

## SECTION II

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. If you have a large amount of money in the bank, your spending power is great. If your spending power is great, you are happy. So if you have a large amount of money in the bank, you are happy.

Which one of the following most closely parallels the reasoning in the argument above?

- (A) If you have good health, you can earn a lot. If you can earn a lot, you can buy an expensive house. So if you have good health, you can have a comfortable life.
- (B) If you drink too much alcohol, you will feel sick. If you drink too much alcohol, you will have no money left. So if you have no money left, you will feel sick.
- (C) If you swim energetically, your heart rate increases. If your heart rate increases, you are overexcited. So if you swim energetically, you are overexcited.
- (D) If you take a great deal of exercise, you are physically fit. If you take a great deal of exercise, you are exhausted. So if you are physically fit, you are exhausted.
- (E) If you have a large amount of money in the bank, you are confident about the future. If you are optimistic by nature, you are confident about the future. So if you have a large amount of money in the bank, you are optimistic by nature.

2. For a television program about astrology, investigators went into the street and found twenty volunteers born under the sign of Gemini who were willing to be interviewed on the program and to take a personality test. The test confirmed the investigators' personal impressions that each of the volunteers was more sociable and extroverted than people are on average. This modest investigation thus supports the claim that one's astrological birth sign influences one's personality.

Which one of the following, if true, indicates the most serious flaw in the method used by the investigators?

- (A) The personality test was not administered or scored personally by the investigators.
- (B) People born under astrological signs other than Gemini have been judged by astrologers to be much less sociable than those born under Gemini.
- (C) The personal impressions the investigators first formed of other people have tended to be confirmed by the investigators' later experience of those people.
- (D) There is not likely to be a greater proportion of people born under the sign of Gemini on the street than in the population as a whole.
- (E) People who are not sociable and extroverted are not likely to agree to participate in such an investigation.

GO ON TO THE NEXT PAGE.

3. In Europe, schoolchildren devote time during each school day to calisthenics. North American schools rarely offer a daily calisthenics program. Tests prove that North American children are weaker, slower, and shorter-winded than European children. We must conclude that North American children can be made physically fit only if they participate in school calisthenics on a daily basis.

Which one of the following is assumed in the passage?

- (A) All children can be made physically fit by daily calisthenics.
  - (B) All children can be made equally physically fit by daily calisthenics.
  - (C) Superior physical fitness produces superior health.
  - (D) School calisthenics are an indispensable factor in European children's superior physical fitness.
  - (E) North American children can learn to eat a more nutritious diet as well as to exercise daily.
4. A work of architecture, if it is to be both inviting and functional for public use, must be unobtrusive, taking second place to the total environment. Modern architects, plagued by egoism, have violated this precept. They have let their strong personalities take over their work, producing buildings that are not functional for public use.

Which one of the statements below follows logically from the statements in the passage?

- (A) Unobtrusive architecture is both inviting and functional.
- (B) Modern architects who let their strong personalities take over their work produce buildings that are not unobtrusive.
- (C) An architect with a strong personality cannot produce buildings that function well for the public.
- (D) A work of architecture that takes second place to the environment functions well for public use.
- (E) A work of architecture cannot simultaneously express its architect's personality and be functional for public use.

5. Observatory director: Some say that funding the megatelescope will benefit only the astronomers who will work with it. This dangerous point of view, applied to the work of Maxwell, Newton, or Einstein, would have stifled their research and deprived the world of beneficial applications, such as the development of radio, that followed from that research.

If the statements above are put forward as an argument in favor of development of the megatelescope, which one of the following is the strongest criticism of that argument?

