

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. Rainfall in the drought-plagued metropolitan area was heavier than usual for the month of June. Nevertheless, by the first of July the city's water shortage was more severe than ever, and officials proposed drastic restrictions on the use of water.

Which one of the following, if true, helps to explain why the city's water shortage was not alleviated by the first of July?

- (A) Moderate restrictions on the industrial use of water had gone into effect in the metropolitan area several months earlier.
- (B) Because of the heavier rainfall, people watered their lawns much less in June than they usually do in the metropolitan area during that month.
- (C) People in the metropolitan area who had voluntarily reduced their use of water in earlier months when officials voiced alarm used greater than normal amounts of water when rainfall seemed plentiful in June.
- (D) During the drought most residents of the metropolitan area had been informed about water conservation methods that would help them to reduce their water consumption significantly with a minimal reduction in their standard of living.
- (E) The per capita rate of the use of water in the metropolitan area was slightly lower in June than in each of the three previous months and significantly lower than in June of the previous year.

2. Manager: I have circulated a posting for the position of Social Scientific Researcher. Applicants must have either an earned doctorate and a track record of published research, or else five years' work experience. The relevant fields for these requirements are sociology, psychology, and education.

Which one of the applicants, as described below, does NOT meet the manager's requirements?

- (A) Joanne Bernstein has worked for the department of education as coordinator of research for the past eleven years. She also served for six years as director of the Save the Children Fund, for which she was awarded an honorary doctorate from the liberal arts college where she earned her bachelor's degree.
- (B) Alvin Johnson is a doctoral candidate at a local university and is currently working on a dissertation. Prior to undertaking doctoral studies, he worked as a psychology researcher for seven years.
- (C) Edward St. John has worked as a business consultant for the past ten years, during which time he has published six novels. He holds an earned doctorate from one of the nation's foremost business schools.
- (D) Michael Roberts has published two highly regarded books on the problems of urban public schools and has a master's degree in special education. He taught special education classes for two years and then for four years served as a research associate with the Mayor's Task Force on Education.
- (E) Alicia Arias holds an earned doctorate in sociology from a prestigious university and has published one book and fifteen research articles in sociology.

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3. Deer mice normally do not travel far from their nests, and deer mice that are moved more than half a kilometer from their nests generally never find their way back. Yet in one case, when researchers camped near a deer mouse nest and observed a young deer mouse for several weeks before moving it to an area over two kilometers away, the deer mouse found its way back to its nest near their camp in less than two days.

Which one of the following, if true, most helps to explain how the deer mouse might have found its way back to its nest?

- (A) The area to which the deer mouse was moved was dryer and more rocky than the area in which its nest was located.
 - (B) The researchers released the deer mouse in a flat area across which their campfire smoke drifted.
 - (C) There were very few deer mice in the area to which the deer mouse was moved.
 - (D) The researchers had moved the deer mouse in a small dark box, keeping the mouse calm before it was released.
 - (E) Animals that prey on deer mice were common in the area to which the deer mouse was moved.
4. The government's proposed 8 percent cut in all subsidies to arts groups will be difficult for those groups to absorb. As can be seen, however, from their response to last year's cut, it will not put them out of existence. Last year there was also an 8 percent cut, and though private fund-raising was very difficult for the arts groups in the current recessionary economy, they did survive.

The reasoning in the argument is flawed because the argument

- (A) relies without warrant on the probability that the economy will improve
- (B) does not raise the issue of whether there should be any government subsidies to arts groups at all
- (C) equates the mere survival of the arts groups with their flourishing
- (D) does not take into account that the dollar amount of the proposed cut is lower than the dollar amount of last year's cut
- (E) overlooks the possibility that the cumulative effect of the cuts will be more than the arts groups can withstand

5. The average literate person today spends significantly less time reading than the average literate person did 50 years ago, yet many more books are sold per year now than were sold 50 years ago.

Each of the following, if true, helps resolve the apparent discrepancy above EXCEPT:

- (A) The population of literate people is significantly larger today than it was 50 years ago.
 - (B) People who read books 50 years ago were more likely to read books borrowed from libraries than are people who read books today.
 - (C) The average scholar or other person who uses books professionally today owns and consults many more different books than did the average scholar or similar professional 50 years ago.
 - (D) People of 50 years ago were more likely than people are today to display large collections of books as a sign of education and good taste.
 - (E) Books sold now tend to be shorter and easier to read than were books sold 50 years ago.
6. Some scientists believe that the relationship between mice and humans has, over time, diminished the ability of mice to survive in nature, so that now they must depend upon human civilization for their continued existence. This opinion, however, ignores significant facts. Despite numerous predators and humanity's enmity, mice have distributed themselves more widely across the planet than any other mammal except humans. Mice reproduce rapidly and, more important to their survival, they have the ability to adapt to an extraordinary range of habitats. Should the environment ever become too extreme to support human life, naturalists predict that mice would be able to adapt and survive.

