

SECTION I

Time—35 minutes

25 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. Pundit: Our city made a mistake when it sold a private company the rights to assess and collect parking fees. The private company raised parking fees and so has been able to reap profits far greater than what it paid for the rights to assess and collect the fees. If the city had not sold the rights, then that money would have gone to the city.

The pundit's argument requires the assumption that

- (A) other private companies would have been willing to pay for the rights to assess and collect parking fees
- (B) the city could have raised parking fees had it not sold the rights
- (C) municipal functions like assessing and collecting parking fees should always be handled directly by the municipality in question
- (D) the revenue from parking fees is not the only factor that cities need to consider in setting the rates for parking fees
- (E) private companies assess and collect parking fees more efficiently than cities do

2. Popular science publications that explain new developments in science face a dilemma. In order to reach a wide audience, these publications must rely heavily on metaphorical writing, which usually fails to convey the science accurately. If the writing is more rigorous, they get the science right but fail to reach a wide audience. These publications should therefore give up trying to explain new developments in science to a wide audience.

Which one of the following principles, if valid, most helps to justify the reasoning in the argument?

- (A) Science publications should balance the use of metaphors with more rigorous writing.
- (B) The more recent a scientific development is, the harder it is to explain it accurately to a wide audience.
- (C) In reporting scientific developments, it is better to fail to reach a wide audience than to be inaccurate.
- (D) In reporting scientific developments, it is better to reach a wide audience than to be accurate.
- (E) Even the most rigorous explanations of some scientific concepts must still contain metaphors.

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3. Critic: Rock music is musically bankrupt and socially destructive, but at least the album covers of rock LPs from the 1960s and 1970s often featured innovative visual art. But now, since the success of digital music has almost ended the production of LPs, rock music has nothing going for it.

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

- (A) Digital music is not distributed with accompanying innovative visual art.
 - (B) Although very few LPs are produced today, most of these are rock LPs.
 - (C) In the 1960s and 1970s, only rock LPs featured innovative album cover art.
 - (D) The LPs being produced today have innovative album cover art.
 - (E) Rock music is less sophisticated musically and more destructive socially now than it was in the 1960s and 1970s.
4. Scientist: In testing whether a baby's babbling is a linguistic task or just random sounds, researchers videotaped the mouths of babies as they babbled. They discovered that babbling babies open the right sides of their mouths wider than the left. Past studies have established that during nonlinguistic vocalizations people generally open the left side of the mouth wider. So babbling turns out to be a linguistic task.

Which one of the following most accurately describes how the scientist's argument proceeds?

- (A) It describes an argument for a given conclusion and presents a counterargument to suggest that its conclusion is incorrect.
- (B) It questions the adequacy of a generally accepted principle by providing evidence to undermine that principle, and offers a different principle in its place.
- (C) It raises a question, describes a potential experimental test, and argues that the test is necessary to answer the question.
- (D) It describes an explanation for some facts, counters assertions that the explanation is unlikely to be correct, and concludes that it is correct after all.
- (E) It presents two possible interpretations of a phenomenon and provides evidence in support of one interpretation and against the other.

5. Environment minister: Because of our concern about global warming, this country has committed itself to reducing its emissions of carbon dioxide substantially over the next ten years. Since trees absorb carbon dioxide, planting large numbers of trees will help us fulfill our commitment.

Which one of the following, if true, would most weaken the environment minister's argument?

- (A) Owners of large tracts of private land are usually unwilling to plant trees unless they are given a financial incentive for doing so.
 - (B) Over the last ten years the proportion of land that is deforested annually has not increased as much as has the proportion of carbon dioxide in the atmosphere.
 - (C) When ground is disturbed in the course of planting trees, more carbon dioxide is released into the atmosphere by rotting organic matter in the soil than the new trees will absorb in ten years.
 - (D) Many climate researchers believe that global warming is such an urgent problem that carbon dioxide emissions should be substantially reduced in less than ten years.
 - (E) Gases other than carbon dioxide contribute to global warming, and trees do not absorb any of these other gases.
6. Sport utility vehicles (SUVs) are, because of their weight, extremely expensive to operate but, for the same reason, in an accident they are safer for their occupants than smaller vehicles are. Nonetheless, an analysis of recent traffic fatality statistics has led auto safety experts to conclude that the increasing popularity of SUVs is an alarming trend.