- (A) It appeals to the authority of experts who cannot have known all the issues involved in construction of the megatelescope.
  - (B) It does not identify those opposed to development of the megatelescope.
  - (C) It launches a personal attack on opponents of the megatelescope by accusing them of having a dangerous point of view.
  - (D) It does not distinguish between the economic and the intellectual senses of "benefit."
  - (E) It does not show that the proposed megatelescope research is worthy of comparison with that of eminent scientists in its potential for applications.
6. The Transit Authority's proposal to increase fares by 40 percent must be implemented. Admittedly, this fare increase will impose a hardship on some bus and subway riders. But if the fare is not increased, service will have to be cut severely and that would result in an unacceptably large loss of ridership.
- The passage employs which one of the following argumentative strategies?
- (A) It offers evidence that the recommended course of action would have no undesirable consequences.
  - (B) It shows that a proponent of any alternative position would be forced into a contradiction.
  - (C) It arrives at its conclusion indirectly by providing reasons for rejecting an alternative course of action.
  - (D) It explains why the recommended course of action would not be subject to the objections raised against the alternative.
  - (E) It justifies the conclusion by showing that such a course of action has proven effective in the past.

7. Those who participate in local politics include people who are genuinely interested in public service and people who are selfish opportunists. Everyone who participates in local politics has an influence on the community's values.

If the statements above are true, which one of the following must also be true?

- (A) Some selfish opportunists have an influence on the community's values.
- (B) Some persons who are interested in public service do not have an influence on the community's values.
- (C) All those who have an influence on the community's values participate in local politics.
- (D) Some of those who influence the community's values neither are interested in public service nor are selfish opportunists.
- (E) All those who have an influence on the community's values are either interested in public service or are selfish opportunists.

Questions 8–9

Although nondairy coffee lighteners made with coconut oil contain 2 grams of saturated fat per tablespoon, or 7 times more than does whole milk, those lighteners usually contain no cholesterol. Yet one tablespoon of such lighteners causes the consumer's blood cholesterol to rise to a higher level than does an identical amount of whole milk, which contains 2 milligrams of cholesterol per tablespoon.

8. Which one of the following, if true, contributes most to an explanation of the apparent discrepancy noted above?
- (A) Nutritionists recommend that adults consume as little saturated fat as possible and no more than 250 milligrams of cholesterol a day.
  - (B) One gram of saturated fat in food has roughly the same effect on blood cholesterol as 25 milligrams of cholesterol in food.
  - (C) Light cream, a dairy product that contains 5 times more cholesterol than does whole milk, is often chosen as a lightener by consumers who normally prefer whole milk.
  - (D) Certain nondairy coffee lighteners made without coconut oil contain less saturated fat and less cholesterol than does whole milk.
  - (E) The lower the saturated fat content of dairy products, the less cholesterol they usually contain.
9. Manufacturers of coffee lighteners based on coconut oil claim that their products usually cause the typical consumer's blood cholesterol to rise to a lower level than does the use of whole milk as a lightener. Which one of the following, if true, provides the most support for the manufacturers' claim?
- (A) Consumers of lighteners made with coconut oil who avoid other high-cholesterol foods and exercise more than average tend to have lower-than-average blood cholesterol levels.
  - (B) Coffee is frequently consumed with pastries and other rich desserts that themselves result in high blood cholesterol levels.
  - (C) One popular nondairy coffee lightener that is not based on coconut oil has reduced its fat content by 20 percent while keeping its cholesterol content at zero.
  - (D) Consumers typically add to their coffee substantially smaller quantities of coconut oil-based lighteners than of whole milk.
  - (E) Most consumers are convinced that whole dairy products increase blood cholesterol and that nondairy coffee lighteners do not.

10. People with serious financial problems are so worried about money that they cannot be happy. Their misery makes everyone close to them—family, friends, colleagues—unhappy as well. Only if their financial problems are solved can they and those around them be happy.

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

- (A) Only serious problems make people unhappy.
  - (B) People who solve their serious financial problems will be happy.
  - (C) People who do not have serious financial problems will be happy.
  - (D) If people are unhappy, they have serious financial problems.
  - (E) If people are happy, they do not have serious financial problems.
11. It is often said that people should be rewarded for doing a given job in proportion to the effort it costs them to do it. However, a little reflection will show that this is, in fact, a very bad idea, since it would mean that those people with the least skill or natural aptitude for a particular task would be the ones given the most incentive to do it.

Which one of the following argumentative strategies is used above?

