, to the point at which they refused to go any deeper. In a 1588 inquiry into the solidity of piers for Venice's Rialto Bridge, it was determined that the bridge's builder, Antonio Da Ponte, had met the contemporary standard for refusal: he had caused the pilings to be driven until additional penetration into the ground was no greater than two inches after twenty-four hammer blows.

Which one of the following can properly be inferred from the passage?

- (A) The Rialto Bridge was built on unsafe pilings.
- (B) The standard of refusal was not sufficient to ensure the safety of a bridge.
- (C) Da Ponte's standard of refusal was less strict than that of other bridge builders of his day.
- (D) After 1588, no bridges were built on pilings that were driven to the point of refusal.
- (E) It is possible that the pilings of the Rialto Bridge could have been driven deeper even after the standard of refusal had been met.

3. Joan got A's on all her homework assignments, so if she had gotten an A on her term paper, she could pass the course even without doing the class presentation. Unfortunately, she did not get an A on her term paper, so it is obvious that she will have to do the class presentation to pass the course.

The argument's reasoning is questionable because the argument

- (A) ignores the possibility that Joan must either have an A on her term paper or do the class presentation to pass the course
- (B) presupposes without justification that Joan's not getting an A on her term paper prevents her from passing the course without doing the class presentation
- (C) overlooks the importance of class presentations to a student's overall course grade
- (D) ignores the possibility that if Joan has to do the class presentation to pass the course, then she did not get an A on her term paper
- (E) fails to take into account the possibility that some students get A's on their term papers but do not pass the course

GO ON TO THE NEXT PAGE.

4. Compared to us, people who lived a century ago had very few diversions to amuse them. Therefore, they likely read much more than we do today.

Which one of the following statements, if true, most weakens the argument?

- (A) Many of the books published a century ago were of low literary quality.
 - (B) On average, people who lived a century ago had considerably less leisure time than we do today.
 - (C) The number of books sold today is larger than it was a century ago.
 - (D) On the average, books today cost slightly less in relation to other goods than they did a century ago.
 - (E) One of the popular diversions of a century ago was horse racing.
5. Although consciousness seems to arise from physical processes, physical theories can explain only why physical systems have certain physical structures and how these systems perform various physical functions. Thus, no strictly physical theory can explain consciousness.

The conclusion of the argument follows logically if which one of the following is assumed?

- (A) Physical theories can explain only physical phenomena.
- (B) An explanation of consciousness must encompass more than an explanation of physical structures and functions.
- (C) The physical structures and functions of consciousness are currently unknown.
- (D) Consciousness arises from processes that are entirely explainable by physical theories.
- (E) An explanation of physical structures and functions must be formulated in strictly physical terms.

6. Advertisement: At most jewelry stores, the person assessing the diamond is the person selling it, so you can see why an assessor might say that a diamond is of higher quality than it really is. But because all diamonds sold at Gem World are certified in writing, you're assured of a fair price when purchasing a diamond from Gem World.

The reasoning in the advertisement would be most strengthened if which one of the following were true?

- (A) Many jewelry stores other than Gem World also provide written certification of the quality of their diamonds.
 - (B) The certifications of diamonds at Gem World are written by people with years of experience in appraising gems.
 - (C) The diamonds sold at Gem World are generally of higher quality than those sold at other jewelry stores.
 - (D) The diamond market is so volatile that prices of the most expensive diamonds can change by hundreds of dollars from one day to the next.
 - (E) The written certifications of diamonds at Gem World are provided by an independent company of gem specialists.
7. Newtonian physics dominated science for over two centuries. It found consistently successful application, becoming one of the most highly substantiated and accepted theories in the history of science. Nevertheless, Einstein's theories came to show the fundamental limits of Newtonian physics and to surpass the Newtonian view in the early 1900s, giving rise once again to a physics that has so far enjoyed wide success.
- Which one of the following logically follows from the statements above?
- (A) The history of physics is characterized by a pattern of one successful theory subsequently surpassed by another.
 - (B) Long-standing success of substantiation of a theory of physics is no guarantee that the theory will continue to be dominant indefinitely.
 - (C) Every theory of physics, no matter how successful, is eventually surpassed by one that is more successful.
 - (D) Once a theory of physics is accepted, it will remain dominant for centuries.
 - (E) If a long-accepted theory of physics is surpassed, it must be surpassed by a theory that is equally successful.

