

SECTION III

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. Flavonoids are a common component of almost all plants, but a specific variety of flavonoid in apples has been found to be an antioxidant. Antioxidants are known to be a factor in the prevention of heart disease.

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

- (A) A diet composed largely of fruits and vegetables will help to prevent heart disease.
 - (B) Flavonoids are essential to preventing heart disease.
 - (C) Eating at least one apple each day will prevent heart disease.
 - (D) At least one type of flavonoid helps to prevent heart disease.
 - (E) A diet deficient in antioxidants is a common cause of heart disease.
2. A number of Grandville's wealthiest citizens have been criminals. So, since it is of utmost importance that the Grandville Planning Committee be composed solely of individuals whose personal standards of ethics are beyond reproach, no wealthy person should be appointed to that committee.

The argument is most vulnerable to the criticism that it

- (A) confuses a result with something that is sufficient for bringing about that result
- (B) mistakes a temporal relationship for a causal relationship
- (C) assumes that because a certain action has a certain result the person taking that action intended that result
- (D) judges only by subjective standards something that can be readily evaluated according to objective standards
- (E) generalizes on the basis of what could be exceptional cases

3. Birds startled by potential predators generally try to take cover in nearby vegetation. Yet many birds that feed at bird feeders placed in suburban gardens are killed when, thus startled, they fly away from the vegetation in the gardens and into the windowpanes of nearby houses.

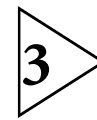
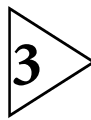
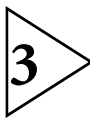
Which one of the following, if true, most helps to explain the anomalous behavior of the birds that fly into windowpanes?

- (A) Predator attacks are as likely to occur at bird feeders surrounded by dense vegetation as they are at feeders surrounded by little or no vegetation.
 - (B) The bird feeders in some suburban gardens are placed at a considerable distance from the houses.
 - (C) Large birds are as likely as small birds to fly into windowpanes.
 - (D) Most of the birds startled while feeding at bird feeders placed in suburban gardens are startled by loud noises rather than by predators.
 - (E) The windowpanes of many houses clearly reflect surrounding vegetation.
4. Raising the humidity of a room protects furniture, draperies, and computers from damage caused by excessively dry air. Further, it can make people feel warmer, helps the body's defenses against viruses, and alleviates some skin rashes.

Each of the following is supported by the information above EXCEPT:

- (A) Humidity can be bad for computers.
- (B) A room can be too dry for the optimal maintenance of its furnishings.
- (C) Dry air can feel cooler than humid air of the same temperature.
- (D) Increased humidity can be beneficial to the skin.
- (E) The human immune system can benefit from humidity.

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Questions 5-6

Jane: Television programs and movies that depict violence among teenagers are extremely popular. Given how influential these media are, we have good reason to believe that these depictions cause young people to engage in violent behavior. Hence, depictions of violence among teenagers should be prohibited from movies and television programs, if only in those programs and movies promoted to young audiences.

Maurice: But you are recommending nothing short of censorship! Besides which, your claim that television and movie depictions of violence cause violence is mistaken: violence among young people predates movies and television by centuries.

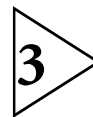
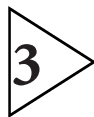
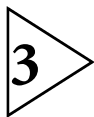
5. Maurice's attempted refutation of Jane's argument is vulnerable to criticism on which one of the following grounds?
 - (A) It presupposes that an unpopular policy cannot possibly achieve its intended purpose.
 - (B) It confuses a subjective judgment of private moral permissibility with an objective description of social fact.
 - (C) It rules out something as a cause of a current phenomenon solely on the ground that the phenomenon used to occur without that thing.
 - (D) It cites purported historical facts that cannot possibly be verified.
 - (E) It relies on an ambiguity in the term "violence" to justify a claim.
6. Which one of the following, if true, most strengthens Jane's argument?
 - (A) The most violent characters depicted in movies and on television programs are adult characters who are portrayed by adult actors.
 - (B) The movies that have been shown to have the most influence on young people's behavior are those that are promoted to young audiences.
 - (C) The people who make the most profits in the movie and television industry are those who can successfully promote their work to both young and old audiences.
 - (D) Many adolescents who engage in violent behavior had already displayed such behavior before they were exposed to violence in movies.
 - (E) Among the producers who make both movies and television programs, many voluntarily restrict the subject matter of films directed toward young audiences.