Which one of the following, if true, most helps to account for the response of auto safety experts to the popularity of SUVs?

- (A) Vehicles with a reputation for being safer than others tend to be driven more carefully than other vehicles.
- (B) Vehicles with a high average fuel consumption have fuel tanks with larger capacities.
- (C) Recent statistics suggest that large vehicles such as SUVs tend to carry more passengers than smaller vehicles do.
- (D) Recent statistics suggest that the average number of fatalities in collisions between SUVs and smaller vehicles is higher than for other collisions.
- (E) Recent statistics suggest that SUVs are as likely to be involved in collisions as smaller vehicles are.

7. Political advertisement: Sherwood campaigns as an opponent of higher taxes. But is anybody fooled? For the last 10 years, while Sherwood served on the city council, the council consistently increased taxes year after year. Break the cycle of higher and higher taxes: reject Sherwood's bid for reelection to city council.

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

- (A) bases a crucial generalization on a very limited sample
 - (B) fails to consider the possibility that something that is unavoidable might nonetheless be undesirable
 - (C) mistakes something that is sufficient to bring about a result for something that is necessary to bring about that result
 - (D) makes a personal attack on someone who holds a certain view rather than addressing the reasonableness of that view
 - (E) takes for granted that a characteristic of a group as a whole is shared by an individual member of that group
8. Client: The owners of the catering company we use decided to raise their rates. They argued that the increase was necessary to allow them to hire and train new staff to accommodate their expanding client base. They should reconsider that decision and not raise their rates. After all, the mission of the company is to provide low-cost gourmet catering, and this mission will be jeopardized if they raise rates.

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

- (A) The owners of the catering company decided to raise their rates.
- (B) The catering company needs to increase its rates to accommodate its expanding client base.
- (C) The catering company's rates should not be raised.
- (D) The catering company's mission is to provide low-cost gourmet catering.
- (E) The catering company's mission will be jeopardized if its rates are increased.

9. Red admiral butterflies fly in a highly irregular fashion, constantly varying their speed, wing strokes, and flight path. While predators avoid poisonous butterfly species, nonpoisonous butterflies like the red admiral need to elude predators to survive. Scientists therefore hypothesize that the red admiral's flight style, which is clearly not energy efficient, evolved as a means of avoiding predators.

Which one of the following, if true, most strengthens the support for the scientists' hypothesis?

- (A) No species of poisonous butterfly has an irregular flight style like that of the red admiral.
 - (B) Attacks from predators are not the most common cause of death for butterflies.
 - (C) Many other types of butterfly have flight styles similar to that of the red admiral.
 - (D) It is much more energy efficient for butterflies to fly in an irregular fashion than it is for heavier varieties of insects.
 - (E) All of the predators that prey on the red admiral also prey on other species of nonpoisonous butterflies.
10. Copyright statutes benefit society by providing incentive to produce original works, so some kind of copyright statute is ultimately justified. But these statutes also represent a significant cost to society because they create protected monopolies. In many countries, copyright statutes grant copyright protection for the life of the author plus several decades. This is too long, since the societal benefit from the additional years of copyright is more than offset by the societal cost.

Which one of the following principles, if valid, most strongly supports the reasoning in the argument?

- (A) A statute should be written in a way that eliminates any appearance of its being inconsistent in its aims.
- (B) A statute should be repealed if the conditions that originally justified enacting the statute no longer hold true.
- (C) A statute that is justified in one country is justified in every country.
- (D) A statute should not limit rights unless it can be shown that it thereby enhances other rights.
- (E) If a statute is to be justified by its benefit to society, it should be designed so that its societal benefit always exceeds its societal cost.

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11. Police chief: During my tenure as chief, crime in this city has fallen by 20 percent. This is clearly the result of my policing strategy, which uses real-time crime data and focuses police resources on the areas with the most crime.

Which one of the following, if true, most calls into question the police chief's explanation for the drop in crime?

