

## SECTION I

Time—35 minutes

24 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. Rita: The original purpose of government farm-subsidy programs was to provide income stability for small family farmers, but most farm-subsidy money goes to a few farmers with large holdings. Payments to farmers whose income, before subsidies, is greater than \$100,000 a year should be stopped.

Thomas: It would be impossible to administer such a cutoff point. Subsidies are needed during the planting and growing season, but farmers do not know their income for a given calendar year until tax returns are calculated and submitted the following April.

Which one of the following, if true, is the strongest counter Rita can make to Thomas' objection?

- (A) It has become difficult for small farmers to obtain bank loans to be repaid later by money from subsidies.
- (B) Having such a cutoff point would cause some farmers whose income would otherwise exceed \$100,000 to reduce their plantings.
- (C) The income of a farmer varies because weather and market prices are not stable from year to year.
- (D) If subsidy payments to large farmers were eliminated, the financial condition of the government would improve.
- (E) Subsidy cutoffs can be determined on the basis of income for the preceding year.

2. Modern physicians often employ laboratory tests, in addition to physical examinations, in order to diagnose diseases accurately. Insurance company regulations that deny coverage for certain laboratory tests therefore decrease the quality of medical care provided to patients.

Which one of the following is an assumption that would serve to justify the conclusion above?

- (A) Physical examinations and the uncovered laboratory tests together provide a more accurate diagnosis of many diseases than do physical examinations alone.
  - (B) Many physicians generally oppose insurance company regulations that, in order to reduce costs, limit the use of laboratory tests.
  - (C) Many patients who might benefit from the uncovered laboratory tests do not have any form of health insurance.
  - (D) There are some illnesses that experienced physicians can diagnose accurately from physical examination alone.
  - (E) Laboratory tests are more costly to perform than are physical examinations.
3. Oil analysts predict that if the price of oil falls by half, the consumer's purchase price for gasoline made from this oil will also fall by half.

Which one of the following, if true, would cast the most serious doubt on the prediction made by the oil analysts?

- (A) Improved automobile technology and new kinds of fuel for cars have enabled some drivers to use less gasoline.
- (B) Gasoline manufacturers will not expand their profit margins.
- (C) There are many different gasoline companies that compete with each other to provide the most attractive price to consumers.
- (D) Studies in several countries show that the amount of gasoline purchased by consumers initially rises after the price of gasoline has fallen.
- (E) Refining costs, distribution costs, and taxes, none of which varies significantly with oil prices, constitute a large portion of the price of gasoline.

GO ON TO THE NEXT PAGE.

4. A survey was recently conducted among ferry passengers on the North Sea. Among the results was this: more of those who had taken anti-seasickness medication before their trip reported symptoms of seasickness than those who had not taken such medication. It is clear, then, that despite claims by drug companies that clinical tests show the contrary, people would be better off not taking anti-seasickness medications.

Which one of the following, if true, would most weaken the conclusion above?

- (A) Given rough enough weather, most ferry passengers will have some symptoms of seasickness.
  - (B) The clinical tests reported by the drug companies were conducted by the drug companies' staffs.
  - (C) People who do not take anti-seasickness medication are just as likely to respond to a survey on seasickness as people who do.
  - (D) The seasickness symptoms of the people who took anti-seasickness medication would have been more severe had they not taken the medication.
  - (E) People who have spent money on anti-seasickness medication are less likely to admit symptoms of seasickness than those who have not.
5. Economic considerations color every aspect of international dealings, and nations are just like individuals in that the lender sets the terms of its dealings with the borrower. That is why a nation that owes money to another nation cannot be a world leader.

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

- (A) A nation that does not lend to any other nation cannot be a world leader.
- (B) A nation that can set the terms of its dealings with other nations is certain to be a world leader.
- (C) A nation that has the terms of its dealings with another nation set by that nation cannot be a world leader.
- (D) A nation that is a world leader can borrow from another nation as long as that other nation does not set the terms of the dealings between the two nations.
- (E) A nation that has no dealings with any other nation cannot be a world leader.

