

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. Educational television is a contradiction in terms. While a classroom encourages social interaction, television encourages solitude. School is centered on the development of language, but television depends upon constantly changing visual images. And in a classroom, fun is merely a means to an end, but on television it is the end in itself.

Upon which one of the following assumptions does the author rely in the passage?

- (A) The classroom should not be a place where anyone has fun.
 - (B) Only experiences that closely resemble what takes place in the school environment can be educational.
 - (C) Television programs reinforce some of the values of the school environment.
 - (D) Educational television programs are qualitatively better than most other television programs.
 - (E) The potential of television as a powerful learning tool has not yet been realized.
2. Switching to “low-yield” cigarettes, those that yield less nicotine, tar, and carbon monoxide than regular cigarettes when tested on a standard machine, does not, in general, reduce the incidence of heart attack. This result is surprising, since nicotine and carbon monoxide have been implicated as contributing to heart disease.

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

- (A) Smoking low-yield cigarettes has become fashionable, as relatively healthier styles of life have become more popular than those that have been identified as risky.
- (B) For those who are themselves smokers, inhaling the smoke of others is not generally a significant factor contributing to an increased risk of heart disease.
- (C) Nicotine does not contribute as much to heart disease as does carbon monoxide.
- (D) Carbon monoxide and cigarette tar are not addictive substances.
- (E) People who switch from high-yield to low-yield cigarettes often compensate by increasing the number and depth of puffs in order to maintain their accustomed nicotine levels.

Questions 3–4

Sally: I cannot study at a university where there is an alcohol problem, so unless something is done about the alcohol problem at this university, I'll have to transfer to a university where there are no fraternities.

Yolanda: I don't agree that fraternities are responsible for the alcohol problem at this university. Alcohol problems exist at all universities, including those where there are no fraternities. We all should become more aware of alcohol abuse. It's not simply a fraternity problem; it's a cultural problem.

3. Which one of the following is an assumption on which Sally's argument depends?
- (A) Most universities have fraternities.
 - (B) Nothing will be done about the alcohol problem at Sally's university.
 - (C) Alcohol problems are becoming more widespread at universities.
 - (D) Some fraternity members who drink alcoholic beverages are too young to do so legally.
 - (E) There could be universities that have no alcohol problems.
4. In the conversation, Yolanda does which one of the following?
- (A) She argues that if people become more aware of alcohol abuse, fewer people will themselves abuse alcohol.
 - (B) She makes an overly broad generalization from one university to all universities.
 - (C) She concludes that because alcohol problems are cultural problems, they cannot be fraternity problems.
 - (D) She tries to undermine what she supposes to be Sally's position by pointing out that alcohol problems occur even at universities where there are no fraternities.
 - (E) She suggests that even if alcohol problems existed only at universities with fraternities, she would still conclude that alcoholism is a cultural rather than a fraternity problem.

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5. Some people have questioned why the Homeowners Association is supporting Cooper's candidacy for mayor. But if the Association wants a mayor who will attract more businesses to the town, Cooper is the only candidate it could support. So, since the Association is supporting Cooper, it must have a goal of attracting more businesses to the town.

The reasoning in the argument is in error because

- (A) the reasons the Homeowners Association should want to attract more businesses to the town are not given
 - (B) the Homeowners Association could be supporting Cooper's candidacy for reasons unrelated to attracting businesses to the town
 - (C) other groups besides the Homeowners Association could be supporting Cooper's candidacy
 - (D) the Homeowners Association might discover that attracting more businesses to the town would not be in the best interest of its members
 - (E) Cooper might not have all of the skills that are needed by a mayor who wants to attract businesses to a town
6. Advertisement: Most power hedge trimmers on the market do an adequate job of trimming hedges, but many power hedge trimmers are dangerous to operate and can cause serious injury when used by untrained operators. Bolter Industries' hedge trimmer has been tested by National Laboratories, the most trusted name in safety testing. So you know, if you buy a Bolter's, you are buying a power hedge trimmer whose safety is assured.

The answer to which one of the following questions would be most useful in evaluating the truth of the conclusion drawn in the advertisement?