Which one of the following, if true, would most support the naturalists' prediction?

- (A) The size of the mouse population is limited by the availability of food.
- (B) Under optimum conditions, mice reproduce every four weeks, with five to seven pups per litter.
- (C) Fossil remains prove that mice inhabited North America prior to the arrival of humans.
- (D) Mice have colonized an island near Antarctica which is too bleak and harsh to support human life.
- (E) A significant percentage of the world's mouse population lives in urban areas.

7. All zebras have stripes, and the most widespread subspecies has the best-defined stripes. The stripes must therefore be of importance to the species. Since among these grassland grazers the stripes can hardly function as camouflage, they must serve as some sort of signal for other zebras.

Which one of the following, if true, most strongly supports the conclusion regarding a signaling function?

- (A) The subspecies of zebras with the best-defined stripes is also characterized by exceptional size and vigor.
 - (B) In certain tall grasses zebras can be harder to spot than grazing animals with a coat of uniform color.
 - (C) A visual signal transmitted among the members of a species can consist of a temporary change of color perceptible to other members of the species.
 - (D) Zebras react much faster to moving shapes that have stripes than they do to moving shapes that are otherwise identical but lack stripes.
 - (E) Zebras have a richer repertoire of vocal signals than do similar species such as horses.
8. Some years ago, an editorial defended United States government restrictions on academic freedom, arguing that scientists who receive public funding cannot rightly “detach themselves from the government’s policies on national security.” Yet the same editorial criticized the Soviet government for not allowing scientists to “detach themselves from politics.” If there is a significant difference between the principles involved in each case, the editorial should have explained what that difference is.

The author of the passage criticizes the editorial by

- (A) disputing certain factual claims made in the editorial
- (B) pointing out an apparent inconsistency in the editorial
- (C) describing an alleged exception to a general claim made in the editorial
- (D) refuting an assumption on which the argument of the editorial appears to have been based
- (E) drawing a conclusion from the editorial different from the conclusion drawn by the writer of the editorial

9. Ph.D. programs are valuable only if they inculcate good scholarship and expedite the student’s full participation in the field. Hence, doctoral dissertations should not be required in the humanities. Undertaking a quality book-length dissertation demands an accumulation of knowledge virtually impossible for those relatively new to their disciplines. The student consequently either seeks to compensate for poor quality with quantity or ends up spending years producing a work of quality. Either way, the dissertation is counterproductive and frustrates the appropriate goals of the doctoral program.

The claim that doctoral dissertations should not be required in the humanities plays which one of the following roles in the argument?

- (A) It provides essential support for the conclusion.
- (B) It is an example illustrative of a general principle concerning the goals of Ph.D. programs.
- (C) It is what the argument is attempting to establish.
- (D) It provides evidence for the assumption that requirements for degrees in the humanities differ from requirements for degrees in other disciplines.
- (E) It confirms the observation that the requirement for a dissertation can frustrate the goals of a doctoral program.

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10. The government of Penglai, an isolated island, proposed eliminating outdoor advertising except for small signs of standard shape that identify places of business. Some island merchants protested that the law would reduce the overall volume of business in Penglai, pointing to a report done by the government indicating that in every industry the Penglai businesses that used outdoor advertising had a larger market share than those that did not.

Which one of the following describes an error of reasoning in the merchants' argument?

- (A) presupposing that there are no good reasons for restricting the use of outdoor advertising in Penglai
 - (B) assuming without giving justification that the outdoor advertising increased market share by some means other than by diverting trade from competing businesses
 - (C) ignoring the question of whether the government's survey of the island could be objective
 - (D) failing to establish whether the market-share advantage enjoyed by businesses employing outdoor advertising was precisely proportionate to the amount of advertising
 - (E) disregarding the possibility that the government's proposed restrictions are unconstitutional
11. Unless they are used as strictly temporary measures, rent-control ordinances (municipal regulations placing limits on rent increases) have several negative effects for renters. One of these is that the controls will bring about a shortage of rental units. This disadvantage for renters occurs over the long run, but the advantage—smaller rent increases—occurs immediately. In many municipalities, specifically in all those where tenants of rent-control units have a secure hold on political power and can get rent-control ordinances enacted or repealed, it is invariably the desire for short-term gain that guides those tenants in the exercise of that power.
- If the statements above are true, which one of the following can be properly inferred from them?
- (A) It is impossible for landlords to raise rents when rent controls are in effect.
 - (B) In many municipalities rent-control ordinances are repealed as soon as shortages of rental units arise.
 - (C) The only negative effect of rent control for renters is that it brings about a shortage of rental units.
 - (D) In many municipalities there is now, or eventually will be, a shortage of rental units.
 - (E) In the long term, a shortage of rental units will raise rents substantially.

