

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. Anita: Since 1960 the spotted owl population has declined alarmingly. Timber companies that have been clearing the old-growth forests where the spotted owl lives are responsible for this.

Jean: No, the spotted owl's decline is due not to the timber companies but to a rival species. For the past three decades, the more prolific barred owl has been moving steadily into the spotted owl's habitat and replacing the spotted owl.

Jean does which one of the following in her response to Anita?

- (A) denies the truth of Anita's premise that timber companies have been clearing old-growth forests
- (B) challenges Anita's assumption that the decline in the population of the spotted owl poses a threat to the species' continued survival
- (C) proposes an alternative explanation for the decline in the spotted owl population
- (D) argues that Anita's conclusion is not valid because she has failed to consider the spotted owl population over a long enough time period
- (E) suggests that Anita overlooked the possibility that spotted owls are able to live in forests that are not old-growth forests

Questions 2–3

Veterinarian: A disease of purebred racehorses that is caused by a genetic defect prevents afflicted horses from racing and can cause paralysis and death. Some horse breeders conclude that because the disease can have such serious consequences, horses with this defect should not be bred. But they are wrong because, in most cases, the severity of the disease can be controlled by diet and medication, and the defect also produces horses of extreme beauty that are in great demand in the horse show industry.

- 2. The point of the veterinarian's response to the horse breeders is most accurately expressed by which one of the following?
 - (A) Racehorses that have the genetic defect need not be prevented from racing.
 - (B) There should not be an absolute ban on breeding racehorses that have the genetic defect.
 - (C) Racehorses that are severely afflicted with the disease have not been provided with the proper diet.
 - (D) The best way to produce racehorses of extreme beauty is to breed horses that have the genetic defect.
 - (E) There should be no prohibition against breeding racehorses that have any disease that can be controlled by diet and exercise.
- 3. The veterinarian's argument employs which one of the following techniques?
 - (A) calling into question the motives of the horse breeders cited
 - (B) demonstrating that the horse breeders' conclusion is inconsistent with evidence advanced to support it
 - (C) providing evidence that contradicts the horse breeders' evidence
 - (D) disputing the accuracy of evidence on which the horse breeders' argument depends
 - (E) introducing considerations that lead to a conclusion different from that of the horse breeders' argument

GO ON TO THE NEXT PAGE.

4. Political scientist: The concept of freedom is hopelessly vague. Any definition of freedom will either exclude some acts that intuitively qualify as free, or admit some acts that intuitively fall outside the concept. The notions of justice, fairness, and equality are equally indeterminate. This is why political organization should be disavowed as futile.

The reasoning in the argument is questionable because the argument

- (A) generalizes from an unrepresentative sample to every political idea
 - (B) makes the unsupported claim that the concept of freedom is hopelessly vague
 - (C) ignores the fact that some people view freedom as indispensable
 - (D) fails to show any specific link between the vagueness of concepts such as freedom and the rejection of political organization
 - (E) is mounted by someone who has a vested interest in the rejection of political organization
5. A recently passed law requires all places of public accommodation to eliminate discrimination against persons with disabilities by removing all physical barriers to accessibility. Private schools, therefore, are legally obligated to make their campuses physically accessible to persons with disabilities.

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

- (A) No private school can legally deny admission to a person with a disability.
- (B) Private schools have historically been resistant to changes in government policy on discrimination.
- (C) Private schools, like public schools are places of public accommodation.
- (D) Private schools have enough funds to make their campuses barrier-free.
- (E) Private property is often considered to be public space by groups that have historically been subjects of discrimination.

6. Prehistoric chimpanzee species used tools similar to those used by prehistoric humans; prehistoric tools recently found in East Africa are of a type used by both species. The area where the tools were found, however, is a savanna, and whereas there were prehistoric humans who lived in savanna habitats, prehistoric chimpanzees lived only in forests. Therefore, the tools must have been used by humans rather than by chimpanzees.

Which one of the following is an assumption on which the argument depends?

