

## 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. Paperback books wear out more quickly than hardcover books do, but paperback books cost much less. Therefore, users of public libraries would be better served if public libraries bought only paperback books, since by so doing these libraries could increase the number of new book titles added to their collections without increasing their budgets.

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

- (A) If a public library's overall budget is cut, the budget for new acquisitions is usually cut back more than is that for day-to-day operations.
  - (B) Paperback books can very inexpensively have their covers reinforced in order to make them last longer.
  - (C) Many paperback books are never published in hardcover.
  - (D) Library users as a group depend on their public library for access to a wide variety of up-to-date reference books that are published in hardcover only.
  - (E) People are more likely to buy for themselves a copy of a book they had previously borrowed from the public library if that book is available in paperback.
2. Garbage in this neighborhood probably will not be collected until Thursday this week. Garbage is usually collected here on Wednesdays, and the garbage collectors in this city are extremely reliable. However, Monday was a public holiday, and after a public holiday that falls on a Monday, garbage throughout the city is supposed to be collected one day later than usual.

The argument proceeds by

- (A) treating several pieces of irrelevant evidence as though they provide support for the conclusion
- (B) indirectly establishing that one thing is likely to occur by directly ruling out all of the alternative possibilities
- (C) providing information that allows application of a general rule to a specific case
- (D) generalizing about all actions of a certain kind on the basis of a description of one such action
- (E) treating something that is probable as though it were inevitable

3. When compact discs first entered the market, they were priced significantly higher than vinyl records. Manufacturers attributed the difference in price to the difference in production costs, saying that compact disc production was expensive because the technology was new and unfamiliar. As the technology became more efficient, the price of the discs did indeed come down. But vinyl records, whose production technology has long been established, then went up in price to approach that of compact discs.

Which one of the following most helps to explain why the price of vinyl records went up?

- (A) Consumers were so enthusiastic about the improved sound quality offered by compact disc technology that they were willing to pay a higher price to obtain it.
- (B) Some consumers who continued to buy vinyl records instead of compact discs did so because they were unwilling to pay a higher price for compact discs.
- (C) As consumers bought compact discs instead of vinyl records, the number of vinyl records produced decreased, making their production less cost-efficient.
- (D) Compact disc player technology continued to change and develop even after compact discs first entered the market.
- (E) When compact discs first entered the market, many consumers continued to buy vinyl records rather than buying the equipment necessary to play compact discs.

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4. Conservationists have established land reserves to preserve the last remaining habitat for certain species whose survival depends on the existence of such habitat. A grove of trees in Mexico that provide habitat for North American monarch butterflies in winter is a typical example of such a land reserve. If global warming occurs as predicted, however, the temperature bands within which various types of vegetation can grow will shift into regions that are currently cooler.

If the statements above are true, they provide the most support for which one of the following?

- (A) If global warming occurs as predicted, the conservation land reserves will cease to serve their purpose.
  - (B) Monarch butterflies will succeed in adapting to climatic change by shortening their migration.
  - (C) If global warming occurs, it will melt polar ice and so will cause the sea level to rise so high that many coastal plants and animals will become extinct.
  - (D) The natural world has adapted many times in the past to drastic global warming and cooling.
  - (E) If global warming occurs rapidly, species of plants and animals now protected in conservation land reserves will move to inhabit areas that are currently used for agriculture.
5. Financial success does not guarantee happiness. This claim is not mere proverbial wisdom but a fact verified by statistics. In a recently concluded survey, only one-third of the respondents who claimed to have achieved financial success reported that they were happy.

Which one of the following, if true, most strongly supports the conclusion drawn from the survey results?

- (A) The respondents who reported financial success were, for the most part, financially successful.
- (B) Financial success was once thought to be necessary for happiness but is no longer considered a prerequisite for happiness.
- (C) Many of the respondents who claimed not to have achieved financial success reported that they were happy five years ago.
- (D) Many of the respondents who failed to report financial success were in fact financially successful.
- (E) Most of the respondents who reported they were unhappy were in fact happy.

6. The distance that animals travel each day and the size of the groups in which they live are highly correlated with their diets. And diet itself depends in large part on the sizes and shapes of animals' teeth and faces.

The statements above provide the most support for which one of the following?