Questions 12–13

In many languages other than English there is a word for “mother’s brother” which is different from the word for “father’s brother,” whereas English uses the word “uncle” for both. Thus, speakers of these languages evidence a more finely discriminated kinship system than English speakers do. The number of basic words for colors also varies widely from language to language. Therefore, speakers of languages that have fewer basic words for colors than English has must be perceptually unable to distinguish as many colors as speakers of English can distinguish.

12. Which one of the following, if true, undermines the conclusion concerning words for colors?
- (A) Speakers of English are able to distinguish between lighter and darker shades of the color they call “blue,” for which Russian has two different basic words.
 - (B) Almost every language distinguishes red from the other colors
 - (C) Khmer uses a basic word corresponding to English “blue” for most leaves, but uses its basic word corresponding to English “green” for unripe bananas
 - (D) The word “orange” in English has the same origin as the equivalent word in Spanish.
 - (E) Most languages do not have a basic word that distinguishes gray from other colors, although gray is commonly found in nature.
13. The conclusion concerning words for colors would be properly drawn if which one of the following were assumed?
- (A) Most languages have distinct words for “sister” and “brother.”
 - (B) Each language has a different basic word for each sensory quality that its speakers can perceptually distinguish.
 - (C) Every language makes some category distinctions that no other language makes.
 - (D) In any language short, frequently used words express categories that are important for its speakers to distinguish perceptually from each other.
 - (E) Speakers of languages with relatively few basic words for colors live in geographical regions where flora and fauna do not vary greatly in color.

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Questions 14–15

Zachary: One would have to be blind to the reality of moral obligation to deny that people who believe a course of action to be morally obligatory for them have both the right and the duty to pursue that action, and that no one else has any right to stop them from doing so.

Cynthia: But imagine an artist who feels morally obliged to do whatever she can to prevent works of art from being destroyed confronting a morally committed antipornography demonstrator engaged in destroying artworks he deems pornographic. According to your principle that artist has, simultaneously, both the right and the duty to stop the destruction and no right whatsoever to stop it.

14. Cynthia's response to Zachary's claim is structured to demonstrate that

- (A) the concept of moral obligation is incoherent
- (B) the ideas of right and duty should not be taken seriously since doing so leads to morally undesirable consequences
- (C) Zachary's principle is untenable on its own terms
- (D) because the term "moral obligation" is understood differently by different people, it is impossible to find a principle concerning moral rights and duties that applies to everyone
- (E) Zachary's principle is based on an understanding of moral obligation that is too narrow to encompass the kind of moral obligation artists feel toward works of art

15. Which one of the following, if substituted for the scenario invoked by Cynthia, would preserve the force of her argument?

- (A) a medical researcher who feels a moral obligation not to claim sole credit for work that was performed in part by someone else confronting another researcher who feels no such moral obligation
- (B) a manufacturer who feels a moral obligation to recall potentially dangerous products confronting a consumer advocate who feels morally obliged to expose product defects
- (C) an investment banker who believes that governments are morally obliged to regulate major industries confronting an investment banker who holds that governments have a moral obligation not to interfere with market forces
- (D) an architect who feels a moral obligation to design only energy-efficient buildings confronting, as a potential client, a corporation that believes its primary moral obligation is to maximize shareholder profits
- (E) a health inspector who feels morally obliged to enforce restrictions on the number of cats a householder may keep confronting a householder who, feeling morally obliged to keep every stray that comes along, has over twice that number of cats

16. A county airport, designed to serve the needs of private aircraft owners, planned to cover its operating expenses in part by charging user fees to private aircraft using the airport. The airport was unable to pay its operating expenses because the revenue from user fees was lower than expected.

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

- (A) Most of the county's citizens live a convenient distance from one or another airport now offering commercial airline services.
- (B) Private aircraft owners were unwilling to pay the user fees charged at the airport.
- (C) The airport's construction was financed exclusively by private funds.
- (D) The airport's operating expenses were greater than the revenue raised from sources other than the airport user fees for private planes.
- (E) The number of owners of private aircraft who use the county's airport facilities will not change appreciably in the future.

