

## 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. Editorial: The structure of the present school calendar was established to satisfy the requirements of early-twentieth-century agricultural life. In those days, farmers needed their children to have long breaks during which they could remain at home and help with the harvest. The contemporary school year is thus made up of periods of study interspersed with long breaks. But agricultural life no longer occupies most of our citizens, so we can now make changes that serve the interests of children. Therefore, long breaks should be removed from the school calendar.

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

- (A) During long breaks children have a tendency to forget what they have learned.
- (B) Children of farmers need to continue observing a school calendar made up of periods of study interspersed with long breaks.
- (C) Long breaks in the school calendar should be replaced with breaks that are no longer than workers' average vacations.
- (D) A change in the present school calendar that shortened breaks would serve the interests of agricultural life.
- (E) A school calendar made up of periods of study without long breaks would serve the interests of children more than a school calendar with long breaks.

2. Leatherbacks, the largest of the sea turtles, when subjected to the conditions of captivity, are susceptible to a wide variety of fatal diseases with which they would never come in contact if they lived in the wild. It is surprising, therefore, that the likelihood that a leatherback will reach its theoretical maximum life expectancy is about the same whether that animal is living in captivity or in the wild.

Which one of the following, if true, most helps to resolve the apparent discrepancy?

- (A) Fewer diseases attach leatherbacks than attack other large aquatic reptiles.
- (B) The average life expectancy of sea turtles in general is longer than that of almost all other marine animals.
- (C) Most leatherbacks that perish in the wild are killed by predators.
- (D) Few zoologists have sufficient knowledge to establish an artificial environment that is conducive to the well-being of captive leatherbacks.
- (E) The size of a leatherback is an untrustworthy indicator of its age.

GO ON TO THE NEXT PAGE.

3. Chairperson: The board of directors of our corporation should not allow the incentives being offered by two foreign governments to entice us to expand our operations into their countries without further consideration of the issue. Although there is an opportunity to increase our profits by expanding our operations there, neither of these countries is politically stable.

The chairperson's reasoning most closely conforms to which one of the following principles?

- (A) A corporation should never expand operations into countries that are politically unstable.
- (B) Corporations should expand operations into countries when there is a chance of increasing profits.
- (C) Political stability is the most important consideration in deciding whether to expand operations into a country.
- (D) Corporations should always be cautious about expanding operations into politically unstable countries.
- (E) Boards of directors should always disregard governmental incentives when considering where to expand corporate operations.

4. Maria: Thomas Edison was one of the most productive inventors of his time, perhaps of all time. His contributions significantly shaped the development of modern lighting and communication systems. Yet he had only a few months of formal schooling. Therefore, you do not need a formal education to make crucial contributions to technological advancement.

Frank: That is definitely not true anymore. Since Edison's day there have been many new developments in technology; to make crucial contributions today you need much more extensive technical knowledge than was needed then.

Frank's reasoning in his response to Maria is most vulnerable to criticism on the grounds that it

- (A) fails to address the possibility that technical knowledge may be acquired without formal education
- (B) does not consider whether there have been improvements in formal education since Edison's day
- (C) relies on using the term "crucial" differently from the way Maria used it
- (D) presumes that no other inventor of Edison's time could have been as productive as Edison
- (E) fails to criticize or question any of Maria's statements about Edison

5. In some countries, there is a free flow of information about infrastructure, agriculture, and industry, whereas in other countries, this information is controlled by a small elite. In the latter countries, the vast majority of the population is denied vital information about factors that determine their welfare. Thus, these countries are likely to experience more frequent economic crises than other countries do.

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

- (A) It is more likely that people without political power will suffer from economic crises than it is that people in power will.
- (B) Economic crises become more frequent as the amount of information available to the population about factors determining its welfare decreases.
- (C) In nations in which the government controls access to information about infrastructure, agriculture, and industry, economic crises are common.
- (D) The higher the percentage of the population that participates in economic decisions, the better those decisions are.
- (E) A small elite that controls information about infrastructure, agriculture, and industry is likely to manipulate that information for its own benefit.

GO ON TO THE NEXT PAGE.