#### Questions 6-7

Rotelle: You are too old to address effectively the difficult issues facing the country, such as nuclear power, poverty, and pollution.

Sims: I don't want to make age an issue in this campaign, so I will not comment on your youth and inexperience.

6. Sims does which one of the following?
- (A) demonstrates that Rotelle's claim is incorrect
  - (B) avoids mentioning the issue of age
  - (C) proposes a way to decide which issues are important
  - (D) shows that Rotelle's statement is self-contradictory
  - (E) fails to respond directly to Rotelle's claim
7. Rotelle is committed to which one of the following?
- (A) Many old people cannot effectively address the difficult issues facing the country.
  - (B) Those at least as old as Sims are the only people who cannot effectively address the difficult issues facing the country.
  - (C) Some young people can effectively address the difficult issues facing the country.
  - (D) If anyone can effectively address the difficult issues facing the country, that person must be younger than Sims.
  - (E) Addressing the difficult issues facing the country requires an understanding of young people's points of view.

GO ON TO THE NEXT PAGE.

8. Political theorist: The chief foundations of all governments are the legal system and the police force; and as there cannot be a good legal system where the police are not well paid, it follows that where the police are well paid there will be a good legal system.

The reasoning in the argument is not sound because it fails to establish that

- (A) many governments with bad legal systems have poorly paid police forces
  - (B) bad governments with good legal systems must have poorly paid police forces
  - (C) a well-paid police force cannot be effective without a good legal system
  - (D) a well-paid police force is sufficient to guarantee a good legal system
  - (E) some bad governments have good legal systems
9. Court records from medieval France show that in the years 1300 to 1400 the number of people arrested in the French realm for “violent interpersonal crimes” (not committed in wars) increased by 30 percent over the number of people arrested for such crimes in the years 1200 to 1300. If the increase was not the result of false arrests, therefore, medieval France had a higher level of documented interpersonal violence in the years 1300 to 1400 than in the years 1200 to 1300.

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

- (A) In the years 1300 to 1400 the French government’s category of violent crimes included an increasing variety of interpersonal crimes that are actually nonviolent.
- (B) Historical accounts by monastic chroniclers in the years 1300 to 1400 are filled with descriptions of violent attacks committed by people living in the French realm.
- (C) The number of individual agreements between two people in which they swore oaths not to attack each other increased substantially after 1300.
- (D) When English armies tried to conquer parts of France in the mid- to late 1300s, violence in the northern province of Normandy and the southwestern province of Gascony increased.
- (E) The population of medieval France increased substantially during the first five decades of the 1300s, until the deadly bubonic plague decimated the population of France after 1348.

10. *Rhizobium* bacteria living in the roots of bean plants or other legumes produce fixed nitrogen, which is one of the essential plant nutrients and which for nonlegume crops, such as wheat, normally must be supplied by applications of nitrogen-based fertilizer. So if biotechnology succeeds in producing wheat strains whose roots will play host to *Rhizobium* bacteria, the need for artificial fertilizers will be reduced.

The argument above makes which one of the following assumptions?

- (A) Biotechnology should be directed toward producing plants that do not require artificial fertilizer.
  - (B) Fixed nitrogen is currently the only soil nutrient that must be supplied by artificial fertilizer for growing wheat crops.
  - (C) There are no naturally occurring strains of wheat or other grasses that have *Rhizobium* bacteria living in their roots.
  - (D) Legumes are currently the only crops that produce their own supply of fixed nitrogen.
  - (E) *Rhizobium* bacteria living in the roots of wheat would produce fixed nitrogen.
11. Current legislation that requires designated sections for smokers and nonsmokers on the premises of privately owned businesses is an intrusion into the private sector that cannot be justified. The fact that studies indicate that nonsmokers might be harmed by inhaling the smoke from others’ cigarettes is not the main issue. Rather, the main issue concerns the government’s violation of the right of private businesses to determine their own policies and rules.
- Which one of the following is a principle that, if accepted, could enable the conclusion to be properly drawn?
- (A) Government intrusion into the policies and rules of private businesses is justified only when individuals might be harmed.
  - (B) The right of individuals to breathe safe air supersedes the right of businesses to be free from government intrusion.
  - (C) The right of businesses to self-determination overrides whatever right or duty the government may have to protect the individual.
  - (D) It is the duty of private businesses to protect employees from harm in the workplace.
  - (E) Where the rights of businesses and the duty of government conflict, the main issue is finding a successful compromise.