Questions 17–18

Consumer activist: By allowing major airlines to abandon, as they promptly did, all but their most profitable routes, the government's decision to cease regulation of the airline industry has worked to the disadvantage of everyone who lacks access to a large metropolitan airport.

Industry representative: On the contrary, where major airlines moved out, regional airlines have moved in and, as a consequence, there are more flights into and out of most small airports now than before the change in regulatory policy.

17. The industry representative's argument will not provide an effective answer to the consumer activist's claim unless which one of the following is true?
- (A) No small airport has fewer flights now than it did before the change in policy regarding regulation of the airline industry.
 - (B) When permitted to do so by changes in regulatory policy, each major airline abandoned all but large metropolitan airports.
 - (C) Policies that result in an increase in the number of flights to which consumers have easy access do not generally work to the disadvantage of consumers.
 - (D) Regional airlines charge less to fly a given route now than the major airlines charged when they flew the same route.
 - (E) Any policy that leads to an increase in the number of competitors in a given field works to the long-term advantage of consumers.
18. Which one of the following is an assumption on which the consumer activist's argument depends?
- (A) Before the recent change in regulatory policy, there was no advantage in having easy access to a large metropolitan airport.
 - (B) When any sizable group of consumers is seriously disadvantaged by a change in government policy, that change should be reversed.
 - (C) Government regulation of industry almost always works to the advantage of consumers.
 - (D) At the time of the regulatory change, the major airlines were maintaining their less profitable routes at least in part because of government requirements.
 - (E) Regional airlines lack the resources to provide consumers with service of the same quality as that provided by the major airlines.

19. A report on the likely effects of current levels of air pollution on forest growth in North America concluded that, since nitrogen is a necessary nutrient for optimal plant growth, the nitrogen deposited on forest soil as a result of air pollution probably benefits eastern forests. However, European soil scientists have found that in forests saturated with sulfate and nitrate, trees begin to die when the nitrogen deposited exceeds the amount of nitrogen absorbed by the forest system. Since this finding is likely to apply to forests everywhere, large areas of eastern forests of North America are, undoubtedly, already being affected adversely.

Which one of the following most accurately expresses the main point of the passage?

- (A) The implication of the report cited is that the amount of nitrogen reaching eastern forests by way of polluted air is approximately what those forests need for optimal growth.
- (B) If large areas of eastern forests were increasingly saturated with sulfate and nitrate, the capacity of those forest systems for absorbing nitrogen would also increase.
- (C) The type of analysis used by European soil scientists does not necessarily apply to eastern forests of North America.
- (D) The eastern forests are the only forests of North America currently affected by polluted air.
- (E) Contrary to the report cited, the nitrogen pollution now in the air is more likely to cause trees to die in eastern forests than to benefit them.

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20. Railroad spokesperson: Of course it is a difficult task to maintain quality of service at the same time that the amount of subsidy the taxpayers give the railroad network is reduced. Over recent years, however, the number of passengers has increased in spite of subsidy reductions. This fact leads to the conclusion that our quality of service has been satisfactory.

The spokesperson's argument is based on which one of the following assumptions?

- (A) Taxpayers do not wish to have their taxes raised to subsidize the railroads.
 - (B) Some people refuse to travel by train if they are dissatisfied with the quality of service.
 - (C) The quality of service on the trains must have improved in spite of subsidy reductions.
 - (D) It is impossible to reduce subsidies to the railroad network without some effect on the quality of service.
 - (E) The increase in the number of passengers will increase revenue sufficiently to offset the subsidy reductions.
21. In response to high mortality in area hospitals, surgery was restricted to emergency procedures during a five-week period. Mortality in these hospitals was found to have fallen by nearly one-third during the period. The number of deaths rose again when elective surgery (surgery that can be postponed) was resumed. It can be concluded that, before the five-week period, the risks of elective surgery had been incurred unnecessarily often in the area.

Which one of the following, if true, most seriously undermines the conclusion above?

- (A) The conditions for which elective surgery was performed would in the long run have been life-threatening, and surgery for them would have become riskier with time.
- (B) The physicians planning elective surgery performed before the five-week period had fully informed the patients who would undergo it of the possible risks of the procedures.
- (C) Before the suspension of elective surgery, surgical operations were performed in area hospitals at a higher rate, per thousand residents of the area, than was usual elsewhere.
- (D) Elective surgery is, in general, less risky than is emergency surgery because the conditions requiring or indicating surgery are often less severe.
- (E) Even if a surgical procedure is successful, the patient can die of a hospital-contracted infection with a bacterium that is resistant to antibiotic treatment.