- (A) The crime rate in the police chief's city is still significantly higher than in many other cities.
 - (B) The crime rate in the police chief's city is higher now than it was several decades before the chief's tenure began.
 - (C) The crime rate in the police chief's city fell significantly during the first few years of the chief's tenure, then it leveled off.
 - (D) The crime rate in the country as a whole fell by about 30 percent during the police chief's tenure.
 - (E) The variation in crime rates between different areas of the city is smaller in the police chief's city than in many other cities.
12. Commentator: The Duke of Acredia argued long ago that only virtuous Acredian rulers concerned with the well-being of the people will be able to rule successfully. Since then, when Acredian governments have fallen, their falls have always been during the rule of one who viciously disregards the people's needs. The Duke, then, was right about at least one thing: Concern for the welfare of the people is necessary for the successful governance of Acredia.

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

- (A) ignores the possibility that the conditions that are necessary for the welfare of the people are likely to change over time
- (B) infers the necessity of a certain condition for success from the fact that its absence has always led to failure
- (C) appeals to evidence from sources that are likely to be in some way biased or unreliable
- (D) infers that a certain condition is required for success from the fact that the lack of that condition is associated with failure
- (E) presumes, without providing justification, that the character of past rulers can be assessed in some completely objective way

13. Dr. Khan: Professor Burns recognizes that recent observations fail to confirm earlier ones that apparently showed a comet reservoir far out in our solar system. She claims this nonconfirmation is enough to show that the earlier observations are incorrect. But the recent observations occurred under poor conditions.

Which one of the following is most supported by Dr. Khan's statements?

- (A) If the recent observations had been made under good conditions, they would have provided conclusive evidence of a comet reservoir far out in our solar system.
 - (B) Contrary to Professor Burns's view, the recent observations confirm the earlier ones.
 - (C) Professor Burns's claim about the implications of the recent observations is incorrect.
 - (D) The recent observations, even if they had been made under good conditions, would not have been enough to suggest that the earlier ones are incorrect.
 - (E) The poor conditions present during recent observations render them worthless.
14. If people refrained from being impolite to one another the condition of society would be greatly improved. But society would not be better off if the government enacted laws requiring people to be polite to each other. Enforcing such laws would create even more problems than does impoliteness.
- Which one of the following most accurately describes the role played in the argument by the claim that society would not be better off if the government enacted laws requiring people to be polite to each other?
- (A) It is the conclusion drawn by the argument as a whole.
 - (B) It is cited as evidence for the generalization that is the argument's overall conclusion.
 - (C) It is cited as evidence for the assertion used to support the argument's overall conclusion.
 - (D) It is cited as an illustration of a generalization that serves as the main premise of the argument.
 - (E) It describes a phenomenon that the conclusion of the argument purports to explain.

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15. Astronomer: In most cases in which a planet has been detected orbiting a distant star, the planet's orbit is distinctly oval, whereas the orbits of Earth and several other planets around our sun are approximately circular. However, many comets orbiting our sun have been thrown into oval orbits by close encounters with planets orbiting our sun. So some of the planets in oval orbits around distant stars were probably thrown into those orbits by close encounters with other planets orbiting the same stars.

Which one of the following, if true, would most strengthen the astronomer's argument?

- (A) When two planets or other large objects in orbit have a close encounter, usually the smaller of the two is the more greatly affected.
 - (B) There is no indication that the orbit of any planet orbiting our sun has been affected by a close encounter with another planet orbiting our sun.
 - (C) In most cases in which planets have been discovered orbiting a distant star, more than one planet has been found orbiting the star.
 - (D) Most comets with an oval orbit around our sun were thrown into that orbit by a close encounter with some other object.
 - (E) For each distant star that has been found to have a planet, no other object large enough to affect the planet's orbit has been found orbiting the star.
16. It is possible to grow agricultural crops that can thrive when irrigated with seawater. Such farming, if undertaken near oceans, would actually be cheaper than most other irrigated agriculture, since the water would not have to be pumped far. The greatest expense in irrigated agriculture is in pumping the water, and the pumping costs increase with the distance the water is pumped.

Which one of the following most accurately describes the role played in the argument by the claim that the greatest expense in irrigated agriculture is in pumping the water?

- (A) It is a claim that the argument shows to be false.
- (B) It is a hypothesis that, if proven, would undermine the argument's conclusion.
- (C) It is evidence provided to support the argument's conclusion.
- (D) It is the argument's conclusion.
- (E) It is a claim for which the argument provides evidence, but which is not the argument's conclusion.