- (A) Prehistoric humans did not carry their tools with them when they traveled from one place to another.
 - (B) Since the evolution of the first primates, East Africa has been predominantly savanna.
 - (C) Prehistoric humans never ventured into areas of the forest that were inhabited by prehistoric chimpanzees.
 - (D) The area where the tools were found was not a forest at the time the tools were in use.
 - (E) The prehistoric ancestors of modern chimpanzees were not capable of using tools more sophisticated than those found recently in East Africa.
7. Computers perform actions that are closer to thinking than anything nonhuman animals do. But computers do not have volitional powers, although some nonhuman animals do.

Which one of the following is most strongly supported by the information above?

- (A) Having volitional powers need not involve thinking.
- (B) Things that are not animals do not have volitional powers.
- (C) Computers possess none of the attributes of living things.
- (D) It is necessary to have volitional powers in order to think.
- (E) Computers will never be able to think as human beings do.

GO ON TO THE NEXT PAGE.

8. The caterpillar of the monarch butterfly feeds on milkweed plants, whose toxins make the adult monarch poisonous to many predators. The viceroy butterfly, whose caterpillars do not feed on milkweed plants, is very similar in appearance to the monarch. Therefore, it can be concluded that the viceroy is so seldom preyed on because of its visual resemblance to the monarch.

Which one of the following, if it were discovered to be true, would most seriously undermine the argument?

- (A) Some predators do not have a toxic reaction to insects that feed on milkweed plants.
 - (B) Being toxic to predators will not protect individual butterflies unless most members of the species to which such butterflies belong are similarly toxic.
 - (C) Some of the predators of the monarch butterfly also prey on viceroys.
 - (D) The viceroy butterfly is toxic to most predators.
 - (E) Toxicity to predators is the principal means of protection for only a few butterfly species.
9. Every action has consequences, and among the consequences of any action are other actions. And knowing whether an action is good requires knowing whether its consequences are good, but we cannot know the future, so good actions are impossible.

Which one of the following is an assumption on which the argument depends?

- (A) Some actions have only other actions as consequences.
- (B) We can know that past actions were good.
- (C) To know that an action is good requires knowing that refraining from performing it is bad.
- (D) Only actions can be the consequences of other actions.
- (E) For an action to be good we must be able to know that it is good.

10. All bridges built from 1950 to 1960 are in serious need of rehabilitation. Some bridges constructed in this period, however, were built according to faulty engineering design. That is the bad news. The good news is that at least some bridges in serious need of rehabilitation are not suspension bridges, since no suspension bridges are among the bridges that were built according to faulty engineering design.

If the statements above are true, then, on the basis of those statements, which one of the following must also be true?

- (A) Some suspension bridges are not in serious need of rehabilitation.
 - (B) Some suspension bridges are in serious need of rehabilitation.
 - (C) Some bridges that were built according to faulty engineering design are in serious need of rehabilitation.
 - (D) Some bridges built from 1950 to 1960 are not in serious need of rehabilitation.
 - (E) Some bridges that were built according to faulty engineering design are not bridges other than suspension bridges.
11. A severe blow to the head can cause one to lose consciousness; from this some people infer that consciousness is a product of the brain and cannot survive bodily death. But a radio that becomes damaged may suddenly cease to broadcast the program it had been receiving, and we do not conclude from this that the program itself has ceased to exist. Similarly, more substantial evidence would be needed to conclude that consciousness does not survive bodily death.

Which one of the following most accurately describes the role played in the argument by the example of the damaged radio?

- (A) It is cited as evidence that consciousness does in fact survive bodily death.
- (B) It is cited as a counterexample to a widely accepted belief about the nature of consciousness.
- (C) It is cited as a case analogous to loss of consciousness in which people do not draw the same sort of conclusion that some people draw about consciousness.
- (D) It is cited as the primary piece of evidence for the conclusion that the relationship of consciousness to the brain is analogous to that of a radio program to the radio that receives it.
- (E) It is cited as an example of a case in which something consisting purely of energy depends on the existence of something material to provide evidence of its existence.

12. Political theorist: The vast majority of countries that have a single political party have corrupt national governments, but some countries with a plurality of parties also have corrupt national governments. What all countries with corrupt national governments have in common, however, is the weakness of local governments.

If all of the political theorist's statements are true, which one of the following must also be true?