6. Hana said she was not going to invite her brothers to her birthday party. However, among the gifts Hana received at her party was a recording in which she had expressed an interest. Since her brothers had planned to give her that recording, at least some of Hana's brothers must have been among the guests at Hana's birthday party after all.

A reasoning error in the argument is that the argument

- (A) disregards the possibility that a change of mind might be justified by a change in circumstances
  - (B) treats the fact of someone's presence at a given event as a guarantee that that person had a legitimate reason to be at that event
  - (C) uses a term that is intrinsically evaluative as though that term was purely descriptive
  - (D) fails to establish that something true of some people is true of only those people
  - (E) overlooks the possibility that a person's interest in one kind of thing is compatible with that person's interest in a different kind of thing
7. If you have no keyboarding skills at all, you will not be able to use a computer. And if you are not able to use a computer, you will not be able to write your essays using a word processing program.

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

- (A) If you have some keyboarding skills, you will be able to write your essays using a word processing program.
- (B) If you are not able to write your essays using a word processing program, you have no keyboarding skills.
- (C) If you are able to write your essays using a word processing program, you have at least some keyboarding skills.
- (D) If you are able to use a computer, you will probably be able to write your essays using a word processing program.
- (E) If you are not able to write your essays using a word processing program, you are not able to use a computer.

#### Questions 8–9

Rossi: It is undemocratic for people to live under a government in which their interests are not represented. So children should have the right to vote, since sometimes the interests of children are different from those of their parents.

Smith: Granted, children's interests are not always the same as their parents'; governmental deficits incurred by their parents' generation will later affect their own generation's standard of living. But even if children are told about the issues affecting them, which is not generally the case, their conceptions of what can or should be done are too simple, and their time horizons are radically different from those of adults, so we cannot give them the responsibility of voting.

8. Which one of the following most accurately describes Rossi's argument?
- (A) It makes an appeal to a general principle.
  - (B) It denies the good faith of an opponent.
  - (C) It relies on evaluating the predictable consequences of a proposal.
  - (D) It substitutes description for giving a rationale for a policy.
  - (E) It employs a term on two different occasions in different senses.
9. Smith's statements can most directly be used as part of an argument for which one of the following views?
- (A) A democratic government does not infringe on the rights of any of its citizens.
  - (B) Children have rights that must be respected by any political authority that rules over them.
  - (C) News programs for children would give them enough information to enable them to vote in an informed way.
  - (D) If there are any limitations on full democracy that result from denying the vote to children, such limitations must be accepted.
  - (E) If parents do not adequately represent their children's interests in the political sphere, those interests will be adequately represented by someone else.

GO ON TO THE NEXT PAGE.

10. To accommodate the personal automobile, houses are built on widely scattered lots far from places of work and shopping malls are equipped with immense parking lots that leave little room for wooded areas. Hence, had people generally not used personal automobiles, the result would have to have been a geography of modern cities quite different from the one we have now.

The argument's reasoning is questionable because the argument

- (A) infers from the idea that the current geography of modern cities resulted from a particular cause that it could only have resulted from that cause
- (B) infers from the idea that the current geography of modern cities resulted from a particular cause that other facets of modern life resulted from that cause
- (C) overlooks the fact that many technological innovations other than the personal automobile have had some effect on the way people live
- (D) takes for granted that shopping malls do not need large parking lots even given the use of the personal automobile
- (E) takes for granted that people ultimately want to live without personal automobiles

11. Many of the presidents and prime ministers who have had the most successful foreign policies had no prior experience in foreign affairs when they assumed office. Although scholars and diplomats in the sacrosanct inner circle of international affairs would have us think otherwise, anyone with an acute political sense, a disciplined temperament, and a highly developed ability to absorb and retain information can quickly learn to conduct a successful foreign policy. In fact, prior experience alone will be of little value to a foreign policymaker who lacks all three of these traits.

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

- (A) Scholars and diplomats have more experience in foreign affairs than most presidents and prime ministers bring to office.
- (B) Prior experience in foreign affairs is neither a sufficient nor a necessary condition for a president or prime minister to have a successful foreign policy.
- (C) Prior experience in foreign affairs is a necessary but not sufficient condition for a president or prime minister to have a successful foreign policy.
- (D) An acute political sense, a disciplined temperament, and a highly developed ability to absorb and retain information are each necessary conditions for a president or prime minister to have a successful foreign policy.
- (E) A president or prime minister with years of experience in foreign affairs will have a more successful foreign policy than one who does not have experience in foreign affairs.