17. Critics worry that pessimistic news reports about the economy harm it by causing people to lose confidence in the economy, of which everyone has direct experience every day. Journalists respond that to do their jobs well they cannot worry about the effects of their work. Also, studies show that people do not defer to journalists except on matters of which they have no direct experience.

The statements above, if true, most strongly support which one of the following?

- (A) Critics who think that the economy is affected by the extent of people's confidence in it are wrong.
- (B) Pessimistic news reports about such matters as foreign policy, of which people do not have experience every day, are likely to have a negative impact.
- (C) Pessimistic news reports about the state of the economy are likely to harm the economy.
- (D) News reports about the economy are unlikely to have a significant effect on people's opinions about the state of the economy.
- (E) Journalists need not be deeply concerned about their reporting's effects on the well-being of the average citizen.

18. Police captain: The chief of police has indicated that gifts of cash or objects valued at more than \$100 count as graft. However, I know with certainty that no officer in my precinct has ever taken such gifts, so the recent accusations of graft in my precinct are unfounded.

The reasoning in the police captain's argument is most vulnerable to criticism on the grounds that the argument

- (A) bases a rebuttal of accusations of graft on knowledge about only a limited sample of officers
- (B) fails to consider that there may be other instances of graft besides those indicated by the chief of police
- (C) bases a claim about the actions of individuals on an appeal to the character of those individuals
- (D) takes for granted that if the accusations of graft are unfounded, so is any accusation of corruption
- (E) relies on a premise that contradicts the conclusion drawn in the argument

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19. Economist: Although average hourly wages vary considerably between different regions of this country, in each region, the average hourly wage for full-time jobs increased last year. Paradoxically, however, in the country as a whole, the average hourly wage for full-time jobs decreased last year.

Which one of the following, if true of the economist's country, most helps to resolve the apparent paradox in the economist's statements?

- (A) In the country as a whole, the average hourly wage for full-time jobs has decreased slightly for each of the last three years.
- (B) Last year, to reduce costs, employers moved many full-time jobs from regions with relatively high hourly wages to regions where those jobs typically pay much less.
- (C) The year before last, the unemployment rate reached a ten-year low; last year, however, the unemployment rate increased slightly.
- (D) Last year, the rate at which the average hourly wage for full-time jobs increased varied considerably between different regions of the country.
- (E) Last year, hourly wages for most full-time jobs in the manufacturing sector declined while those for most full-time jobs in the service sector increased.

20. Researchers compared the brains of recently deceased people who had schizophrenia with those of recently deceased people who did not have schizophrenia. They found that 35 percent of the former and none of the latter showed evidence of damage to a structure of nerve cells called the subplate. They knew that this damage must have occurred prior to the second fetal trimester, when the subplate controls the development of the connections between the different parts of the brain.

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

- (A) Roughly 35 percent of people with abnormal brain subplates will eventually have schizophrenia.
- (B) A promising treatment in some cases of schizophrenia is repair of the damaged connections between the different parts of the brain.
- (C) Some people developed schizophrenia because of damage to the brain subplate after the second fetal trimester.
- (D) Schizophrenia is determined by genetic factors.
- (E) There may be a cause of schizophrenia that predates birth.

21. A new device uses the global positioning system to determine a cow's location and, when a cow strays outside of its pasture, makes noises in the cow's ears to steer it back to its home range. Outfitting all of the cattle in a herd with this device is far more expensive than other means of keeping cattle in their pastures, such as fences. The device's maker nevertheless predicts that ranchers will purchase the device at its current price.

Which one of the following, if true, does the most to support the prediction made by the device's maker?

- (A) The price of the device will come down appreciably if the device's maker is able to produce it in large quantities.
- (B) As they graze, cattle in a herd follow the lead of the same few members of the herd.
- (C) The device has been shown not to cause significant stress to cattle.
- (D) The device has been shown to be as effective as fences at keeping cattle in their pastures.
- (E) The device's maker offers significant discounts to purchasers who buy in bulk.

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22. Food co-ops are a type of consumer cooperative. Consumer cooperatives offer the same products as other stores but usually more cheaply. It is therefore more economical to shop at a food co-op than at a supermarket.