7. Sam: In a recent survey, over 95 percent of people who purchased a Starlight automobile last year said they were highly satisfied with their purchase. Since people who have purchased a new car in the last year are not highly satisfied if that car has a manufacturing defect, Starlight automobiles are remarkably free from such defects.

Tiya: But some manufacturing defects in automobiles become apparent only after several years of use.

Which one of the following most accurately describes how Tiya's response is related to Sam's argument?

- (A) It argues that Sam's conclusion is correct, though not for the reasons Sam gives.
 - (B) It provides evidence indicating that the survey results Sam relies on in his argument do not accurately characterize the attitudes of those surveyed.
 - (C) It offers a consideration that undermines the support Sam offers for his conclusion.
 - (D) It points out that Sam's argument presupposes the truth of the conclusion Sam is defending.
 - (E) It presents new information that implies that Sam's conclusion is false.
 8. Some environmentalists question the prudence of exploiting features of the environment, arguing that there are no economic benefits to be gained from forests, mountains, or wetlands that no longer exist. Many environmentalists claim that because nature has intrinsic value it would be wrong to destroy such features of the environment, even if the economic costs of doing so were outweighed by the economic costs of not doing so.
- Which one of the following can be logically inferred from the passage?
- (A) It is economically imprudent to exploit features of the environment.
 - (B) Some environmentalists appeal to a noneconomic justification in questioning the defensibility of exploiting features of the environment.
 - (C) Most environmentalists appeal to economic reasons in questioning the defensibility of exploiting features of the environment.
 - (D) Many environmentalists provide only a noneconomic justification in questioning the defensibility of exploiting features of the environment.
 - (E) Even if there is no economic reason for protecting the environment, there is a sound noneconomic justification for doing so.



9. Market research traditionally entails surveying consumers about why they buy and use particular products and brands. Observational research—actually watching consumers shopping and interacting with products—is now increasingly used by market researchers to supplement surveys. Market researchers claim that observational research yields information about consumer behavior that surveys alone cannot provide.

Which one of the following, if true, provides the strongest support for the market researchers' claim?

- (A) Even consumers who are unable to explain their preference for or rejection of particular brands reveal which brands they are considering by picking up and putting down products while they are shopping.
 - (B) Market researchers find that consumers are almost always willing to participate in observational research for which the consumer is paid by the hour.
 - (C) Consumers are becoming increasingly self-conscience about their buying habits, and some consumers have stopped buying some items that they normally used to buy.
 - (D) Market researchers say they find data collection more enjoyable in observational research than in survey research, because observational research requires more creative judgment on their part.
 - (E) Consumers are more likely to respond to oral surveys than they are to respond to written questionnaires.
10. Laura: Harold is obviously lonely. He should sell his cabin in the woods and move into town. In town he will be near other people all the time, so he will not be lonely anymore.

Ralph: Many very lonely people live in towns. What is needed to avoid loneliness is not only the proximity of other people but also genuine interaction with them.

Ralph responds to Laura by pointing out that

- (A) something needed for a certain result does not necessarily guarantee that result
- (B) what is appropriate in one case is not necessarily appropriate in all cases
- (C) what is logically certain is not always intuitively obvious
- (D) various alternative solutions are possible for a single problem
- (E) a proposed solution for a problem could actually worsen that problem

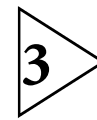
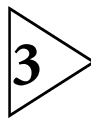
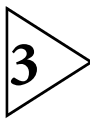
11. A rise in the percentage of all 18-year-olds who were recruited by the armed services of a small republic between 1980 and 1986 correlates with a rise in the percentage of young people who dropped out of high school in that republic. Since 18-year-olds in the republic are generally either high school graduates or high school dropouts, the correlation leads to the conclusion that the republic's recruitment rates for 18-year-olds depend substantially on recruitment rates for high school dropouts.

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

- (A) A larger number of 18-year-old high school graduates were recruited for the republic's armed services in 1986 than in 1980.
 - (B) Many of the high-technology systems used by the republic's armed services can be operated only by individuals who have completed a high school education.
 - (C) Between 1980 and 1986 the percentage of high school graduates among 18-year-olds recruited in the republic rose sharply.
 - (D) Personnel of the republic's armed services are strongly encouraged to finish their high school education.
 - (E) The proportion of recruits who had completed at least two years of college education was greater in 1986 than in 1980.
12. Letter to the Editor: Your article on effective cockroach control states that vexone is effective against only one of the more than 4,000 cockroach species that infest North America: the German cockroach. In actuality, vexone has been utilized effectively for almost a decade against all of the species that infest North America. In testing our product, Roach Ender, which contains vexone, we have conducted many well-documented studies that prove this fact.