12. Leachate is a solution, frequently highly contaminated, that develops when water permeates a landfill site. If and only if the landfill's capacity to hold liquids is exceeded does the leachate escape into the environment, generally in unpredictable quantities. A method must be found for disposing of leachate. Most landfill leachate is sent directly to sewage treatment plants, but not all sewage plants are capable of handling the highly contaminated water.

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

- (A) The ability to predict the volume of escaping landfill leachate would help solve the disposal problem.
- (B) If any water permeates a landfill, leachate will escape into the environment.
- (C) No sewage treatment plants are capable of handling leachate.
- (D) Some landfill leachate is sent to sewage treatment plants that are incapable of handling it.
- (E) If leachate does not escape from a landfill into the environment, then the landfill's capacity to hold liquids has not been exceeded.

13. The soaring prices of scholarly and scientific journals have forced academic libraries used only by academic researchers to drastically reduce their list of subscriptions. Some have suggested that in each academic discipline subscription decisions should be determined solely by a journal's usefulness in that discipline, measured by the frequency with which it is cited in published writings by researchers in the discipline.

Which one of the following, if true, most seriously calls into question the suggestion described above?

- (A) The nonacademic readership of a scholarly or scientific journal can be accurately gauged by the number of times articles appearing in it are cited in daily newspapers and popular magazines.
- (B) The average length of a journal article in some sciences, such as physics, is less than half the average length of a journal article in some other academic disciplines, such as history.
- (C) The increasingly expensive scholarly journals are less and less likely to be available to the general public from nonacademic public libraries.
- (D) Researchers often will not cite a journal article that has influenced their work if they think that the journal in which it appears is not highly regarded by the leading researchers in the mainstream of the discipline.
- (E) In some academic disciplines, controversies which begin in the pages of one journal spill over into articles in other journals that are widely read by researchers in the discipline.

14. The average level of fat in the blood of people suffering from acute cases of disease W is lower than the average level for the population as a whole. Nevertheless, most doctors believe that reducing blood-fat levels is an effective way of preventing acute W.

Which one of the following, if true, does most to justify this apparently paradoxical belief?

- (A) The blood level of fat for patients who have been cured of W is on average the same as that for the population at large.
- (B) Several of the symptoms characteristic of acute W have been produced in laboratory animals fed large doses of a synthetic fat substitute, though acute W itself has not been produced in this way.
- (C) The progression from latent to acute W can occur only when the agent that causes acute W absorbs large quantities of fat from the patient's blood.
- (D) The levels of fat in the blood of patients who have disease W respond abnormally slowly to changes in dietary intake of fat.
- (E) High levels of fat in the blood are indicative of several diseases that are just as serious as W.

15. Baking for winter holidays is a tradition that may have a sound medical basis. In midwinter, when days are short, many people suffer from a specific type of seasonal depression caused by lack of sunlight. Carbohydrates, both sugars and starches, boost the brain's levels of serotonin, a neurotransmitter that improves the mood. In this respect, carbohydrates act on the brain in the same way as some antidepressants. Thus, eating holiday cookies may provide an effective form of self-prescribed medication.

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

- (A) Seasonal depression is one of the most easily treated forms of depression.
- (B) Lack of sunlight lowers the level of serotonin in the brain.
- (C) People are more likely to be depressed in midwinter than at other times of the year.
- (D) Some antidepressants act by changing the brain's level of serotonin.
- (E) Raising the level of neurotransmitters in the brain effectively relieves depression.

GO ON TO THE NEXT PAGE.