- (A) Has National Laboratories performed safety tests on other machines made by Bolter Industries?
- (B) How important to the average buyer of a power hedge trimmer is safety of operation?
- (C) What were the results of National Laboratories' tests of Bolter Industries' hedge trimmer?
- (D) Are there safer ways of trimming a hedge than using a power hedge trimmer?
- (E) Does any other power hedge trimmer on the market do a better job of trimming hedges than does Bolter Industries' hedge trimmer?

7. Slash-and-burn agriculture involves burning several acres of forest, leaving vegetable ash that provides ample fertilizer for three or four years of bountiful crops. On the cleared land nutrients leach out of the soil, however, and the land becomes too poor to support agriculture. New land is then cleared by burning and the process starts again. Since most farming in the tropics uses this method, forests in this region will eventually be permanently eradicated.

The argument depends on the assumption that

- (A) forests in the tropics do not regenerate well enough to restore themselves once they have been cleared by the slash-and-burn method
 - (B) some other methods of agriculture are not as destructive to the environment in tropical regions as the slash-and-burn method is
 - (C) forests in the tropics are naturally deficient in nutrients that are needed to support the growth of plants that are not native to those regions
 - (D) slash-and-burn agriculture is particularly suitable for farming in tropical areas
 - (E) slash-and-burn agriculture produces a more bountiful crop than do other agriculture methods for the first year
8. Of 2,500 people who survived a first heart attack, those who did not smoke had their first heart attack at a median age of 62. However, of those 2,500, people who smoked two packs of cigarettes a day had their first heart attack at a median age of 51. On the basis of this information, it can be concluded that nonsmokers tend to have a first heart attack eleven years later than do people who smoke two packs of cigarettes a day.

The conclusion is incorrectly drawn from the information given because this information does not include

- (A) the relative severity of heart attacks suffered by smokers and nonsmokers
- (B) the nature of the different medical treatments that smokers and nonsmokers received after they had survived their first heart attack
- (C) how many of the 2,500 people studied suffered a second heart attack
- (D) the earliest age at which a person who smoked two packs a day had his or her first heart attack
- (E) data on people who did not survive a first heart attack

9. Paleontologists have discovered fossils of centipedes that are 414 million years old. These fossils are at least 20 million years older than the earliest land-dwelling animals previously identified. The paleontologists are confident that these centipedes lived on land, even though the fossilized centipedes were discovered in rock that also contained fossilized remains of animals known to be water-dwelling.

The paleontologists' view would be LEAST supported by the truth of which one of the following?

- (A) The legs of the fossilized centipedes were particularly suited to being a means of locomotion on land.
 - (B) All of the centipedes that had previously been discovered were land dwellers.
 - (C) The rock in which the fossilized centipedes were found was formed from mud flats that were occasionally covered by river water.
 - (D) Fossils of the earliest land-dwelling animals that had previously been identified were found in rock that did not contain fossilized remains of water-dwelling animals.
 - (E) Fossils of spiders with respiratory systems adapted only to breathing air were found in the same rock as the centipede fossils.
10. Broadcaster: Our radio station has a responsibility to serve the public interest. Hence, when our critics contend that our recent exposé of events in the private lives of local celebrities was excessively intrusive, we can only reply that the overwhelming public interest in these matters makes it our responsibility to publicize them.

Which one of the following is a flaw in the broadcaster's defense of the radio station's practice?

- (A) assuming without argument that there is a right to privacy
- (B) ignoring grounds for criticism of the exposé aside from intrusion into people's private lives
- (C) intentionally failing to specify what is meant by "excessively intrusive"
- (D) confusing legal responsibility with moral obligation
- (E) improperly exploiting an ambiguity in the phrase "public interest"

Questions 11–12

The fire that destroyed the Municipal Building started before dawn this morning, and the last fire fighters did not leave until late this afternoon. No one could have been anywhere in the vicinity of a fire like that one and fail to notice it. Thomas must have seen it, whatever he now says to the contrary. He admits that, as usual, he went from his apartment to the library this morning, and there is no way for him to get from his apartment to the library without going past the Municipal Building.