Each of the following statements conflicts with the letter writer's view EXCEPT:

- (A) Vexone is effective against only two species of cockroach that infest North America.
- (B) Not all of the major species of cockroach that infest North America can be controlled by Roach Ender.
- (C) Every species of cockroach that infests North America can be controlled by vexone.
- (D) The cockroach infestations that have been combated with vexone have not included all of the cockroach species that infest North America.
- (E) Roach Ender was tested against exactly 4,000 cockroach species that infest North America.



13. A recent study concludes that prehistoric birds, unlike modern birds, were cold-blooded. This challenges a widely held view that modern birds descended from warm-blooded birds. The conclusion is based on the existence of growth rings in prehistoric birds' bodily structures, which are thought to be found only in cold-blooded animals. Another study, however, disputes this view. It concludes that prehistoric birds had dense blood vessels in their bones, which suggests that they were active creatures and therefore had to be warm-blooded.

Which one of the following, if true, would most help to resolve the dispute described above in favor of one party to it?

- (A) Some modern warm-blooded species other than birds have been shown to have descended from cold-blooded species.
 - (B) Having growth rings is not the only physical trait of cold-blooded species.
 - (C) Modern birds did not evolve from prehistoric species of birds.
 - (D) Dense blood vessels are not found in all warm-blooded species.
 - (E) In some cold-blooded species the gene that is responsible for growth rings is also responsible for dense blood vessels.
14. If citizens do not exercise their right to vote, then democratic institutions will crumble and, as a consequence, much valuable social cohesion will be lost. Of course, one person's vote can only make an imperceptible difference to the result of an election, but one must consider the likely effects of large numbers of people failing to vote. An act or omission by one person is not right if such an act or omission done by large numbers of people would be socially damaging. Organized society would be impossible if theft were common, though a single dishonest act on the part of a single person is likely to have an insignificant effect upon society.

Which one of the following most accurately expresses the main conclusion of the argument?

- (A) People in a democracy should not neglect to vote.
- (B) Dishonest acts and failure to vote are equally damaging.
- (C) There is a risk that individual antisocial acts will be imitated by others.
- (D) A single person's vote or wrongful act can in fact make a great deal of difference.
- (E) Large-scale dishonesty and neglect of public duty will be destructive of democratic and other societies.

15. Human beings have cognitive faculties that are superior to those of other animals, and once humans become aware of these, they cannot be made happy by anything that does not involve gratification of these faculties.

Which one of the following statements, if true, most calls into question the view above?

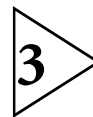
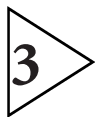
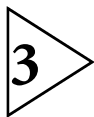
- (A) Certain animals—dolphins and chimpanzees, for example—appear to be capable of rational communication.
- (B) Many people familiar both with intellectual stimulation and with physical pleasures enjoy the latter more.
- (C) Someone who never experienced classical music as a child will usually prefer popular music as an adult.
- (D) Many people who are serious athletes consider themselves to be happy.
- (E) Many people who are serious athletes love gourmet food.

16. Historian: We can learn about the medical history of individuals through chemical analysis of their hair. It is likely, for example, that Isaac Newton's psychological problems were due to mercury poisoning; traces of mercury were found in his hair. Analysis is now being done on a lock of Beethoven's hair. Although no convincing argument has shown that Beethoven ever had a venereal disease, some people hypothesize that venereal disease caused his deafness. Since mercury was commonly ingested in Beethoven's time to treat venereal disease, if researchers find a trace of mercury in his hair, we can conclude that this hypothesis is correct.

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

- (A) None of the mercury introduced into the body can be eliminated.
- (B) Some people in Beethoven's time did not ingest mercury.
- (C) Mercury is an effective treatment for venereal disease.
- (D) Mercury poisoning can cause deafness in people with venereal disease.
- (E) Beethoven suffered from psychological problems of the same severity as Newton's.

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17. In 1992, a major newspaper circulated throughout North America paid its reporters an average salary that was much lower than the average salary paid by its principal competitors to their reporters. An executive of the newspaper argued that this practice was justified, since any shortfall that might exist in the reporters' salaries is fully compensated by the valuable training they receive through their assignments.

Which one of the following, if true about the newspaper in 1992, most seriously undermines the justification offered by the executive?