- (A) stating a general principle and then presenting reasons in favor of adopting it
- (B) providing evidence that where the principle under discussion has been adopted, the results usually have been undesirable
- (C) demonstrating that a consequence that had been assumed to follow from the principle under consideration need not follow from it
- (D) attempting to undermine a general principle by arguing that undesirable consequences would follow from it
- (E) showing that, in practice, the principle under consideration could not be uniformly applied

12. Photovoltaic power plants produce electricity from sunlight. As a result of astonishing recent technological advances, the cost of producing electric power at photovoltaic power plants, allowing for both construction and operating costs, is one-tenth of what it was 20 years ago, whereas the corresponding cost for traditional plants, which burn fossil fuels, has increased. Thus, photovoltaic power plants offer a less expensive approach to meeting demand for electricity than do traditional power plants.

The conclusion of the argument is properly drawn if which one of the following is assumed?

- (A) The cost of producing electric power at traditional plants has increased over the past 20 years.
  - (B) Twenty years ago, traditional power plants were producing 10 times more electric power than were photovoltaic plants.
  - (C) None of the recent technological advances in producing electric power at photovoltaic plants can be applied to producing power at traditional plants.
  - (D) Twenty years ago, the cost of producing electric power at photovoltaic plants was less than 10 times the cost of producing power at traditional plants.
  - (E) The cost of producing electric power at photovoltaic plants is expected to decrease further, while the cost of producing power at traditional plants is not expected to decrease.
13. If that insect is a bee, it can only sting once. It only did sting once. So it is a bee.
- Which one of the following exhibits a pattern of reasoning most similar to that in the argument above?
- (A) Spring is here. It has to be, because when it is spring, I cannot stop sneezing; and I just sneezed.
  - (B) When the sky is clear, the atmospheric pressure is high. At the moment, it is clearing up, so the atmospheric pressure is bound to be high soon.
  - (C) Old and brittle paintings are always moved with extreme care. That particular painting is never moved with extreme care. So it must not be old and brittle.
  - (D) Only one more thunderstorm was needed to ruin that roof. But the roof was still fine a month later. There must not have been any thunderstorms over that month.
  - (E) To survive in the wild requires physical stamina like Mark's. All the same, Mark's fear of spiders would prevent his survival.

14. Pamela: Physicians training for a medical specialty serve as resident staff physicians in hospitals. They work such long hours—up to 36 consecutive hours—that fatigue impairs their ability to make the best medical decisions during the final portion of their shifts.

Quincy: Thousands of physicians now practicing have been trained according to the same regimen, and records show they generally made good medical decisions during their training periods. Why should what has worked in the past be changed now?

Which one of the following, if true, is the most effective counter Pamela might make to Quincy's argument?

- (A) The basic responsibilities of resident staff physicians in hospitals have not changed substantially over the past few decades.
  - (B) Because medical reimbursement policies now pay for less recuperation time in hospitals, patients in hospitals are, on the average, more seriously ill during their stays than in the past.
  - (C) It is important that emergency-room patients receive continuity of physician care, insofar as possible, over the critical period after admission, generally 24 hours.
  - (D) The load of work on resident physicians-in-training varies according to the medical specialty for which each is being trained.
  - (E) The training of physicians should include observation and recognition of the signs indicating a hospitalized patient's progress or decline over a period of at least 36 hours.
15. When a group of children who have been watching television programs that include acts of violence is sent to play with a group of children who have been watching programs that do not include acts of violence, the children who have been watching violent programs commit a much greater number of violent acts in their play than do the children who have been watching nonviolent programs. Therefore, children at play can be prevented from committing violent acts by not being allowed to watch violence on television.

The argument in the passage assumes which one of the following?

- (A) Television has a harmful effect on society.
- (B) Parents are responsible for the acts of their children.
- (C) Violent actions and passive observation of violent actions are not related.
- (D) There are no other differences between the two groups of children that might account for the difference in violent behavior.
- (E) Children who are treated violently will respond with violence.

16. It is repeatedly claimed that the dumping of nuclear waste poses no threat to people living nearby. If this claim could be made with certainty, there would be no reason for not locating sites in areas of dense population. But the policy of dumping nuclear waste only in the more sparsely populated regions indicates, at the very least, some misgiving about safety on the part of those responsible for policy.