8. Conscientiousness is high on most firms' list of traits they want in employees. Yet a recent study found that laid-off conscientious individuals are less likely to find jobs within five months than are their peers who shirked their workplace responsibilities.

Each of the following, if true, helps to resolve the apparent paradox above EXCEPT:

- (A) People who shirk their workplace responsibilities are less likely to keep the jobs they have, so there are more of them looking for jobs.
 - (B) Conscientious people tend to have a greater than average concern with finding the job most suited to their interests and abilities.
 - (C) Resentment about having been laid off in spite of their conscientiousness leads some people to perform poorly in interviews.
 - (D) People who are inclined to shirk their workplace responsibilities are more likely to exaggerate their credentials, leading prospective employers to believe them to be highly qualified.
 - (E) Finding a job is less urgent for the conscientious, because they tend to have larger savings.
9. Psychologist: Although studies of young children have revealed important facts about the influence of the environment on language acquisition, it is clear that one cannot attribute such acquisition solely to environmental influences: innate mechanisms also play a role. So, the most reasonable question that ought to be studied is whether_____.

Which one of the following most logically completes the passage?

- (A) language acquisition can ever be fully explained
- (B) innate mechanisms are a contributing factor in language learning
- (C) language acquisition is solely the product of innate mechanisms
- (D) parents and peers are the most important influence on a child's learning of a language
- (E) innate mechanisms play a more important role in language acquisition than a child's immediate environment

Questions 10-11

Mark: To convey an understanding of past events, a historian should try to capture what it was like to experience those events. For instance, a foot soldier in the Battle of Waterloo knew through direct experience what the battle was like, and it is this kind of knowledge that the historian must capture.

Carla: But how do you go about choosing whose perspective is the valid one? Is the foot soldier's perspective more valid than that of a general? Should it be a French or an English soldier? Your approach would generate a biased version of history, and to avoid that, historians must stick to general and objective characterizations of the past.

10. Carla does which one of the following in disputing Mark's position?
- (A) contests Mark's understanding of historical events
 - (B) questions Mark's presupposition that one person can understand another's feelings
 - (C) argues that the selection involved in carrying out Mark's proposal would distort the result
 - (D) questions whether Mark accurately describes the kind of historical writing he deplores
 - (E) gives reason to believe that Mark's recommendation is motivated by his professional self-interest
11. Mark's and Carla's positions indicate that they disagree about the truth of which one of the following?
- (A) The purpose of writing history is to convey an understanding of past events.
 - (B) The participants in a battle are capable of having an objective understanding of the ramifications of the events in which they are participating.
 - (C) Historians can succeed in conveying a sense of the way events in the distant past seemed to someone who lived in a past time.
 - (D) Historians should aim to convey past events from the perspective of participants in those events.
 - (E) Historians should use fictional episodes to supplement their accounts of past events if the documented record of those events is incomplete.

GO ON TO THE NEXT PAGE.

12. Rosen: One cannot prepare a good meal from bad food, produce good food from bad soil, maintain good soil without good farming, or have good farming without a culture that places value on the proper maintenance of all its natural resources so that needed supplies are always available.

Which one of the following can be properly inferred from Rosen's statement?

- (A) The creation of good meals depends on both natural and cultural conditions.
 - (B) Natural resources cannot be maintained properly without good farming practices.
 - (C) Good soil is a prerequisite of good farming.
 - (D) Any society with good cultural values will have a good cuisine.
 - (E) When food is bad, it is because of poor soil and, ultimately, bad farming practices.
13. Adam: Marking road edges with reflecting posts gives drivers a clear view of the edges, thereby enabling them to drive more safely. Therefore, marking road edges with reflecting posts will decrease the annual number of road accidents.

Aiesha: You seem to forget that drivers exceed the speed limit more frequently and drive close to the road edge more frequently on roads that are marked with reflecting posts than on similar roads without posts, and those are driving behaviors that cause road accidents.