- (A) Senior reporters at the newspaper earned as much as reporters of similar stature who worked for the newspaper's principal competitors.
 - (B) Most of the newspaper's reporters had worked there for more than ten years.
 - (C) The circulation of the newspaper had recently reached a plateau, after it had increased steadily throughout the 1980s.
 - (D) The union that represented reporters at the newspaper was different from the union that represented reporters at the newspaper's competitors.
 - (E) The newspaper was widely read throughout continental Europe and Great Britain as well as North America.
18. The human brain and its associated mental capacities evolved to assist self-preservation. Thus, the capacity of make aesthetic judgments is an adaptation to past environments in which humans lived. So an individual's aesthetic judgments must be evaluated in terms of the extent to which they promote the survival of that individual.

Which one of the following is a principle that would, if valid, provide the strongest justification for the reasoning above?

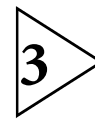
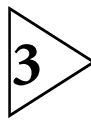
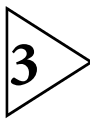
- (A) All human adaptations to past environments were based on the human brain and its associated mental capacities.
- (B) Human capacities that do not contribute to the biological success of the human species cannot be evaluated.
- (C) If something develops to serve a given function, the standard by which it must be judged is how well it serves that function.
- (D) Judgments that depend on individual preference or taste cannot be evaluated as true or false.
- (E) Anything that enhances the proliferation of a species is to be valued highly.

19. On a certain day, nine scheduled flights on Swift Airlines were canceled. Ordinarily, a cancellation is due to mechanical problems with the airplane scheduled for a certain flight. However, since it is unlikely that Swift would have mechanical problems with more than one or two airplanes on a single day, some of the nine cancellations were probably due to something else.

The argument depends on which one of the following assumptions?

- (A) More than one or two airplanes were scheduled for the nine canceled flights.
- (B) Swift Airlines has fewer mechanical problems than do other airlines of the same size.
- (C) Each of the canceled flights would have been longer than the average flight on Swift Airlines.
- (D) Swift Airlines had never before canceled more than one or two scheduled flights on a single day.
- (E) All of the airplanes scheduled for the canceled flights are based at the same airport.

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20. Game show host: Humans are no better than apes at investing, that is, they do not attain a better return on their investments than apes do. We gave five stock analysts and one chimpanzee \$1,350 each to invest. After one month, the chimp won, having increased its net worth by \$210. The net worth of the analyst who came in second increased by only \$140.

Each of the following describes a flaw in the game show host's reasoning EXCEPT:

- (A) A conclusion is drawn about apes in general on the basis of an experiment involving one chimpanzee.
- (B) No evidence is offered that chimpanzees are capable of understanding stock reports and making reasoned investment decisions.
- (C) A broad conclusion is drawn about the investment skills of humans on the basis of what is known about five humans.
- (D) Too general a conclusion is made about investing on the basis of a single experiment involving short-term investing but not long-term investing.
- (E) No evidence is considered about the long-term performance of the chimpanzee's portfolio versus that of the analysts' portfolios.

21. If the law punishes littering, then the city has an obligation to provide trash cans. But the law does not punish littering, so the city has no such obligation.

Which one of the following exhibits a flawed pattern of reasoning most similar to that in the argument above?

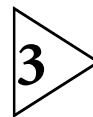
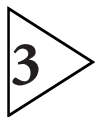
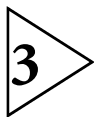
- (A) If today is a holiday, then the bakery will not be open. The bakery is not open for business. Thus today is a holiday.
- (B) Jenny will have lots of balloons at her birthday party. There are no balloons around yet, so today is not her birthday.
- (C) The new regulations will be successful only if most of the students adhere to them. Since most of the students will adhere to those regulations, the new regulations will be successful.
- (D) In the event that my flight had been late, I would have missed the committee meeting. Fortunately, my flight is on time. Therefore, I will make it to the meeting.
- (E) When the law is enforced, some people are jailed. But no one is in jail, so clearly the law is not enforced.

22. Researcher: The role of chemicals called pheromones in determining the sexual behavior of some animals is well documented. But, even though humans also produce these chemicals, it is clear that psychological factors have taken over this role in us. Whereas for animals these behaviors are involuntary, which is a clear sign of chemical control, humans, by virtue of their free will, choose how they behave, and thus psychological factors take over. So pheromones are merely a vestige of our evolutionary past.