- (A) Animals that eat meat travel in relatively small groups and across relatively small ranges compared to animals that eat plants.
  - (B) Animals that have varied diets can be expected to be larger and more robust than animals that eat only one or two kinds of food.
  - (C) When individual herd animals lose their teeth through age or injury, those animals are likely to travel at the rear of their herd.
  - (D) Information about the size and shape of an animal's face is all that is needed to identify the species to which that animal belongs.
  - (E) Information about the size and shape of an extinct animal's teeth and face can establish whether that animal is likely to have been a herd animal.
7. It is not correct that the people of the United States, relative to comparable countries, are the most lightly taxed. True, the United States has the lowest tax, as percent of gross domestic product, of the Western industrialized countries, but tax rates alone do not tell the whole story. People in the United States pay out of pocket for many goods and services provided from tax revenues elsewhere. Consider universal health care, which is an entitlement supported by tax revenues in every other Western industrialized country. United States government health-care expenditures are equivalent to about 5 percent of the gross domestic product, but private health-care expenditures represent another 7 percent. This 7 percent, then, amounts to a tax.

The argument concerning whether the people of the United States are the most lightly taxed is most vulnerable to which one of the following criticisms?

- (A) It bases a comparison on percentages rather than on absolute numbers.
- (B) It unreasonably extends the application of a key term.
- (C) It uses negatively charged language instead of attempting to give a reason.
- (D) It generalizes from only a few instances.
- (E) It sets up a dichotomy between alternatives that are not exclusive.

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8. Various mid-fourteenth-century European writers show an interest in games, but no writer of this period mentions the playing of cards. Nor do any of the mid-fourteenth-century statutes that proscribe or limit the play of games mention cards, though they do mention dice, chess, and other games. It is therefore likely that, contrary to what is sometimes claimed, at that time playing cards was not yet common in Europe.

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

- (A) Neither today's newspapers nor this evening's television news mentioned a huge fire that was rumored to have happened in the port last night. Therefore, there probably was no such fire.
- (B) This evening's television news reported that the cruise ship was only damaged in the fire last night, whereas the newspaper reported that it was destroyed. The television news is based on more recent information, so probably the ship was not destroyed.
- (C) Among the buildings that are near the port is the newspaper's printing plant. Early editions of this morning's paper were very late. Therefore, the fire at the port probably affected areas beyond the port itself.
- (D) The newspaper does not explicitly say that the port reopened after the fire, but in its listing of newly arrived ships it mentions some arrival times after the fire. Therefore, the port was probably not closed for long.
- (E) The newspaper is generally more reliable than the television news, and the newspaper reported that the damage from last night's fire in the port was not severe. Therefore, the damage probably was not severe.

9. In a mature tourist market such as Bellaria there are only two ways hotel owners can increase profits: by building more rooms or by improving what is already there. Rigid land-use laws in Bellaria rule out construction of new hotels or, indeed, any expansion of hotel capacity. It follows that hotel owners cannot increase their profits in Bellaria since Bellarian hotels \_\_\_\_\_.

Which one of the following logically completes the argument?

- (A) are already operating at an occupancy rate approaching 100 percent year-round
  - (B) could not have been sited any more attractively than they are even in the absence of land-use laws
  - (C) have to contend with upward pressures on the cost of labor which stem from an incipient shortage of trained personnel
  - (D) already provide a level of luxury that is at the limits of what even wealthy patrons are prepared to pay for
  - (E) have shifted from serving mainly Bellarian tourists to serving foreign tourists traveling in organized tour groups
10. Every political philosopher of the early twentieth century who was either a socialist or a communist was influenced by Rosa Luxemburg. No one who was influenced by Rosa Luxemburg advocated a totalitarian state.
- If the statements above are true, which one of the following must on the basis of them also be true?
- (A) No early-twentieth-century socialist political philosopher advocated a totalitarian state.
  - (B) Every early-twentieth-century political philosopher who did not advocate a totalitarian state was influenced by Rosa Luxemburg.
  - (C) Rosa Luxemburg was the only person to influence every early-twentieth-century political philosopher who was either socialist or communist.
  - (D) Every early-twentieth-century political philosopher who was influenced by Rosa Luxemburg and was not a socialist was a communist.
  - (E) Every early-twentieth-century political philosopher who did not advocate a totalitarian state was either socialist or communist.

Questions 11–12

Harris: Currently, hybrid animals are not protected by international endangered-species regulations. But new techniques in genetic research suggest that the red wolf, long thought to be an independent species, is a hybrid of the coyote and the gray wolf. Hence, since the red wolf clearly deserves protection, these regulations should be changed to admit the protection of hybrids.

Vogel: Yet hybrids do not need protection. Since a breeding population that arises through hybridization descends from independent species, if any such population were to die out, it could easily be revived by interbreeding members of the species from which the hybrid is descended.