11. The main conclusion of the argument is that
- (A) Thomas was in the vicinity of the fire this morning
 - (B) Thomas claimed not to have seen the fire
 - (C) Thomas saw the fire this morning
 - (D) Thomas went directly from his apartment to the library this morning
 - (E) Thomas went by the Municipal Building this morning
12. The argument employs which one of the following reasoning techniques?
- (A) presenting several different pieces of evidence, each of which by itself would allow the conclusion to be properly drawn
 - (B) establishing that one thing occurred by showing that another thing occurred and that this second thing was enough to ensure the occurrence of the first thing
 - (C) justifying a claim that a view held by someone else is false by explaining why that view, despite its falsity, is a tempting one for that person to hold under the circumstances
 - (D) relying on evidence that a certain kind of event has regularly occurred in the past as a basis for concluding that an event of that kind occurred in the present case
 - (E) drawing a general conclusion about what is possible in a certain kind of situation on the basis of firsthand experience with one such situation

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13. Editorial: In rejecting the plan proposed by parliament to reform the electoral process, the president clearly acted in the best interests of the nation. Anyone who thinks otherwise should remember that the president made this decision knowing it would be met with fierce opposition at home and widespread disapproval abroad. All citizens who place the nation's well-being above narrow partisan interests will applaud this courageous action.

The reasoning in the editorial is in error because

- (A) it confuses a quality that is merely desirable in a political leader with a quality that is essential to effective political decision-making
 - (B) it fails to distinguish between evidence concerning the courage required to make a certain decision and evidence concerning the wisdom of making that decision
 - (C) it ignores the likelihood that many citizens have no narrow partisan interest in the proposed election reform plan
 - (D) it overlooks the possibility that there was strong opposition to the parliament's plan among members of the president's own party
 - (E) it depends on the unwarranted assumption that any plan proposed by a parliament will necessarily serve only narrow partisan interests
14. Once consumers recognize that a period of inflation has begun, there is generally an increase in consumer spending. This increase can be readily explained by consumers' desire not to postpone purchases that will surely increase in price. But during protracted periods of inflation, consumers eventually begin to put off making even routine purchases, despite the fact that consumers continue to expect prices to rise and despite the fact that salaries also rise during inflationary periods.

Which one of the following, if true, most helps to explain the apparent inconsistency in consumer behavior described above?

- (A) During times of inflation consumers save more money than they do in noninflationary periods.
- (B) There is usually a lag between the leading economic indicators' first signaling the onset of an inflationary period and consumers' recognition of its onset.
- (C) No generalization that describes human behavior will be true of every type of human behavior.
- (D) If significant numbers of consumers are unable to make purchases, prices will eventually fall but salaries will not be directly affected.
- (E) Consumers' purchasing power decreases during periods of protracted inflation since salaries do not keep pace with prices.

Questions 15–16

A favored theory to explain the extinction of dinosaurs, together with many other species, has been the globally catastrophic collision of a large asteroid with the Earth. Supporting evidence is an extraterrestrial chemical element in a layer of dust found worldwide at a geological level laid down contemporaneously with the supposed event. A new competing theory contends that any asteroid impact was irrelevant, because it was massive volcanic activity that caused the extinctions by putting enough dust into the atmosphere to cool the planet. The Deccan region of India contains extensive volcanic flows that occurred within the same time period as the supposed asteroid impact and the extinctions.

15. The new theory assumes that

- (A) the massive volcanic activity was not caused by the impact of an asteroid
- (B) no individual dinosaurs survived the impact of the asteroid, if it occurred
- (C) the extinctions took place over a longer time period than they would have if caused by the impact of an asteroid
- (D) other volcanic eruptions were not occurring at the same time as those in the Deccan region
- (E) it is not possible to determine which would have occurred first, the volcanic flows in the Deccan region or the supposed impact of an asteroid

16. Which one of the following, if true, most strongly indicates that the asteroid-impact theory is at least incomplete, if not false?

- (A) Large concentrations of dinosaur nests with fossil eggs found in Alberta indicate that at least some species of dinosaurs congregated in large groups during some part of their lives.
- (B) Dinosaur remains indicate that some species of dinosaur could have migrated in herds over wide ranges, so that they could have traveled to escape the local effects of certain catastrophes.
- (C) Legends from many cultures, such as the Greek legend that Cadmus raised an army by sowing dragons' teeth in the ground, show that various ancient peoples worldwide were familiar with the fossils of dinosaurs.
- (D) In the Gobi desert in China, where now only small animals can eke out an existence, fossil dinosaur skeletons 27 feet long were found in circumstances indicating that the climate there was as dry when the dinosaurs lived as it is now.
- (E) The fossil record in Montana from below the layer of extraterrestrial dust shows a diminution over time in dinosaur species from 35 to 13, and dinosaur teeth found above the dust layer show a diminution in species from 13 to 5.