Which one of the following is most appropriate as an analogy demonstrating that the reasoning in the argument above is flawed?

- (A) By that line of reasoning, we could conclude that people who own sports cars use much more gasoline in their cars than people who own other types of cars, since sports cars use more gasoline per mile than most other cars.
- (B) By that line of reasoning, we could conclude that it is better to buy frozen vegetables than fresh vegetables, since fresh vegetables are more expensive than frozen vegetables and spoil more quickly.
- (C) By that line of reasoning, we could conclude that a person who rides a bicycle causes more pollution per mile traveled than one who rides a public bus, since bicycling is a private means of transportation and private means of transportation tend to generate more pollution per mile traveled than do public means.
- (D) By that line of reasoning, we could conclude that more people must be shopping at health food stores than ever before, since people tend to choose healthful food over unhealthful food as long as the healthful food tastes at least as good, and healthful food today is better tasting than ever.
- (E) By that line of reasoning, we could conclude that the best way to lose weight is to increase one's consumption of artificially sweetened foods, since artificially sweetened foods have fewer calories than foods sweetened with sugar, and excessive calorie intake contributes to weight gain.

23. Editorial: The gates at most railroad crossings, while they give clear warning of oncoming trains, are not large enough to prevent automobile drivers from going around them onto the tracks. Some people claim that the ensuing accidents are partly the fault of the railroad company, but this is a mistake. Granted, if one has a small child in the house, then one ought to block access to stairs completely; but a licensed driver is a capable adult who should know better.

The editorial's conclusion follows logically if which one of the following is assumed?

- (A) The gates could be made larger, yet irresponsible drivers might still be able to go around them onto the tracks.
- (B) Capable adults have a responsibility to take some measures to ensure their own safety.
- (C) When the warnings of companies are disregarded by capable adults, the adults are fully responsible for any resulting accidents.
- (D) Small children are not involved in accidents resulting from drivers going around the gates.
- (E) Any company's responsibility to promote public safety is not unlimited.

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24. Researcher: People who participate in opinion surveys often give answers they believe the opinion surveyor expects to hear, and it is for this reason that some opinion surveys do not reflect the actual views of those being surveyed. However, in well-constructed surveys, the questions are worded so as to provide respondents with no indication of which answers the surveyor might expect. So if a survey is well constructed, survey respondents' desire to meet surveyors' expectations has no effect on the survey's results.

The reasoning in the researcher's argument is questionable in that the argument overlooks the possibility that

- (A) an opinion survey that disguises the surveyor's expectations may be flawed in a number of ways, some of which have nothing to do with the surveyor's expectations
- (B) when people who respond to opinion surveys hold strong opinions, their answers are unlikely to be influenced by other people's expectations
- (C) many opinion surveyors have no expectations whatsoever regarding the answers of people who respond to surveys
- (D) some people who know what answers an opinion surveyor expects to hear will purposefully try to thwart the surveyor's expectations
- (E) the answers of opinion-survey respondents can be influenced by beliefs about the surveyor's expectations even if those beliefs are unfounded

25. The availability of television reduces the amount of reading children do. When television is made unavailable, a nearly universal increase in reading, both by parents and by children, is reported. When television is available again, the level of reading by both parents and children relapses to its previous level.

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

- (A) Whenever the money supply in an economy fluctuates, interest rates tend to fluctuate. When the money supply remains constant, interest rates tend to remain stable. Thus, the money supply's remaining constant stabilizes interest rates.
- (B) The consumption of candy between meals disrupts a child's appetite at mealtimes. When candy is not consumed, blood sugar declines until mealtime, so the child feels hungry. A child who eats healthy meals feels less desire for candy.
- (C) Global warming is caused by increased carbon dioxide in the atmosphere. Furthermore, industrial pollution causes increased carbon dioxide in the atmosphere. So industrial pollution causes global warming.
- (D) Voting behavior is affected by factors other than political candidates' records of political achievement. For example, a candidate who projects confidence will gain votes as a result, whereas a candidate with a supercilious facial expression will lose votes.
- (E) Adults read less than they once did because there are so many other activities to divert them. This can be seen from the fact that the more time they spend on such other activities, the less they read. Conversely, the less they read, the more time they spend on such other activities.

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.