The researcher's argument requires the assumption that

- (A) whatever does not have a chemical explanation must have a purely psychological one
- (B) voluntary action cannot have a chemical explanation
- (C) free will can be found only in humans
- (D) voluntary action cannot have an evolutionary explanation
- (E) there is a psychological explanation for the continuing presence of pheromones in humans

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23. Ethicist: It is widely believed that it is always wrong to tell lies, but this is a rule almost no one fully complies with. In fact, lying is often the morally appropriate thing to do. It is morally correct to lie when telling the truth carries the reasonable expectation of producing considerable physical or psychological harm to others.

Which one of the following most closely conforms to the principle the ethicist endorses?

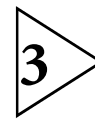
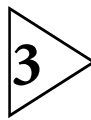
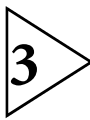
- (A) When Juan asked Judy if the movie they were going to was *North by Northwest*, Judy said yes, though she knew that *Persona* was playing instead. This was the only way Juan would see the film and avoid losing an opportunity for an aesthetically pleasing experience.
- (B) A daughter asked her father which candidate he supported, McBride or Chang. Though in fact he preferred Chang, the father responded by saying he preferred McBride, in order to avoid discussion.
- (C) A husband told his wife he felt ready to go on a canoe trip, though he had recently had severe chest pains; his wife had determined a year ago that they would go on this trip, so to ask to cancel now would be inconvenient.
- (D) A young boy asked his mother if she loved his older sister more than she loved him. The mother said she loved them both to the same degree, even though it was not true.
- (E) A friend invited Jamal to a party, but Jamal was afraid that he might see his ex-wife and her new husband there. To spare himself emotional pain, as well as the embarrassment of telling his friend why he did not want to go, Jamal falsely claimed he had to work.

24. Surviving seventeenth-century Dutch landscapes attributed to major artists now equal in number those attributed to minor ones. But since in the seventeenth century many prolific minor artists made a living supplying the voracious market for Dutch landscapes, while only a handful of major artists painted in the genre, many attributions of seventeenth-century Dutch landscape paintings to major artists are undoubtedly erroneous.

Which one of the following, if true, most strengthens the argument?

- (A) Technically gifted seventeenth-century Dutch landscape artists developed recognizable styles that were difficult to imitate.
- (B) In the workshops of major seventeenth-century artists, assistants were employed to prepare the paints, brushes, and other materials that the major artists then used.
- (C) In the eighteenth century, landscapes by minor seventeenth-century artists were often simply thrown away or else destroyed through improper storage.
- (D) Seventeenth-century art dealers paid minor artists extra money to leave their landscapes unsigned so that the dealers could add phony signatures and pass such works off as valuable paintings.
- (E) More seventeenth-century Dutch landscapes were painted than have actually survived, and that is true of those executed by minor artists as well as of those executed by major artists.

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25. The interstitial nucleus, a subregion of the brain's hypothalamus, is typically smaller for male cats than for female cats. A neurobiologist performed autopsies on male cats who died from disease X, a disease affecting no more than .05 percent of male cats, and found that these male cats had interstitial nuclei that were as large as those generally found in female cats. Thus, the size of the interstitial nucleus determines whether or not male cats can contract disease X.

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

- (A) No female cats have been known to contract disease X, which is a subtype of disease Y.
- (B) Many male cats who contract disease X also contract disease Z, the cause of which is unknown.
- (C) The interstitial nuclei of female cats who contract disease X are larger than those of female cats who do not contract disease X.
- (D) Of 1,000 autopsies on male cats who did not contract disease X, 5 revealed interstitial nuclei larger than those of the average male cat.
- (E) The hypothalamus is known not to be causally linked to disease Y, and disease X is a subtype of disease Y.

26. It is common to respond to a person who is exhorting us to change our behavior by drawing attention to that person's own behavior. This response, however, is irrational. Whether or not someone in fact heeds his or her own advice is irrelevant to whether that person's advice should be heeded.

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

- (A) Other countries argue that if we are serious about disarming we should go ahead and disarm to show our good intentions, but this is irrational, for we could make the same argument about them.
- (B) My neighbor urges me to exercise, but I see no good reason to do so; despite his strenuous exercise, he has failed to exhibit any real benefits from it.
- (C) When one country accuses another country of violating human rights standards, the accused country can reduce the damage to its reputation by drawing attention to the human rights record of its accuser because this tactic distracts critical attention.
- (D) One should not dismiss the philosopher's argument that matter does not exist by pointing out that the philosopher acts as though matter exists. People's actions have no effect on the strength of their arguments.
- (E) We should not be too severe in our condemnation of the salesperson; we have all lied at one point or another. It is irrational to condemn a person for wrongs committed by everybody.

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.