17. A contract, whether expressed or unexpressed, exists when two parties engage with each other for the reciprocal transfer of benefits. Thus, in accepting support from public funds, an artist creates at least an unexpressed contract between himself or herself and the public, and the public can rightly expect to benefit from the artist's work.

Which one of the following most accurately describes an error in reasoning in the passage?

- (A) attempting to justify a rule of conduct on the grounds that it confers benefits on all of the parties involved
 - (B) concluding that a definition is fully applicable to a situation when it is known only that the situation conforms partially to that definition
 - (C) speaking only in abstract terms about matters that involve contingencies and that must be judged on a case-by-case basis
 - (D) confusing the type of mental or emotional activity in which an individual can engage with the mental or emotional states that can characterize groups of individuals
 - (E) treating an issue that requires resolution through political processes as if it were merely a matter of opinion
18. People cannot be morally responsible for things over which they have no control. Therefore, they should not be held morally responsible for any inevitable consequences of such things, either. Determining whether adults have any control over the treatment they are receiving can be difficult. Hence in some cases it can be difficult to know whether adults bear any moral responsibility for the way they are treated. Everyone, however, sometimes acts in ways that are an inevitable consequence of treatment received as an infant, and infants clearly cannot control, and so are not morally responsible for, the treatment they receive.

Anyone making the claims above would be logically committed to which one of the following further claims?

- (A) An infant should never be held morally responsible for an action that infant has performed.
- (B) There are certain commonly performed actions for which no one performing those actions should ever be held morally responsible.
- (C) Adults who claim that they have no control over the treatment they are receiving should often be held at least partially responsible for being so treated.
- (D) If a given action is within a certain person's control that person should be held morally responsible for the consequences of that action.
- (E) No adult should be held morally responsible for every action he or she performs.

19. Fares on the city-run public buses in Greenville are subsidized by city tax revenues, but among the beneficiaries of the low fares are many people who commute from outside the city to jobs in Greenville. Some city councillors argue that city taxes should be used primarily to benefit the people who pay them, and therefore that bus fares should be raised enough to cover the cost of the service.

Each of the following, if true, would weaken the argument advanced by the city councilors EXCEPT:

- (A) Many businesses whose presence in the city is beneficial to the city's taxpayers would relocate outside the city if public-transit fares were more expensive.
- (B) By providing commuters with economic incentives to drive to work, higher transit fares would worsen air pollution in Greenville and increase the cost of maintaining the city's streets.
- (C) Increasing transit fares would disadvantage those residents of the city whose low incomes make them exempt from city taxes, and all city councilors agree that these residents should be able to take advantage of city-run services.
- (D) Voters in the city, many of whom benefit from the low transit fares, are strongly opposed to increasing local taxes.
- (E) People who work in Greenville and earn wages above the nationally mandated minimum all pay the city wage tax of 5 percent.

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20. Government official: Clearly, censorship exists if we, as citizens, are not allowed to communicate what we are ready to communicate at our own expense or if other citizens are not permitted access to our communications at their own expense. Public unwillingness to provide funds for certain kinds of scientific, scholarly, or artistic activities cannot, therefore, be described as censorship.

The flawed reasoning in the government official's argument is most parallel to that in which one of the following?

- (A) All actions that cause unnecessary harm to others are unjust; so if a just action causes harm to others, that action must be necessary.
- (B) Since there is more to good manners than simply using polite forms of address, it is not possible to say on first meeting a person whether or not that person has good manners.
- (C) Acrophobia, usually defined as a morbid fear of heights, can also mean a morbid fear of sharp objects. Since both fears have the same name, they undoubtedly have the same origin.
- (D) There is no doubt that a deed is heroic if the doer risks his or her own life to benefit another person. Thus an action is not heroic if the only thing it endangers is the reputation of the doer.
- (E) Perception of beauty in an object is determined by past and present influences on the mind of the beholder. Thus no object can be called beautiful, since not everyone will see beauty in it.