Aiesha responds to Adam's argument by

- (A) questioning Adam's assertion that reflecting posts give drivers a clear view of road edges
- (B) presenting a possible alternative method for decreasing road accidents
- (C) raising a consideration that challenges the argument's assumption that facilitating safe driving will result in safer driving
- (D) denying that the drivers' view of the road is relevant to the number of road accidents
- (E) providing additional evidence to undermine the claim that safer driving does not necessarily reduce the number of road accidents

14. In response to office workers' worries about the health risks associated with using video display terminals (VDTs), researchers asked office workers to estimate both the amount of time they had spent using VDTs and how often they had suffered headaches over the previous year. According to the survey, frequent VDT users suffered from headaches more often than other office workers did, leading researchers to conclude that VDTs cause headaches.

Which one of the following, if true, most undermines the researchers' conclusion?

- (A) Few of the office workers surveyed participated in regular health programs during the year in question.
- (B) In their study the researchers failed to ask the workers to distinguish between severe migraine headaches and mild headaches.
- (C) Previous studies have shown that the glare from VDT screens causes some users to suffer eyestrain.
- (D) Office workers who experienced frequent headaches were more likely than other workers to overestimate how much time they spent using VDTs.
- (E) Office workers who regularly used VDTs experienced the same amount of job-related stress as workers who did not use VDTs.

GO ON TO THE NEXT PAGE.

15. Literary critic: The meaning of a literary work is not fixed but fluid, and therefore a number of equally valid interpretations of it may be offered. Interpretations primarily involve imposing meaning on a literary work rather than discovering meaning in it, so interpretations need not consider the writer's intentions. Thus, any interpretation of a literary work tells more about the critic than about the writer.

Which one of the following is an assumption required by the literary critic's argument?

- (A) There are no criteria by which to distinguish the validity of different interpretations of literary works.
 - (B) A meaning imposed on a literary work reflects facts about the interpreter.
 - (C) A writer's intentions are relevant to a valid interpretation of the writer's work.
 - (D) The true intentions of the writer of a work of literature can never be known to a critic of that work.
 - (E) The deepest understanding of a literary work requires that one know the writer's history.
16. Media consultant: Electronic media are bound to bring an end to the institution of the traditional school in our culture. This is because the emergence of the traditional school, characterized by a group of students gathered with a teacher in a classroom, was facilitated by the availability of relatively inexpensive printed books. Currently, however, the function of books in communicating information is gradually being taken over by electronic media. So, it is inevitable that the traditional school will not survive in our culture.

The reasoning in the consultant's argument is flawed because it

- (A) presupposes as a premise what it is trying to establish
- (B) relies inappropriately on expert testimony
- (C) presupposes that just because something can happen it will happen
- (D) mistakes something that enables an institution to arise for something necessary to the institution
- (E) confuses the value of an institution with the medium by which it operates

17. A safety report indicates that, on average, traffic fatalities decline by about 7 percent in those areas in which strict laws requiring drivers and passengers to wear seat belts have been passed. In a certain city, seat belt laws have been in effect for two years, but the city's public safety records show that the number of traffic deaths per year has remained the same.

Which one of the following, if true, does NOT help resolve the apparent discrepancy between the safety report and the city's public safety records?

- (A) Two years ago speed limits in the city were increased by as much as 15 kph (9 mph).
 - (B) The city now includes pedestrian fatalities in its yearly total of traffic deaths, whereas two years ago it did not.
 - (C) In the time since the seat belt laws were passed, the city has experienced a higher than average increase in automobile traffic.
 - (D) Because the city's seat belt laws have been so rarely enforced, few drivers in the city have complied with them.
 - (E) In the last two years, most of the people killed in car accidents in the city were not wearing seat belts.
18. Some critics of space exploration programs claim that they are too costly to be justified. Moreover, there is the very real risk of a debilitating explosion—most experts say something like a 1-in-70 chance per flight. Budgetary pressures to make the programs cheaper only serve to undermine safety: one program's managers uncovered a series of manufacturing flaws that critics contend are a direct consequence of the pressure to produce results as quickly and cheaply as possible.

The passage conforms most closely to which one of the following propositions?