- (A) Every country with weak local government has a single political party.
 - (B) Some countries with weak local governments have a plurality of political parties.
 - (C) Some countries with weak local governments do not have corrupt national governments.
 - (D) The majority of countries with weak local governments have a single political party.
 - (E) Fewer multiparty countries than single-party countries have weak local governments.
13. Committee member: We should not vote to put at the top of the military's chain of command an individual whose history of excessive drinking is such that that person would be barred from commanding a missile wing, a bomber squadron, or a contingent of fighter jets. Leadership must be established from the top down.

The committee member's argument conforms most closely to which one of the following principles?

- (A) No one who would be barred from important jobs in an organization should lead that organization.
- (B) Whoever leads an organization must have served at every level in the organization.
- (C) Whoever leads an organization must be qualified to hold each important job in the organization.
- (D) No one who drinks excessively should hold a leadership position anywhere along the military's chain of command.
- (E) No one who cannot command a missile wing should be at the top of the military's chain of command.

Questions 14–15

Kim: In northern Europe during the eighteenth century a change of attitude occurred that found expression both in the adoption of less solemn and elaborate death rites by the population at large and in a more optimistic view of the human condition as articulated by philosophers. This change can be explained as the result of a dramatic increase in life expectancy that occurred in northern Europe early in the eighteenth century.

Lee: Your explanation seems unlikely, because it could not be correct unless the people of the time were aware that their life expectancy had increased.

14. Which one of the following, if true, provides the strongest defense of Kim's explanation against Lee's criticism?
- (A) An increase in life expectancy in a population often gives rise to economic changes that, in turn, directly influence people's attitudes.
 - (B) Present-day psychologists have noted that people's attitudes toward life can change in response to information about their life expectancy.
 - (C) Philosophers in northern Europe during the eighteenth century made many conjectures that did not affect the ideas of the population at large.
 - (D) The concept of life expectancy is based on statistical theories that had not been developed in the eighteenth century.
 - (E) Before the eighteenth century the attitudes of northern Europeans were more likely to be determined by religious teaching than by demographic phenomena.
15. Which one of the following most accurately describes Lee's criticism of Kim's explanation?
- (A) It refers to sources of additional data that cannot easily be reconciled with the facts Kim cites.
 - (B) It offers an alternative explanation that is equally supported by the evidence Kim cites.
 - (C) It cites an analogous case in which Kim's explanation clearly cannot hold.
 - (D) It suggests that Kim's explanation depends on a questionable assumption.
 - (E) It points out that Kim's explanation is based on two hypotheses that contradict each other.

16. Some health officials are concerned about the current sustained increase in reported deaths from alcohol-related conditions, attributing this increase to a rise in alcoholism. What these health officials are overlooking, however, is that attitudes toward alcoholism have changed radically. Alcoholism is now widely viewed as a disease, whereas in the past it was considered a moral failing. It is therefore likely that more deaths are being reported as alcohol-related because physicians are more likely to identify these deaths as alcohol-related.

Which one of the following, if true, provides the most support for the argument?

- (A) The frequent use of alcohol by young people is being reported as occurring at increasingly early ages.
 - (B) In some places and times, susceptibility to any kind of disease has been viewed as a moral failing.
 - (C) More physicians now than in the past are trained to recognize the physical effects of alcoholism.
 - (D) Even though alcoholism is considered to be a disease, most doctors recommend psychological counseling and support groups as the best treatment.
 - (E) Many health officials are not physicians.
17. Studies show that the most creative engineers get their best and most useful ideas only after doodling and jotting down what turn out to be outlandish ideas. Now that many engineers do their work with computers instead of on paper, however, doodling is becoming much less common, and some experts fear that the result will be fewer creative and useful engineering ideas. These experts argue that this undesirable consequence would be avoided if computer programs for engineering work included simulated notepads that would allow engineers to suspend their "serious" work on the computer, type up outlandish ideas, and then quickly return to their original work.

Which one of the following is an assumption on which the experts' reasoning depends?