11. Which one of the following is a point at issue between Harris and Vogel?
  - (A) whether the red wolf descends from the gray wolf and the coyote
  - (B) whether there are some species that are currently considered endangered that are not in fact in any danger
  - (C) whether the packs of red wolves that currently exist are in danger of dying out
  - (D) whether there are some hybrids that ought to be protected by endangered-species regulations
  - (E) whether new techniques in genetic research should be used to determine which groups of animals constitute species and which constitute hybrids
12. Which one of the following is an assumption on which Vogel's argument relies?
  - (A) The techniques currently being used to determine whether a population of animals is a hybrid of other species have proven to be reliable.
  - (B) The international regulations that protect endangered species and subspecies are being enforced successfully.
  - (C) The gray wolf has been successfully bred in captivity.
  - (D) All hybrids are the descendants of species that are currently extant.
  - (E) The coyote and the red wolf are not related genetically.

13. From an analysis of broken pottery and statuary, archaeologists have estimated that an ancient settlement in southwestern Arabia was established around 1000 B.C. However, new evidence suggests that the settlement is considerably older: tests show that a piece of building timber recently uncovered at the site is substantially older than the pottery and statuary.

Which one of the following, if true, most seriously undermines the conclusion drawn from the new evidence?

- (A) The building timber bore marks suggesting that it had been salvaged from an earlier settlement.
    - (B) The pieces of pottery and fragments of statues that were analyzed come from several parts of the site.
    - (C) The tests used to determine the age of the pottery and statuary had been devised more recently than those used to determine the age of the building timber.
    - (D) The site has yielded many more samples of pottery and statuary than of building timber.
    - (E) The type of pottery found at the site is similar to a type of pottery associated with civilizations that existed before 1000 B.C.
  14. The book *To Save the Earth* is so persuasive that no one who reads it can fail to heed its environmentalist message. Members of the Earth Association have given away 2,000 copies in the last month. Thus the Earth Association can justly claim credit for at least 2,000 people in one month converted to the environmentalist cause.
- Which one of the following is an assumption on which the argument depends?
- (A) No other environmental organization gave away copies of *To Save the Earth* during the month in which the Earth Association gave away its 2,000 copies.
    - (B) The people to whom the Earth Association gave copies of *To Save the Earth* would not have been willing to pay to receive it from the Earth Association.
    - (C) The copies of *To Save the Earth* given away by members of the Earth Association were printed on recycled paper.
    - (D) None of those who received *To Save the Earth* from a member of the Earth Association were already committed to the environmentalist cause when they received this book.
    - (E) Every recipient of *To Save the Earth* will embrace the environmental program advocated by the Earth Association.

15. Smokers of pipes or cigars run a distinctly lower risk to their health than do cigarette smokers. However, whereas cigarette smokers who quit smoking altogether sharply reduce their risk of smoking related health problems, those who give up cigarettes and take up pipes or cigars remain in as much danger as before.

Which one of the following, if true, offers the best prospects for an explanation of why the two changes in smoking habits do not both result in reduced health risks?

- (A) Smokers of pipes or cigars who quit smoking thereby reduce their risk of smoking-related health problems.
- (B) Cigarette smokers who quit smoking for a time and who then resume cigarette smoking do not necessarily reduce their risk of smoking-related health problems.
- (C) The kinds of illnesses that smokers run an increased risk of contracting develop no earlier in cigarette smokers than they do in smokers of pipes or cigars.
- (D) At any given period in their lives, virtually all smokers smoke either cigarettes exclusively or cigars exclusively or pipes exclusively, rather than alternating freely among various ways of smoking.
- (E) People who switch from cigarette smoking to smoking pipes or cigars inhale smoke in a way that those who have never smoked cigarettes do not.

Questions 16–17

Production manager: The building materials that we produce meet industry safety codes but pose some safety risk. Since we have recently developed the technology to make a safer version of our product, we should stop producing our current product and sell only the safer version in order to protect public safety.

Sales manager: If we stop selling our current product, we will have no money to develop and promote the safer product. We need to continue to sell the less-safe product in order to be in a position to market the safer product successfully.