- (A) Attempts to solve one problem can lead to the exacerbation of another problem.
- (B) Safety risks are sometimes ignored in the name of scientific progress.
- (C) Safety is often sacrificed in order to reach a goal as quickly as possible.
- (D) Bureaucratic mistakes can lead to quality reduction and inefficiency.
- (E) Space exploration is too dangerous to be continued.

GO ON TO THE NEXT PAGE.

19. Physician: Hatha yoga is a powerful tool for helping people quit smoking. In a clinical trial, those who practiced hatha yoga for 75 minutes once a week and received individual counseling reduced their smoking and cravings for tobacco as much as did those who went to traditional self-help groups once a week and had individual counseling.

Which one of the following is an assumption on which the physician's argument relies?

- (A) The individual counseling received by the smokers in the clinical trial who practiced hatha yoga did not help them quit smoking.
 - (B) Most smokers are able to practice hatha yoga more than once a week.
 - (C) Traditional self-help groups are powerful tools for helping people quit smoking.
 - (D) People who practice hatha yoga for 75 minutes once a week are not damaging themselves physically.
 - (E) Other forms of yoga are less effective than hatha yoga in helping people quit smoking.
20. Antarctic seals dive to great depths and stay submerged for hours. They do not rely solely on oxygen held in their lungs, but also store extra oxygen in their blood. Indeed, some researchers hypothesize that for long dives these seals also store oxygenated blood in their spleens.

Each of the following, if true, provides some support for the researchers' hypothesis EXCEPT:

- (A) Horses are known to store oxygenated blood in their spleens for use during exertion.
- (B) Many species of seal can store oxygen directly in their muscle tissue.
- (C) The oxygen contained in the seals' lungs and bloodstream alone would be inadequate to support the seals during their dives.
- (D) The spleen is much larger in the Antarctic seal than in aquatic mammals that do not make long dives.
- (E) The spleens of Antarctic seals contain greater concentrations of blood vessels than are contained in most of their other organs.

21. The studies showing that increased consumption of fruits and vegetables may help decrease the incidence of some types of cancer do not distinguish between organically grown and nonorganically grown produce; they were conducted with produce at least some of which contained pesticide residues. The studies may also be taken as showing, therefore, that there is no increased health risk associated with eating fruits and vegetables containing pesticide residues.

The pattern of flawed reasoning in which one of the following is most similar to the pattern of flawed reasoning in the argument above?

- (A) Research shows that the incidence of certain major illnesses, including heart disease and cancer, is decreased in communities that have a modern power plant. The fact that this tendency is present whether the power plant is nuclear or not shows that there is no increased health risk associated with living next to a nuclear power plant.
- (B) Research has shown that there is no long-term health risk associated with a diet consisting largely of foods high in saturated fat and cholesterol if such a diet is consumed by someone with a physically active lifestyle. So, exercise is a more useful strategy for achieving cardiological health than is dietary restriction.
- (C) Research has shown that young people who drive motorcycles and receive one full year of extensive driving instruction are in fact less likely to become involved in accidents than those who simply pass a driving test and drive cars. This shows that there is not an inherently greater risk associated with driving a motorcycle than with driving a car.
- (D) Research has shown that kitchen cutting boards retain significant numbers of microbes even after careful washing, but that after washing fewer microbes are found on wooden boards than on plastic boards. There is, therefore, no greater risk of contracting microbial illnesses associated with using wooden cutting boards than with using plastic cutting boards.
- (E) Research shows that there is no greater long-term health benefit associated with taking vitamin supplements than with a moderate increase in the intake of fruits and vegetables. Clearly, then, there is no long-term health risk associated with the failure to take vitamin supplements, so long as enough fruits and vegetables are consumed.

22. Political theorist: Many people believe that the punishment of those who commit even the most heinous crimes should be mitigated to some extent if the crime was motivated by a sincere desire to achieve some larger good. Granted, some criminals with admirable motives deserve mitigated punishments. Nonetheless, judges should never mitigate punishment on the basis of motives, since motives are essentially a matter of conjecture and even vicious motives can easily be presented as altruistic.

Which one of the following principles, if valid, most helps to justify the political theorist's reasoning?