- (A) Most creative engineers who work with paper and pencil spend about as much time doodling as they spend on what they consider serious work.
- (B) Simulated notepads would not be used by engineers for any purpose other than typing up outlandish ideas.
- (C) No engineers who work with computers keep paper and pencils near their computers in order to doodle and jot down ideas.
- (D) The physical act of working on paper is not essential in providing engineers with the benefits that can be gained by doodling.
- (E) Most of the outlandish ideas engineers jot down while doodling are later incorporated into projects that have practical applications.

18. Columnist: The advent of television helps to explain why the growth in homicide rates in urban areas began significantly earlier than the growth in homicide rates in rural areas. Television sets became popular in urban households about five years earlier than in rural households. Urban homicide rates began increasing in 1958, about four years earlier than a similar increase in rural homicide rates began.

Which one of the following, if true, most supports the columnist's argument?

- (A) In places where the number of violent television programs is low, the homicide rates are also low.
 - (B) The portrayal of violence on television is a cause, not an effect, of the violence in society.
 - (C) There were no violent television programs during the early years of television.
 - (D) The earlier one is exposed to violence on television, the more profound the effect.
 - (E) Increasing one's amount of leisure time increases one's inclination to act violently.
19. Even in ancient times, specialized farms (farms that grow a single type of crop or livestock) existed only where there were large commercial markets for farm products, and such markets presuppose urban populations. Therefore the extensive ruins in the archaeological site at Kadshim are probably the remains of a largely uninhabited ceremonial structure rather than of a densely populated city, since the land in the region of Kadshim could never have supported any farms except mixed farms, which grow a variety of crops and livestock.

Which one of the following is an error of reasoning in the argument?

- (A) taking the fact that something is true of one sample of a class of things as evidence that the same is true of the entire class of things
- (B) taking the nonexistence of something as evidence that a necessary precondition for that thing also did not exist
- (C) interpreting an ambiguous claim in one way in one part of the argument and in another way in another part of the argument
- (D) supposing that because two things usually occur in conjunction with one another, one of them must be the cause of the other
- (E) drawing a conclusion that is simply a restatement of one of the premises on which the argument is based

GO ON TO THE NEXT PAGE.

20. It has recently been found that job prospects for college graduates have never been better. The trend is likely to continue over the next decade. A recent survey found that most employers simply did not know that the number of students graduating would drop by 25 percent over the past ten years, and had not anticipated or planned for this trend. Most employers were not aware that, although the supply of graduates currently meets demand, this situation could change. The same survey revealed that the number of undergraduates choosing to study subjects in high demand, like mathematics and engineering, has dropped substantially. This trend is likely to continue over the next decade.

Which one of the following can properly be concluded from the passage above?

- (A) Soon, more graduates are likely to be competing for fewer jobs.
 - (B) Soon, there is likely to be a shortage of graduates to fill certain vacancies.
 - (C) Employers are aware of changing trends in subjects studied by undergraduates.
 - (D) Soon, fewer graduates are likely to be competing for fewer available jobs.
 - (E) Employers who are well-informed about future trends have anticipated and planned for them.
21. The cities of Oldtown and Spoonville are the same in area and size of population. Since certain health problems that are caused by crowded living conditions are widespread in Oldtown, such problems must be as widespread in Spoonville.

The reasoning in the argument is most vulnerable to criticism on the grounds that the argument

- (A) presupposes without warrant that the health problems that are widespread in any particular city cannot be caused by the living conditions in that city
- (B) fails to distinguish between the size of the total population of a city and the size of the geographic region covered by that city
- (C) fails to indicate whether average life expectancy is lowered as a result of living in crowded conditions
- (D) fails to distinguish between those health problems that are easily treatable and those that are not
- (E) fails to take into account that having identical overall population density is consistent with great disparity in living conditions

22. Shortly after the Persian Gulf War, investigators reported that the area, which had been subjected to hundreds of smoky oil fires and deliberate oil spills when regular oil production slowed down during the war, displayed less oil contamination than they had witnessed in prewar surveys of the same area. They also reported that the levels of polycyclic aromatic hydrocarbons (PAHs)—used as a marker of combustion products spewed from oil wells ignited during the war—were also relatively low, comparable to those recorded in the temperate oil-producing areas of the Baltic Sea.