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

- (A) Evacuation plans in the event of an accident could not be guaranteed to work perfectly except where the population is small.
  - (B) In the event of an accident, it is certain that fewer people would be harmed in a sparsely populated than in a densely populated area.
  - (C) Dumping of nuclear waste poses fewer economic and bureaucratic problems in sparsely populated than in densely populated areas.
  - (D) There are dangers associated with chemical waste, and it, too, is dumped away from areas of dense population.
  - (E) Until there is no shred of doubt that nuclear dumps are safe, it makes sense to situate them where they pose the least threat to the public.
17. A society's infant mortality rate is an accepted indicator of that society's general health status. Even though in some localities in the United States the rate is higher than in many developing countries, in the United States overall the rate has been steadily declining. This decline does not necessarily indicate, however, that babies in the United States are now, on the average, healthier at birth than they were in the past.

Which one of the following reasons, if true, most strongly supports the claim made above about the implications of the decline?

- (A) The figure for infant mortality is compiled as an overall rate and thus masks deficiencies in particular localities.
- (B) Low birth weight is a contributing factor in more than half of the infant deaths in the United States.
- (C) The United States has been developing and has achieved extremely sophisticated technology for saving premature and low-birth-weight babies, most of whom require extended hospital stays.
- (D) In eleven states of the United States, the infant mortality rate declined last year.
- (E) Babies who do not receive adequate attention from a caregiver fail to thrive and so they gain weight slowly.

## Questions 18–19

Like a number of other articles, Ian Ragnall's article relied on a recent survey in which over half the couples applying for divorces listed "money" as a major problem in their marriages. Ragnall's conclusion from the survey data is that financial problems are the major problem in marriages and an important factor contributing to the high divorce rate. Yet couples often express other types of marital frustrations in financial terms. Despite appearances, the survey data do not establish that financial problems are the major problem in contemporary marriages.

18. Which one of the following sentences best expresses the main point of the passage?
- (A) Financial problems are not an important factor contributing to the divorce rate.
  - (B) Marital problems are more easily solved by marriage counselors than by married couples on their own.
  - (C) The conclusion drawn in Ragnall's article is inadequately justified.
  - (D) Over half the couples applying for divorces listed money as a major problem in their marriages.
  - (E) Many articles wrongly claim that financial problems are the major factor contributing to the divorce rate.
19. In the passage, the author does which one of the following?
- (A) undermines a conclusion drawn from statistical data by offering a specific counterexample
  - (B) undermines a conclusion drawn from statistical data by offering an alternative explanation for some of the data
  - (C) undermines a conclusion drawn from statistical data by showing that one cannot prove the presence of an emotion by using statistical methods
  - (D) undermines a conclusion drawn from statistical data by criticizing the survey for which the data was gathered
  - (E) undermines a conclusion by showing that couples cannot accurately describe their own problems

20. In Brazil, side-by-side comparisons of Africanized honeybees and the native honeybees have shown that the Africanized bees are far superior honey producers. Therefore, there is no reason to fear that domestic commercial honey production will decline in the United States if local honeybees are displaced by Africanized honeybees.

Each of the following, if true, would weaken the argument EXCEPT:

- (A) The honeybees native to Brazil are not of the same variety as those most frequently used in the commercial beekeeping industry in the United States.
  - (B) Commercial honey production is far more complicated and expensive with Africanized honeybees than it is with the more docile honeybees common in the United States.
  - (C) If Africanized honeybees replace local honeybees, certain types of ornamental trees will be less effectively pollinated.
  - (D) In the United States a significant proportion of the commercial honey supply comes from hobby beekeepers, many of whom are likely to abandon beekeeping with the influx of Africanized bees.
  - (E) The area of Brazil where the comparative study was done is far better suited to the foraging habits of the Africanized honeybees than are most areas of the United States.
21. The public is well aware that high blood cholesterol levels raise the risk of stroke caused by blood clots. But a recent report concludes that people with low blood cholesterol levels are at increased risk of the other lethal type of stroke—cerebral hemorrhage, caused when a brain artery bursts. The report suggests that because blood cholesterol plays a vital role in maintaining cell membranes, low blood cholesterol weakens artery walls, making them prone to rupture. The conclusion thus supports a long-standing contention by Japanese researchers that Western diets better protect against cerebral hemorrhage than do non-Western diets.
- The argument is based on which one of the following assumptions?
- (A) Western diets are healthier than non-Western diets.
  - (B) Western diets result in higher blood cholesterol levels than do non-Western diets.
  - (C) High blood cholesterol levels preclude the weakening of artery walls.
  - (D) Cerebral hemorrhages are more dangerous than strokes caused by blood clots.
  - (E) People who have low blood pressure are at increased risk of cerebral hemorrhage.