16. Which one of the following principles, if established, most helps to justify the production manager's conclusion?
- (A) Companies should be required to develop safer products if such development can be funded from sales of existing products.
  - (B) That a product does not meet industry safety codes should be taken as sufficient indication that the product poses some safety risks.
  - (C) Companies should not sell a product that poses safety risks if they are technologically capable of producing a safer version of that product.
  - (D) Product safety codes should be reviewed whenever an industry replaces one version of a product with a technologically more advanced version of that product.
  - (E) In order to make building materials safer, companies should continually research new technologies whether or not they are required to do so in order to comply with safety codes.
17. The sales manager counters the production manager's argument by
- (A) pointing out that one part of the production manager's proposal would have consequences that would prevent successful execution of another part
  - (B) challenging the production manager's authority to dictate company policy
  - (C) questioning the product manager's assumption that a product is necessarily safe just because it is safer than another product
  - (D) proposing a change in the standards by which product safety is judged
  - (E) presenting evidence to show that the production manager has overestimated the potential impact of the new technology



Questions 18–19

Each year, an official estimate of the stock of cod in the Grand Banks is announced. This estimate is obtained by averaging two separate estimates of how many cod are available, one based on the number of cod caught by research vessels during a once-yearly sampling of the area and the other on the average number of tons of cod caught by various commercial vessels per unit of fishing effort expended there in the past year—a unit of fishing effort being one kilometer of net set out in the water for one hour. In previous decades, the two estimates usually agreed closely. However, for the last decade the estimate based on commercial tonnage has been increasing markedly, by about the same amount as the sampling-based estimate has been decreasing.

18. If the statements in the passage are true, which one of the following is most strongly supported by them?
- (A) Last year's official estimate was probably not much different from the official estimate ten years ago.
  - (B) The number of commercial vessels fishing for cod in the Grand Banks has increased substantially over the past decade.
  - (C) The sampling-based estimate is more accurate than the estimate based on commercial tonnage in that the data on which it relies is less likely to be inaccurate.
  - (D) The once-yearly sampling by research vessels should be used as the sole basis for arriving at the official estimate of the stock of cod.
  - (E) Twenty years ago, the overall stock of cod in the Grand Banks was officially estimated to be much larger than it is estimated to be today.
19. Which one of the following, if true, most helps to account for the growing discrepancy between the estimate based on commercial tonnage and the research-based estimate?
- (A) Fishing vessels often exceed their fishing quotas for cod and therefore often underreport the number of tons of cod that they catch.
  - (B) More survey vessels are now involved in the yearly sampling effort than were involved 10 years ago.
  - (C) Improvements in technology over the last 10 years have allowed commercial fishing vessels to locate and catch large schools of cod more easily.
  - (D) Survey vessels count only those cod caught during a 30-day survey period, whereas commercial fishing vessels report all cod caught during the course of a year.
  - (E) Because of past overfishing of cod, fewer fishing vessels now catch the maximum tonnage of cod each vessel is allowed by law to catch.

20. Pretzels can cause cavities. Interestingly, the longer that a pretzel remains in contact with the teeth when it is being eaten, the greater the likelihood that a cavity will result. What is true of pretzels in this regard is also true of caramels. Therefore, since caramels dissolve more quickly in the mouth than pretzels do, eating a caramel is less likely to result in a cavity than eating a pretzel is.

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

- (A) treats a correlation that holds within individual categories as thereby holding across categories as well
- (B) relies on the ambiguous use of a key term
- (C) makes a general claim based on particular examples that do not adequately represent the respective classes that they are each intended to represent
- (D) mistakes the cause of a particular phenomenon for the effect of that phenomenon
- (E) is based on premises that cannot all be true

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## Questions 21–22

Mark: Plastic-foam cups, which contain environmentally harmful chlorofluorocarbons, should no longer be used; paper cups are preferable. Styrene, a carcinogenic by-product, is generated in foam production, and foam cups, once used, persist indefinitely in the environment.

Tina: You overlook the environmental effects of paper cups. A study done 5 years ago showed that making paper for their production burned more petroleum than was used for foam cups and used 12 times as much steam, 36 times as much electricity, and twice as much cooling water. Because paper cups weigh more, their transportation takes more energy. Paper mills produce water pollution, and when the cups decay they produce methane, a gas that contributes to harmful global warming. So they are a worse choice.

21. Which one of the following, if true, could Mark cite to counter evidence offered by Tina?
- (A) The use of energy for chain saws that cut down trees and for trucks that haul logs is part of the environmental cost of manufacturing paper.
  - (B) Foam cups are somewhat more acceptable to consumers than paper cups because of their better insulating qualities.
  - (C) The production and transportation of petroleum occasions serious environmental pollution, but the energy that runs paper mills now comes from burning waste wood rather than petroleum.
  - (D) The amount of styrene escaping into the environment or remaining in foam cups after their manufacture is negligible.
  - (E) Acre for acre, tree farms for the production of wood for paper have fewer beneficial effects on the environment than do natural forests that remain uncut.
22. To decide the issue between Mark and Tina, it would first be most important to decide
- (A) how soon each of the kinds of harm cited by Mark and Tina would be likely to be at its maximum level
  - (B) whether members of some societies use, on average, more disposable goods than do members of other societies
  - (C) whether it is necessary to seek a third alternative that has none of the negative consequences cited with respect to the two products
  - (D) how much of the chains of causation involved in the production, marketing, and disposal of the products should be considered in analyzing their environmental impact
  - (E) whether paper and foam cups, in their most popular sizes, hold the same quantities of liquid