Which one of the following, if true, does most to resolve the apparent discrepancy in the information above?

- (A) Oil contaminants have greater environmental effects in temperate regions than in desert regions.
- (B) Oil contamination and PAH pollution dissipate more rapidly in temperate regions than in desert regions.
- (C) Oil contamination and PAH pollution dissipate more rapidly in desert regions than in temperate regions.
- (D) Peacetime oil production and transport in the Persian Gulf result in high levels of PAHs and massive oil dumping.
- (E) The Persian Gulf War ended before the oil fires and spills caused as much damage as originally expected.

GO ON TO THE NEXT PAGE.

23. An independent audit found no indication of tax avoidance on the part of the firm in the firm's accounts; therefore, no such problem exists.

The questionable reasoning in the argument above is most closely paralleled by that in which one of the following?

- (A) The plan for the introduction of the new project has been unmodified so far; therefore, it will not be modified in the future.
- (B) The overall budget for the projects has been exceeded by a large amount; therefore, at least one of the projects has exceeded its budget by a large amount.
- (C) A compilation of the best student essays of the year includes no essays on current events; therefore, students have become apathetic toward current events.
- (D) A survey of schools in the district found no school without a need for building repair; therefore, the education provided to students in the district is substandard.
- (E) An examination of the index of the book found no listing for the most prominent critic of the theory the book advocates; therefore, the book fails to refer to that critic.

24. One of the great difficulties in establishing animal rights based merely on the fact that animals are living things concerns scope. If one construes the term "living things" broadly, one is bound to bestow rights on organisms that are not animals (e.g., plants). But if this term is construed narrowly, one is apt to refuse rights to organisms that, at least biologically, are considered members of the animal kingdom.

If the statements above are true, which one of the following can be most reasonably inferred from them?

- (A) Not all animals should be given rights.
- (B) One cannot bestow rights on animals without also bestowing rights on at least some plants.
- (C) The problem of delineating the boundary of the set of living things interferes with every attempt to establish animal rights.
- (D) Successful attempts to establish rights for all animals are likely either to establish rights for some plants or not to depend solely on the observation that animals are living things.
- (E) The fact that animals are living things is irrelevant to the question of whether animals should or should not be accorded rights, because plants are living things too.

GO ON TO THE NEXT PAGE.

25. Economist: No economic system that is centrally planned can efficiently allocate resources, and efficient allocation of resources is a necessary condition for achieving a national debt of less than 5 percent of Gross Domestic Product (GDP). It follows that any nation with a centrally planned economy has a national debt that is at least 5 percent of GDP.

The pattern of reasoning exhibited by the economist's argument is most similar to that exhibited by which one of the following?

- (A) Not all mammals are without wings, because bats are mammals and bats have wings.
- (B) All of the rural districts are free of major air pollution problems because such problems occur only where there is a large concentration of automobiles, and there are no such places in the rural districts.
- (C) All of the ungulates are herbivores, and most herbivores would not attack a human being. It follows that any animal that would attack a human being is unlikely to be an ungulate.
- (D) All rock stars who are famous have their own record companies, and all rock stars with their own record companies receive company profits over and above their regular royalties. This implies that receiving large regular royalties is a necessary condition of being a famous rock star.
- (E) Every mutual fund manager knows someone who trades on inside information, and no one who trades on inside information is unknown to every mutual fund manager. One must conclude that no mutual fund manager is unknown to everyone who trades on inside information.

26. Editorialist: Additional restrictions should be placed on driver's licenses of teenagers because teenagers lack basic driving skills. Even though drivers of age nineteen and younger make up only 7 percent of registered drivers, they are responsible for over 14 percent of traffic fatalities.

Each of the following, if true, weakens the argument that teenagers lack basic driving skills EXCEPT:

- (A) Teenagers tend to drive older and less stable cars than other drivers.
- (B) Teenagers and their passengers are less likely to use seat belts and shoulder straps than others.
- (C) Teenagers drive, on average, over twice as far each year as other drivers.
- (D) Teenagers cause car accidents that are more serious than those caused by others.
- (E) Teenagers are likely to drive with more passengers than the average driver.

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.