22. Public reports by national commissions, governors' conferences, and leadership groups have stressed the great need for better understanding of international affairs by the citizenry. If the country is to remain a leading nation in an era of international competitiveness, the need is undeniable. If there is such a need for the citizenry to have a better understanding of international affairs, then all of our new teachers must be prepared to teach their subject matter with an international orientation.

If all of the statements in the passage are true, which one of the following must also be true?

- (A) If the country is to remain a leading nation in an era of international competitiveness, then new teachers must be prepared to teach their subject matter with an international orientation.
- (B) If new teachers are prepared to teach their subject matter with an international orientation, then the country will remain a leading nation in an era of international competitiveness.
- (C) If there is better understanding of international affairs by the citizenry, then the country will remain a leading nation in an era of international competitiveness.
- (D) If the country is to remain a leading nation in an era of international competitiveness, then there is no need for the citizenry to have a better understanding of international affairs.
- (E) Public reports from various groups and commissions have stressed the need for a more international orientation in the education of teachers.

23. "DNA fingerprinting" is a recently-introduced biochemical procedure that uses a pattern derived from a person's genetic material to match a suspect's genetic material against that of a specimen from a crime scene. Proponents have claimed astronomically high odds against obtaining a match by chance alone. These odds are based on an assumption that there is independence between the different characteristics represented by a single pattern.

Which one of the following, if true, casts the most doubt on the claim of the proponents of DNA fingerprinting?

- (A) The large amount of genetic material that people share with all other people and with other animals is not included in the DNA fingerprinting procedure.
- (B) There is a generally accepted theoretical basis for interpreting the patterns produced by the procedure.
- (C) In the whole population there are various different subgroups, within each of which certain sets of genetic characteristics are shared.
- (D) The skill required of laboratory technicians performing the DNA fingerprinting procedure is not extraordinary.
- (E) In the investigation of certain genetic diseases, the techniques used in DNA fingerprinting have traced the transmission of the diseases among the living members of very large families.

GO ON TO THE NEXT PAGE.

24. Anthropologists assert that cultures advance only when independence replaces dependence—that is, only when imposition by outsiders is replaced by initiative from within. In other words, the natives of a culture are the only ones who can move that culture forward. Non-natives may provide valuable advice, but any imposition of their views threatens independence and thus progress. If one looks at individual schools as separate cultures, therefore, the key to educational progress is obvious: \_\_\_\_\_.

Which one of the following best completes the passage?

- (A) individual schools must be independent of outside imposition
- (B) some schools require more independence than others, depending on the initiative of their staffs and students
- (C) school system officials must tailor their initiatives for change to each individual school in the system
- (D) outsiders must be prevented from participation in schools' efforts to advance
- (E) the more independent a school is, the more educational progress it will make

25. The public in the United States has in the past been conditioned to support a substantial defense budget by the threat of confrontation with the Eastern bloc. Now that that threat is dissolving, along with the Eastern bloc itself, it is doubtful whether the public can be persuaded to support an adequate defense budget.

Which one of the following indicates a weakness in the position expressed above?

- (A) It presupposes that public opinion can be manipulated indefinitely, without the public's becoming aware of that manipulation.
- (B) It refers to past and present events that do not have a causal connection with public support of the budget.
- (C) It assumes as fact what it seeks to establish by reasoning.
- (D) It fails to give any reason for the judgment it reaches.
- (E) It hinges on the term "adequate," the precise meaning of which requires reevaluation in the new context.

## 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.