16. The current proposal to give college students a broader choice in planning their own courses of study should be abandoned. The students who are supporting the proposal will never be satisfied, no matter what requirements are established. Some of these students have reached their third year without declaring a major. One first-year student has failed to complete four required courses. Several others have indicated a serious indifference to grades and intellectual achievement.

A flaw in the argument is that it does which one of the following?

- (A) avoids the issue by focusing on supporters of the proposal
- (B) argues circularly by assuming the conclusion is true in stating the premises
- (C) fails to define the critical term “satisfied”
- (D) distorts the proposal advocated by opponents
- (E) uses the term “student” equivocally

Questions 17–18

The question whether intelligent life exists elsewhere in the universe is certainly imprecise, because we are not sure how different from us something might be and still count as “intelligent life.” Yet we cannot just decide to define “intelligent life” in some more precise way since it is likely that we will find and recognize intelligent life elsewhere in the universe only if we leave our definitions open to new, unimagined possibilities.

17. The argument can most reasonably be interpreted as an objection to which one of the following claims?
- (A) The question whether intelligent life exists elsewhere in the universe is one that will never correctly be answered.
  - (B) Whether or not there is intelligent life elsewhere in the universe, our understanding of intelligent life is limited.
  - (C) The question about the existence of intelligent life elsewhere in the universe must be made more precise if we hope to answer it correctly.
  - (D) The question whether there is intelligent life elsewhere in the universe is so imprecise as to be meaningless.
  - (E) The question whether there is intelligent life elsewhere in the universe is one we should not spend our time trying to answer.
18. The passage, if seen as an objection to an antecedent claim, challenges that claim by
- (A) showing the claim to be irrelevant to the issue at hand
  - (B) citing examples that fail to fit a proposed definition of “intelligent life”
  - (C) claiming that “intelligent life” cannot be adequately defined
  - (D) arguing that the claim, if acted on, would be counterproductive
  - (E) maintaining that the claim is not supported by the available evidence

GO ON TO THE NEXT PAGE.

19. The efficiency of microwave ovens in destroying the harmful bacteria frequently found in common foods is diminished by the presence of salt in the food being cooked. When heated in a microwave oven, the interior of unsalted food reaches temperatures high enough to kill bacteria that cause food poisoning, but the interior of salted food does not. Scientists theorize that salt effectively blocks the microwaves from heating the interior.

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

- (A) The kinds of bacteria that cause food poisoning are more likely to be found on the exterior of food than in the interior of food.
- (B) The incidence of serious food poisoning would be significantly reduced if microwave ovens were not used by consumers to cook or reheat food.
- (C) The addition of salt to food that has been cooked or reheated in a microwave oven can increase the danger of food poisoning.
- (D) The danger of food poisoning can be lessened if salt is not used to prepare foods that are to be cooked in a microwave oven.
- (E) Salt is the primary cause of food poisoning resulting from food that is heated in microwave ovens.

20. Pamela: Business has an interest in enabling employees to care for children, because those children will be the customers, employees, and managers of the future. Therefore, businesses should adopt policies, such as day-care benefits, that facilitate parenting.

Lee: No individual company, though, will be patronized, staffed, and managed only by its own employees' children, so it would not be to a company's advantage to provide such benefits to employees when other companies do not.

In which one of the following pairs consisting of argument and objection does the objection function most similarly to the way Lee's objection functions in relation to Pamela's argument?

- (A) New roads will not serve to relieve this area's traffic congestion, because new roads would encourage new construction and generate additional traffic.  
Objection: Failure to build new roads would mean that traffic congestion would strangle the area even earlier.
- (B) Humanity needs clean air to breathe, so each person should make an effort to avoid polluting the air.  
Objection: The air one person breathes is affected mainly by pollution caused by others, so it makes no sense to act alone to curb air pollution.
- (C) Advertised discounts on products draw customers' attention to the products, so advertised discounts benefit sales.  
Objection: Customers already planning to purchase a product accelerate buying to take advantage of advertised discounts, and thus subsequent sales suffer.
- (D) If people always told lies, then no one would know what the truth was, so people should always tell the truth.  
Objection: If people always told lies, then everyone would know that the truth was the opposite of what was said.
- (E) Human social institutions have always changed, so even if we do not know what those changes will be, we do know that the social institutions of the future will differ from those of the past.  
Objection: The existence of change in the past does not ensure that there will always be change in the future.