12. Navigation in animals is defined as the animal's ability to find its way from unfamiliar territory to points familiar to the animal but beyond the immediate range of the animal's senses. Some naturalists claim that polar bears can navigate over considerable distances. As evidence, they cite an instance of a polar bear that returned to its home territory after being released over 500 kilometers (300 miles) away.

Which one of the following, if true, casts the most doubt on the validity of the evidence offered in support of the naturalists' claim?

- (A) The polar bear stopped and changed course several times as it moved toward its home territory.
- (B) The site at which the polar bear was released was on the bear's annual migration route.
- (C) The route along which the polar bear traveled consisted primarily of snow and drifting ice.
- (D) Polar bears are only one of many species of mammal whose members have been known to find their way home from considerable distances.
- (E) Polar bears often rely on their extreme sensitivity to smell in order to scent out familiar territory.

GO ON TO THE NEXT PAGE.

## Questions 13–14

City council member: Despite the city's desperate need to exploit any available source of revenue, the mayor has repeatedly blocked council members' attempts to pass legislation imposing real estate development fees. It is clear that in doing so the mayor is sacrificing the city's interests to personal interests. The mayor cites figures to show that, in the current market, fees of the size proposed would significantly reduce the number of building starts and thus, on balance, result in a revenue loss to the city. But the important point is that the mayor's family is heavily involved in real estate development and thus has a strong financial interest in the matter.

13. Which one of the following most accurately and completely expresses the main conclusion of the city council member's argument?
- (A) Imposing real estate development fees is the best way for the city to exploit the available sources of revenue.
  - (B) The city would benefit financially from the passage of legislation imposing real estate development fees.
  - (C) In blocking council members' attempts to impose real estate development fees, the mayor is sacrificing the city's interests to personal interests.
  - (D) Significantly reducing the number of building starts would not, on balance, result in revenue loss to the city.
  - (E) The mayor's family has a strong financial interest in preventing the passage of legislation that would impose real estate development fees.
14. The reasoning in the city council member's argument is flawed because
- (A) the issue of the mayor's personal interest in the proposed legislation is irrelevant to any assessment of the mayor's action with respect to that legislation
  - (B) the mayor's course of action being personally advantageous is not inconsistent with the mayor's action being advantageous for the city
  - (C) the council member's own absence of personal interest in the proposed legislation has not been established
  - (D) that a person or a municipality has a need for something does not, in itself, establish that that person or that municipality has a right to that thing
  - (E) the possibility remains open that the mayor's need to avoid loss of family revenue is as desperate as the city's need to increase municipal revenue

15. Seemingly inconsequential changes in sea temperature due to global warming eventually result in declines in fish and seabird populations. A rise of just two degrees prevents the vertical mixing of seawater from different strata. This restricts the availability of upwelling nutrients to phytoplankton. Since zooplankton, which feed upon phytoplankton, feed the rest of the food chain, the declines are inevitable.

Which one of the following most accurately describes the role played in the argument by the statement that zooplankton feed upon phytoplankton?

- (A) It is a hypothesis supported by the fact that phytoplankton feed on upwelling nutrients.
- (B) It is intended to provide an example of the ways in which the vertical mixing of seawater affects feeding habits.
- (C) It helps show how global temperature changes affect larger sea animals indirectly.
- (D) It is offered as one reason that global warming must be curtailed.
- (E) It is offered in support of the idea that global warming poses a threat to all organisms.

GO ON TO THE NEXT PAGE.

16. Retailers that excel in neither convenience nor variety of merchandise tend not to be very successful. Yet many successful retailers excel in just one of the areas and meet competitors' standards for the other. Hence, a retailer's success need not depend on excellence in both areas.

The structure of the reasoning in the argument above is most parallel to that in which one of the following?