22. Gallery owner: Because this painting appears in no catalog of van Gogh's work, we cannot guarantee that he painted it. But consider: the subject is one he painted often, and experts agree that in his later paintings van Gogh invariably used just such broad brushstrokes and distinctive combinations of colors as we find here. Internal evidence, therefore, makes it virtually certain that this is a previously uncataloged, late van Gogh, and as such, a bargain at its price.

The reasoning used by the gallery owner is flawed because it

- (A) ignores the fact that there can be general agreement that something is the case without its being the case
 - (B) neglects to cite expert authority to substantiate the claim about the subject matter of the painting
 - (C) assumes without sufficient warrant that the only reason anyone would want to acquire a painting is to make a profit
 - (D) provides no evidence that the painting is more likely to be an uncataloged van Gogh than to be a painting by someone else who painted that particular subject in van Gogh's style
 - (E) attempts to establish a particular conclusion because doing so is in the reasoner's self-interest rather than because of any genuine concern for the truth of the matter
23. Government-subsidized insurance available to homeowners makes it feasible for anyone to build a house on a section of coastline regularly struck by hurricanes. Each major storm causes billions of dollars worth of damage in such coastal areas, after which owners who have insurance are able to collect an amount of money sufficient to recoup a high percentage of their losses.

The passage provides the most support for an argument against a government bill proposing

- (A) that power companies be required to bury power lines in areas of the coastline regularly struck by hurricanes
- (B) an increase in funding of weather service programs that provide a hurricane watch and warning system for coastal areas
- (C) renewal of federal funding for emergency life-support programs in hurricane-stricken areas
- (D) establishment of an agency committed to managing coastal lands in ecologically responsible ways
- (E) establishment of a contingency fund protecting owners of uninsured houses in the coastal areas from catastrophic losses due to the hurricane damage

24. Between 1951 and 1963, it was illegal in the country of Geronia to manufacture, sell, or transport any alcoholic beverages. Despite this prohibition, however, the death rate from diseases related to excessive alcohol consumption was higher during the first five years of the period than it was during the five years prior to 1951. Therefore, the attempt to prevent alcohol use merely made people want and use alcohol more than they would have if it had not been forbidden.

Each of the following, if true, weakens the argument EXCEPT:

- (A) Death from an alcohol-related disease generally does not occur until five to ten years after the onset of excessive alcohol consumption.
- (B) The diseases that can be caused by excessive alcohol consumption can also be caused by other kinds of behavior that increased between 1951 and 1963.
- (C) The death rate resulting from alcohol-related diseases increased just as sharply during the ten years before and the ten years after the prohibition of alcohol as it did during the years of prohibition.
- (D) Many who died of alcohol-related diseases between 1951 and 1963 consumed illegally imported alcoholic beverages produced by the same methods as those used within Geronia.
- (E) Between 1951 and 1963, among the people with preexisting alcohol-related diseases, the percentage who obtained lifesaving medical attention declined because of a social stigma attached to excessive alcohol consumption.

25. A letter submitted to the editor of a national newsmagazine was written and signed by a Dr. Shirley Martin who, in the text of the letter, mentions being a professor at a major North American medical school. Knowing that fewer than 5 percent of the professors at such schools are women, the editor reasons that the chances are better than 19 to 1 that the letter was written by a man.

Which one of the following involves flawed reasoning most like that used by the editor?

- (A) Since 19 out of 20 home computers are purchased primarily for use with computer games, and the first computer sold today was purchased solely for word processing, the next 19 computers sold will almost certainly be used primarily for computer games.
- (B) Fewer than 1 in 20 of the manuscripts submitted to Argon Publishing Co. are accepted for publication. Since only 15 manuscripts were submitted last week, there is almost no chance that any of them will be accepted for publication.
- (C) Fewer than 5 percent of last year's graduating class took Latin in secondary school. Howard took Latin in secondary school, so if he had graduated last year, it is likely that one of the other Latin scholars would not have graduated.
- (D) More than 95 percent of the planes built by UBC last year met government standards for large airliners. Since small planes account for just under 5 percent of UBC's output last year, it is almost certain that all their large planes met government standards.
- (E) Since more than 19 out of every 20 animals in the wildlife preserve are mammals and fewer than 1 out of 20 are birds, there is a greater than 95 percent chance that the animal Emily saw flying between two trees in the wildlife refuge yesterday morning was a mammal.

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.