GO ON TO THE NEXT PAGE.

21. Pedro: Unlike cloth diapers, disposable diapers are a threat to the environment. Sixteen billion disposable diapers are discarded annually, filling up landfills at an alarming rate. So people must stop buying disposable diapers and use cloth diapers.

Maria: But you forget that cloth diapers must be washed in hot water, which requires energy. Moreover, the resulting wastewater pollutes our rivers. When families use diaper services, diapers must be delivered by fuel-burning trucks that pollute the air and add to traffic congestion.

Maria objects to Pedro's argument by

- (A) claiming that Pedro overstates the negative evidence about disposable diapers in the course of his argument in favor of cloth diapers
  - (B) indicating that Pedro draws a hasty conclusion, based on inadequate evidence about cloth diapers
  - (C) pointing out that there is an ambiguous use of the word "disposable" in Pedro's argument
  - (D) demonstrating that cloth diapers are a far more serious threat to the environment than disposable diapers are
  - (E) suggesting that the economic advantages of cloth diapers outweigh whatever environmental damage they may cause
22. In an experiment, two-year-old boys and their fathers made pie dough together using rolling pins and other utensils. Each father-son pair used a rolling pin that was distinctively different from those used by the other father-son pairs, and each father repeated the phrase "rolling pin" each time his son used it. But when the children were asked to identify all of the rolling pins among a group of kitchen utensils that included several rolling pins, each child picked only the one that he had used.

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

- (A) The children did not grasp the function of a rolling pin.
- (B) No two children understood the name "rolling pin" to apply to the same object.
- (C) The children understood that all rolling pins have the same general shape.
- (D) Each child was able to identify correctly only the utensils that he had used.
- (E) The children were not able to distinguish the rolling pins they used from other rolling pins.

GO ON TO THE NEXT PAGE.



23. When 100 people who have not used cocaine are tested for cocaine use, on average only 5 will test positive. By contrast, of every 100 people who have used cocaine 99 will test positive. Thus, when a randomly chosen group of people is tested for cocaine use, the vast majority of those who test positive will be people who have used cocaine.

A reasoning error in the argument is that the argument

- (A) attempts to infer a value judgment from purely factual premises
- (B) attributes to every member of the population the properties of the average member of the population
- (C) fails to take into account what proportion of the population have used cocaine
- (D) ignores the fact that some cocaine users do not test positive
- (E) advocates testing people for cocaine use when there is no reason to suspect that they have used cocaine

24. If a society encourages freedom of thought and expression, then, during the time when it does so, creativity will flourish in that society. In the United States creativity flourished during the eighteenth century. It is clear, therefore, that freedom of thought was encouraged in the United States during eighteenth century.

An error of reasoning of the same kind as one contained in the passage is present in each of EXCEPT:

- (A) According to the airline industry, airfares have to rise if air travel is to be made safer; since airfares were just raised, we can rest assured that air travel will therefore become safer.
- (B) We can conclude that the Hillside police department has improved its efficiency, because crime rates are down in Hillside, and it is an established fact that crime rates go down when police departments increase their efficiency.
- (C) People who are really interested in the preservation of wildlife obviously do not go hunting for big game; since Gerda has never gone hunting for big game and intends never to do so, it is clear that she is really interested in the preservation of wildlife.
- (D) If the contents of a bottle are safe to drink, the bottle will not be marked "poison," so, since the bottle is not marked "poison," its contents will be safe to drink.
- (E) None of the so-called Western democracies is really democratic, because, for a country to be democratic, the opinion of each of its citizens must have a meaningful effect on government, and in none of these countries does each citizen's opinion have such an effect.

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.