- (A) Laws that prohibit or permit actions solely on the basis of psychological states should not be part of a legal system.
- (B) It is better to err on the side of overly severe punishment than to err on the side of overly lenient punishment.
- (C) The legal permissibility of actions should depend on the perceivable consequences of those actions.
- (D) No law that cannot be enforced should be enacted.
- (E) A legal system that, if adopted, would have disastrous consequences ought not be adopted.

Questions 23-24

Roxanne: To protect declining elephant herds from poachers seeking to obtain ivory, people concerned about such endangered species should buy no new ivory. The new ivory and old ivory markets are entirely independent, however, so purchasing antique ivory provides no incentive to poachers to obtain more new ivory. Therefore, only antique ivory—that which is at least 75 years old—can be bought in good conscience.

Salvador: Since current demand for antique ivory exceeds the supply, many people who are unconcerned about endangered species but would prefer to buy antique ivory are buying new ivory instead. People sharing your concern about endangered species, therefore, should refrain from buying any ivory at all—thereby ensuring that demand for new ivory will drop.

23. A point on which Roxanne's and Salvador's views differ is whether
- (A) there are substances that can serve as satisfactory substitutes for ivory in its current uses
 - (B) decreased demand for antique ivory would cause a decrease in demand for new ivory
 - (C) people should take steps to avert a threat to the continued existence of elephant herds
 - (D) a widespread refusal to buy new ivory will have a substantial effect on the survival of elephants
 - (E) people concerned about endangered species should refuse to buy ivory objects that are less than 75 years old
24. Which one of the following principles, if established, would most help to justify Salvador's position?
- (A) People concerned about endangered species should disseminate knowledge concerning potential threats to those species in order to convince others to protect the species.
 - (B) People concerned about endangered species should refrain from buying any products whose purchase could result in harm to those species, but only if acceptable substitutes for those products are available.
 - (C) People concerned about endangered species should refrain from the purchase of all manufactured objects produced from those species, except for those objects already in existence at the time the species became endangered.
 - (D) People concerned about endangered species should refrain from participating in trade in products produced from those species, but only if workers engaged in that trade also agree to such restraint.
 - (E) People concerned about endangered species should act in ways that there is reason to believe will help reduce the undesirable results of the actions performed by people who do not share that concern.

25. In a car accident, air bags greatly reduce the risk of serious injury. However, statistics show that cars without air bags are less likely to be involved in accidents than are cars with air bags. Thus, cars with air bags are no safer than cars without air bags.

The argument is most vulnerable to criticism on the grounds that it

- (A) assumes, without providing justification, that any car with air bags will probably become involved in an accident
- (B) denies the possibility that cars without air bags have other safety features that reduce the risk of serious injury at least as much as do air bags
- (C) overlooks the possibility that some accidents involve both cars with air bags and cars without air bags
- (D) assumes, without providing justification, that the likelihood of an accident's occurring should weigh at least as heavily as the seriousness of any resulting injury in estimates of relative safety
- (E) takes for granted that all accidents would cause air bags to be deployed

26. All known deposits of the mineral tanzanite are in Tanzania. Therefore, because Ashley collects only tanzanite stones, she is unlikely ever to collect a stone not originally from Tanzania.

Which one of the following is most similar in its reasoning to the argument above?

- (A) The lagoon on Scrag Island is home to many frogs. Since the owls on Scrag Island eat nothing but frogs from the island, the owls will probably never eat many frogs that live outside the lagoon.
- (B) Every frog ever seen on Scrag Island lives in the lagoon. The frogs on the island are eaten only by the owls on the island, and hence the owls may never eat an animal that lives outside the lagoon.
- (C) Frogs are the only animals known to live in the lagoon on Scrag Island. The diet of the owls on Scrag Island consists of nothing but frogs from the island. Therefore, the owls are unlikely ever to eat an animal that lives outside the lagoon.
- (D) The only frogs yet discovered on Scrag Island live in the lagoon. The diet of all the owls on Scrag Island consists entirely of frogs on the island, so the owls will probably never eat an animal that lives outside the lagoon.
- (E) Each frog on Scrag Island lives in the lagoon. No owl on Scrag Island is known to eat anything but frogs on the island. It follows that no owl on Scrag Island will eat anything that lives outside the lagoon.

S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.
DO NOT WORK ON ANY OTHER SECTION IN THE TEST.