- (A) Runners who have only average speed and endurance are unlikely to win long-distance races. Some long-distance champions, however, win by being above average in speed or endurance only; therefore, being above average in both speed and endurance is not necessary.
- (B) Bicyclists who have only average speed are unlikely to win short races, but in a long-distance race such bicyclists can win if they have better-built bicycles than average and better endurance than average. Therefore, most bicycle races are not won by bicyclists with above-average speed.
- (C) Excellence in a particular swimming stroke is not always necessary in order for a swimmer to win a race that requires each swimmer to use several different strokes in sequence, and many swimmers win these races without being the best at any of the strokes. Therefore, anyone who does excel at all the strokes is almost certain to win.
- (D) Apples that are neither especially firm nor especially flavorful are unsuitable for baking; yet while flavor is essential for both baking and eating, many flavorful apples that are soft are suitable for eating. Hence, the apples that are best for eating need not be both firm and flavorful.
- (E) Most plants that are neither ornamental nor edible are useless and are thus classified as weeds; yet many such plants are useful for purposes other than food or ornamentation, and are thus not classified as weeds. Hence, not all inedible and non-ornamental plants are weeds.

17. Detective: Because the embezzler must have had specialized knowledge and access to internal financial records, we can presume that the embezzler worked for XYZ Corporation as either an accountant or an actuary. But an accountant would probably not make the kind of mistakes in ledger entries that led to the discovery of the embezzlement. Thus it is likely that the embezzler is one of the actuaries.

Each of the following weakens the detective's argument EXCEPT:

- (A) The actuaries' activities while working for XYZ Corporation were more closely scrutinized by supervisors than were the activities of the accountants.
- (B) There is evidence of breaches in computer security at the time of the embezzlement that could have given persons outside XYZ Corporation access to internal financial records.
- (C) XYZ Corporation employs eight accountants, whereas it has only two actuaries on its staff.
- (D) An independent report released before the crime took place concluded that XYZ Corporation was vulnerable to embezzlement.
- (E) Certain security measures at XYZ Corporation made it more difficult for the actuaries to have access to internal financial records than for the accountants.

GO ON TO THE NEXT PAGE.



18. Until 1985 all commercial airlines completely replenished the cabin air in planes in flight once every 30 minutes. Since then the rate has been once every hour. The less frequently cabin air is replenished in a plane in flight, the higher the level of carbon dioxide in that plane and the easier it is for airborne illnesses to be spread.

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

- (A) In 1985 there was a loosening of regulations concerning cabin air in commercial airline flights.
  - (B) People who fly today are more likely to contract airborne illnesses than were people who flew prior to 1985.
  - (C) Low levels of carbon dioxide in cabin air make it impossible for airborne illnesses to spread.
  - (D) In 1980 the rate at which the cabin air was replenished in commercial airliners was sufficient to protect passengers from the effects of carbon dioxide buildup.
  - (E) In 1980 the level of carbon dioxide in the cabin air on a two-hour commercial airline flight was lower than it is today on a similar flight.
19. There is no genuinely altruistic behavior. Everyone needs to have sufficient amount of self-esteem, which crucially depends on believing oneself to be useful and needed. Behavior that appears to be altruistic can be understood as being motivated by the desire to reinforce that belief, a clearly self-interested motivation.

A flaw in the argument is that it

- (A) presupposes that anyone who is acting out of self-interest is being altruistic
- (B) illicitly infers that behavior is altruistic merely because it seems altruistic
- (C) fails to consider that self-esteem also depends on maintaining an awareness of one's own value
- (D) presumes, without providing justification, that if one does not hold oneself in sufficient self-esteem one cannot be useful or needed
- (E) takes for granted that any behavior that can be interpreted as self-interested is in fact self-interested

20. Current maps showing the North American regions where different types of garden plants will flourish are based on weather data gathered 60 years ago from a few hundred primitive weather stations. New maps are now being compiled using computerized data from several thousand modern weather stations and input from home gardeners across North America. These maps will be far more useful.