23. When people experience throbbing in their teeth or gums, they have serious dental problems, and if a dental problem is serious, it will be a problem either of tooth decay or of gum disease. Therefore, since throbbing in the teeth or gums is a sign of serious dental problems, and neither Sabina's teeth nor her gums are throbbing, Sabina can be suffering from neither tooth decay nor gum disease.

Which one of the following contains an error of reasoning most similar to that made in the argument above?

- (A) People who drink a lot of coffee are said to have jittery nerves. Therefore, medical students who drink a lot of coffee should not become neonatologists or surgeons since neither neonatology nor surgery should be practiced by people with jittery nerves.
- (B) A legally practicing psychiatrist must have both a medical degree and psychiatric training. Thus, since Emmett has not undergone psychiatric training, if he is practicing as a psychiatrist, he is not doing so legally.
- (C) Someone with severe nasal congestion has a sinus infection or else is suffering from an allergy. Therefore, if Barton does not have a sinus infection, Barton probably does not have severe nasal congestion.
- (D) If a person is interested in either physics or chemistry, then that person would be wise to consider a career in medicine. Yolanda, however, is interested in neither physics nor chemistry, so it would not be wise for her to consider a career in medicine.
- (E) Someone who is neither an ophthalmologist nor an optometrist lacks specialized training for diagnosing defects of the eye. Therefore, Kim must have been trained in ophthalmology or optometry, given that she accurately diagnosed John's eye defect.

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24. A certain airport security scanner designed to detect explosives in luggage will alert the scanner's operator whenever the piece of luggage passing under the scanner contains an explosive. The scanner will erroneously alert the operator for only one percent of the pieces of luggage that contain no explosives. Thus in ninety-nine out of a hundred alerts explosives will actually be present.

The reasoning in the argument is flawed because the argument

- (A) ignores the possibility of the scanner's failing to signal an alert when the luggage does contain an explosive
  - (B) draws a general conclusion about reliability on the basis of a sample that is likely to be biased
  - (C) ignores the possibility of human error on the part of the scanner's operator once the scanner has alerted him or her
  - (D) fails to acknowledge the possibility that the scanner will not be equally sensitive to all kinds of explosives
  - (E) substitutes one group for a different group in the statement of a percentage
25. Unless negotiations begin soon, the cease-fire will be violated by one of the two sides to the dispute. Negotiations will be held only if other countries have pressured the two sides to negotiate; an agreement will emerge only if other countries continue such pressure throughout the negotiations. But no negotiations will be held until international troops enforcing the cease-fire have demonstrated their ability to counter any aggression from either side, thus suppressing a major incentive for the two sides to resume fighting.

If the statements above are true, and if negotiations between the two sides do begin soon, at the time those negotiations begin each of the following must also be true EXCEPT:

- (A) The cease-fire has not been violated by either of the two sides.
- (B) International troops enforcing the cease-fire have demonstrated that they can counter aggression from either of the two sides.
- (C) A major incentive for the two sides to resume hostilities has been suppressed.
- (D) Other countries have exerted pressure on the two sides to the dispute.
- (E) The negotiations' reaching an agreement depends in part on the actions of other countries.

26. If Blankenship Enterprises has to switch suppliers in the middle of a large production run, the company will not show a profit for the year. Therefore, if Blankenship Enterprises in fact turns out to show no profit for the year, it will also turn out to be true that the company had to switch suppliers during a large production run.

The reasoning in the argument is most vulnerable to criticism on which one of the following grounds?

- (A) The argument is a circular argument made up of an opening claim followed by a conclusion that merely paraphrases that claim.
- (B) The argument fails to establish that a condition under which a phenomenon is said to occur is the only condition under which that phenomenon occurs.
- (C) The argument involves an equivocation, in that the word "profit" is allowed to shift its meaning during the course of the argument.
- (D) The argument erroneously uses an exceptional, isolated case to support a universal conclusion.
- (E) The argument explains one event as being caused by another event, even though both events must actually have been caused by some third, unidentified event.

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.