21. The Japanese *haiku* is defined as a poem of three lines with five syllables in the first line, seven syllables in the second line, and five syllables in the third line. English poets tend to ignore this fact. Disregarding syllable count, they generally call any three-line English poem with a "*haiku* feel" a *haiku*. This demonstrates that English poets have little respect for foreign traditions, even those from which some of their own poetry derives.

The reasoning is flawed because it

- (A) confuses matters of objective fact with matters of subjective feeling
- (B) draws a conclusion that is broader in scope than is warranted by the evidence advanced
- (C) relies on stereotypes instead of presenting evidence
- (D) overlooks the possibility that the case it cites is not unique
- (E) fails to acknowledge that ignoring something implies a negative judgment about that thing

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Questions 22–23

No one knows what purposes, if any, dreams serve, although there are a number of hypotheses. According to one hypothesis, dreams are produced when the brain is erasing “parasitic connections” (meaningless, accidental associations between ideas), which accumulate during the day and which would otherwise clog up our memories. Interestingly, the only mammal that does not have rapid eye movement sleep, in which we humans typically have our most vivid dreams, is the spiny anteater, which has been seen as anomalous in that it has a very large brain relative to the animal’s size. This fact provides some confirmation for the parasitic-connection hypothesis, since the hypothesis predicts that for an animal that did not dream to have an effective memory that animal would need extra memory space for the parasitic connections.

22. The parasitic-connection hypothesis, if true, most strongly supports which one of the following?
- (A) The animals with the smallest brains spend the most time sleeping.
 - (B) Immediately after a person awakens from normal sleep, her or his memory contains virtually no accidental associations between ideas.
 - (C) When a mammal that would normally dream is prevented from dreaming, the functioning of its memory will be impaired.
 - (D) Insofar as a person’s description of a dream involves meaningful associations between ideas, it is an inaccurate description.
 - (E) All animals other than the spiny anteater dream.

23. The reasoning in the argument most closely conforms to which one of the following principles?
- (A) Facts about one species of animal can provide confirmation for hypotheses about all species that are similar in all relevant respects to the particular species in question.
 - (B) A hypothesis from which several predictions can be drawn as logical conclusions is confirmed only when the majority of these predictions turn out to be true.
 - (C) A hypothesis about the purpose of an action or object is confirmed when it is shown that the hypothesized purpose is achieved with the help of the action or object and could not be achieved without that action or object.
 - (D) A hypothesis is partially confirmed whenever a prediction derived from that hypothesis provides an explanation for an otherwise unexplained set of facts.
 - (E) When several competing hypotheses exist, one of them is confirmed only when it makes a correct prediction that its rivals fail to make.

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24. The body of anyone infected by virus X will, after a week, produce antibodies to fight the virus; the antibodies will increase in number for the next year or so. There is now a test that reliably indicates how many antibodies are present in a person's body. If positive, this test can be used during the first year of infection to estimate to within a month how long that person has had the virus.

Which one of the following conclusions is best supported by the statements above?

- (A) Antibodies increase in number only until they have defeated the virus.
- (B) Without the test for antibodies, there is no way of establishing whether a person has virus X.
- (C) Antibodies are produced only for viral infections that cannot be fought by any other body defenses.
- (D) If a person remains infected by virus X indefinitely, there is no limit to the number of antibodies that can be present in the person's body.
- (E) Anyone infected by virus X will for a time fail to exhibit infection if tested by the antibody test.

25. Large inequalities in wealth always threaten the viability of true democracy, since wealth is the basis of political power, and true democracy depends on the equal distribution of political power among all citizens.

The reasoning in which one of the following arguments most closely parallels the reasoning in the argument above?

- (A) Consumer culture and an emphasis on technological innovation are a dangerous combination, since together they are uncontrollable and lead to irrational excess.
- (B) If Sara went to the bookstore every time her pocket was full, Sara would never have enough money to cover her living expenses, since books are her love and they are getting very expensive.
- (C) It is very difficult to write a successful science fiction novel that is set in the past, since historical fiction depends on historical accuracy, whereas science fiction does not.
- (D) Honesty is important in maintaining friendships. But sometimes honesty can lead to arguments, so it is difficult to predict the effect a particular honest act will have on a friendship.
- (E) Repeated encroachments on one's leisure time by a demanding job interfere with the requirements of good health. The reason is that good health depends on regular moderate exercise, but adequate leisure time is essential to regular exercise.

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.