Each of the following, if true, helps to support the claim that the new maps will be more useful EXCEPT:

- (A) Home gardeners can provide information on plant flourishing not available from weather stations.
  - (B) Some of the weather stations currently in use are more than 60 years old.
  - (C) Weather patterns can be described more accurately when more information is available.
  - (D) Weather conditions are the most important factor in determining where plants will grow.
  - (E) Weather patterns have changed in the past 60 years.
21. A smoker trying to quit is more likely to succeed if his or her doctor greatly exaggerates the dangers of smoking. Similar strategies can be used to break other habits. But since such strategies involve deception, individuals cannot easily adopt them unless a doctor or some other third party provides the warning.

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

- (A) People tend to believe whatever doctors tell them.
- (B) Most of the techniques that help people quit smoking can also help people break other habits.
- (C) The more the relevant danger is exaggerated, the more likely one is to break one's habit.
- (D) People generally do not find it easy to deceive themselves.
- (E) A doctor is justified in deceiving a patient whenever doing so is likely to make the patient healthier.

GO ON TO THE NEXT PAGE.

22. Most people who shop for groceries no more than three times a month buy prepared frozen dinners regularly. In Hallstown most people shop for groceries no more than three times a month. Therefore, in Hallstown most people buy prepared frozen dinners regularly.

Which one of the following arguments has a flawed pattern of reasoning most like the flawed reasoning in the argument above?

- (A) It is clear that most drivers in West Ansland are safe drivers since there are very few driving accidents in West Ansland and most accidents there are not serious.
- (B) It is clear that John cannot drive, since he does not own a car and no one in his family who does not own a car can drive.
- (C) It is clear that Fernando's friends usually drive to school, since all of his friends can drive and all of his friends go to school.
- (D) It is clear that most people in Highland County drive sedans, since most people who commute to work drive sedans and most people in Highland County commute to work.
- (E) It is clear that most of Janine's friends are good drivers, since she accepts rides only from good drivers and she accepts rides from most of her friends.

23. Editorial: This political party has repeatedly expressed the view that increasing spending on education is a worthy goal. On other occasions, however, the same party has claimed that the government should not increase spending on education. So this party's policy is clearly inconsistent.

The argument in the editorial depends on assuming which one of the following?

- (A) It is inconsistent for a legislator both to claim that increasing spending on education is a worthy goal and to vote against increasing spending on education.
- (B) A consistent course of action in educational policy is usually the course of action that will reduce spending on education in the long run.
- (C) Even if a goal is a morally good one, one should not necessarily try to achieve it.
- (D) A consistent political policy does not hold that an action that comprises a worthy goal should not be performed.
- (E) Members of one political party never have inconsistent views on how to best approach a political issue.

24. Science journalist: Brown dwarfs are celestial objects with more mass than planets but less mass than stars. They are identified by their mass and whether or not lithium is present in their atmospheres. Stars at least as massive as the Sun have lithium remaining in their atmospheres because the mixing of elements in their internal nuclear furnaces is incomplete. Stars with less mass than the Sun have no lithium because the element has been fully mixed into their nuclear furnaces and consumed. A brown dwarf does not have a fully functional nuclear furnace and so its lithium cannot be consumed.

Which one of the following is most strongly supported by the science journalist's statements?

- (A) Any celestial object without lithium in its atmosphere is a star with less mass than the Sun.
- (B) Any celestial object with lithium in its atmosphere has a nuclear furnace that has incompletely mixed the object's elements.
- (C) No celestial object that has no lithium in its atmosphere is a brown dwarf.
- (D) No celestial object with lithium in its atmosphere has less mass than the Sun.
- (E) No celestial object less massive than a brown dwarf has lithium in its atmosphere.

25. Native speakers perceive sentences of their own language as sequences of separate words. But this perception is an illusion. This is shown by the fact that travelers who do not know a local language hear an unintelligible, uninterrupted stream of sound, not sentences with distinct words.

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

- (A) It is impossible to understand sentences if they are in fact uninterrupted streams of sound.
- (B) Those who do not know a language cannot hear the way speech in that language actually sounds.
- (C) People pay less close attention to the way their own language sounds than they do to the way an unfamiliar language sounds.
- (D) Accomplished non-native speakers of a language do not perceive sentences as streams of sound.
- (E) Native speakers' perceptions of their own language are not more accurate than are the perceptions of persons who do not know that language.

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.