



SECTION III

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. Roses always provide a stunning display of color, but only those flowers that smell sweet are worth growing in a garden. Some roses have no scent.

Which one of the following conclusions can be properly drawn from the passage?

- (A) Some flowers which provide a stunning display of color are not worth growing in a garden.
- (B) All flowers with no scent provide a stunning display of color.
- (C) Some flowers which are worth growing in a garden have no scent.
- (D) Some roses which smell sweet are not worth growing in a garden.
- (E) No sweet-smelling flower is worth growing in a garden unless it provides a stunning display of color.

2. The use of money causes a civilization to decline. That this is true is shown by the way the troubles of Western civilization began with the invention of money. While real money (gold and silver) is bad enough, imitation money (paper money) is a horror. The decline of Western civilization exactly parallels the increasing use of money—both real money and worthless paper money—as a substitute for things of intrinsic value.

Which one of the following, if true, could contribute most to a refutation of the argument?

- (A) People prefer using money to having a system in which goods are bartered for other goods of equal intrinsic value.
- (B) Eastern cultures have used money, and Eastern civilizations have not declined.
- (C) The use of paper money encourages disregard for the value of work because the money itself has no intrinsic value.
- (D) The rate of exchange between gold and paper money has fluctuated greatly in Western civilization.
- (E) Some employers exchange goods for their employees' services in order to avoid the exchange of money.

3. Fire ants from Brazil now infest the southern United States. Unlike queen fire ants in Brazil, two queens in the United States share a nest. Ants from these nests are more aggressive than those from single-queen nests. By destroying virtually all insects in the nest area, these aggressive ants gain sole access to food sources, and the ant population skyrockets. Since certain predator insects in Brazil limit the fire-ant population there, importing such predator insects into the United States would be of overall benefit to the environment by stopping the increase of the fire-ant population in the United States.

Each of the following is an assumption made in the argument EXCEPT:

- (A) The imported insects would not prove more damaging to the environment in the United States than are the fire ants themselves.
- (B) The predator insects from Brazil could survive in the ecological environment found in the United States.
- (C) The especially aggressive fire ants from the two-queen nests would not be able to destroy the Brazilian predator insects.
- (D) The predator insects would stop the increase of the ant population before the ants spread to states that are farther north.
- (E) The rate of increase of the fire-ant population would not exceed the rate at which the predator insects could kill the ants.

GO ON TO THE NEXT PAGE.



4. In an attempt to counter complaints that a certain pesticide is potentially hazardous to humans if absorbed into edible plants, the pesticide manufacturer has advertised that “ounce for ounce, the active ingredient in this pesticide is less toxic than the active ingredient in mouthwash.”

Which one of the following, if true, indicates a weakness in the manufacturer’s argument?

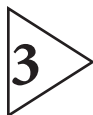
- (A) The ounce-for-ounce toxicity of the active ingredient in mouthwash is less than that of most products meant for external use by humans, such as nail polish or other cosmetics.
- (B) The quantity of toxins humans ingest by consuming plants treated with the pesticide is, on average, much higher than the quantity of toxins humans ingest by using mouthwash.
- (C) The container in which the pesticide is packaged clearly identifies the toxic ingredients and carries warnings about their potential danger to humans.
- (D) On average, the toxins present in the pesticide take longer than the toxins present in mouthwash to reach harmful levels in the human body.
- (E) Since the government began to regulate the pesticide industry over ten years ago, there has been a growing awareness of the dangers of toxins used in pesticides.

Questions 5–6

Four randomly chosen market research companies each produced population estimates for three middle-sized cities; the estimates of each company were then compared with those of the other companies. Two of the cities had relatively stable populations, and for them estimates of current population and of projected population in five years varied little from company to company. However, for the third city, which was growing rapidly, estimates varied greatly from company to company.

5. The passage provides the most support for which one of the following?
- (A) It is more difficult to estimate the population of middle-sized cities than of smaller cities.
 - (B) Population estimates for rapidly growing cities can be accurate enough to be useful for marketing.
 - (C) The rate of change in population of rapidly growing cities does not fluctuate.
 - (D) The market research companies are likely to be equally reliable in estimating the population of stable cities.
 - (E) Estimates of a city’s future population are likely to be more accurate than are estimates of that city’s current population.
6. Which one of the following, if true, would best help explain why estimates of the current population of the rapidly growing city varied more than did current population estimates for the two other cities?
- (A) Population changes over time are more uniform from one district to another in the rapidly growing city than in the two other cities.
 - (B) The population of the rapidly growing city is increasing largely as a result of a high birth rate.
 - (C) The population of the rapidly growing city has a lower average age than the populations of either of the two other cities.
 - (D) All population estimates of the rapidly growing city were produced first by estimating the current populations of the city’s districts and then by adding those estimates.
 - (E) Whereas the companies used different methods for estimating the current population of the rapidly growing city, the companies used the same method for the two other cities.

GO ON TO THE NEXT PAGE.



7. Head injury is the most serious type of injury sustained in motorcycle accidents. The average cost to taxpayers for medical care for nonhelmeted motorcycle-accident victims is twice that for their helmeted counterparts. Jurisdictions that have enacted motorcycle-helmet laws have reduced the incidence and severity of accident-related head injuries, thereby reducing the cost to taxpayers. Therefore, to achieve similar cost reductions, other jurisdictions should enact motorcycle-helmet laws. For the same reason jurisdictions should also require helmets for horseback riders, since horseback-riding accidents are even more likely to cause serious head injury than motorcycle accidents are.

Which one of the following is an assumption upon which the author's conclusion concerning helmets for horseback riders depends?

- (A) Medical care for victims of horseback-riding accidents is a financial drain on tax funds.
 - (B) The higher rate of serious head injury suffered by victims of horseback-riding accidents is due to the difference in size between horses and motorcycles.
 - (C) The medical costs associated with treating head injuries are higher than those for other types of injury.
 - (D) Most fatalities resulting from horseback-riding and motorcycle accidents could have been prevented if the victims had been wearing helmets.
 - (E) When deciding whether to enact helmet laws for motorcyclists and horseback riders, the jurisdiction's primary concern is the safety of its citizens.
8. The senator has long held to the general principle that no true work of art is obscene, and thus that there is no conflict between the need to encourage free artistic expression and the need to protect the sensibilities of the public from obscenity. When well-known works generally viewed as obscene are cited as possible counterexamples, the senator justifies accepting the principle by saying that if these works really are obscene then they cannot be works of art.
- The senator's reasoning contains which one of the following errors?
- (A) It seeks to persuade by emotional rather than intellectual means.
 - (B) It contains an implicit contradiction.
 - (C) It relies on an assertion of the senator's authority.
 - (D) It assumes what it seeks to establish.
 - (E) It attempts to justify a position by appeal to an irrelevant consideration.

9. Until he was dismissed amid great controversy, Hastings was considered one of the greatest intelligence agents of all time. It is clear that if his dismissal was justified, then Hastings was either incompetent or else disloyal. Soon after the dismissal, however, it was shown that he had never been incompetent. Thus, one is forced to conclude that Hastings must have been disloyal.

Which one of the following states an assumption upon which the argument depends?

- (A) Hastings's dismissal was justified.
 - (B) Hastings was a high-ranking intelligence officer.
 - (C) The dismissal of anyone who was disloyal would be justified.
 - (D) Anyone whose dismissal was justified was disloyal.
 - (E) If someone was disloyal or incompetent, then his dismissal was justified.
10. Anyone who fails to answer a patient's questions cannot be a competent physician. That is why I feel confident about my physician's competence: she carefully answers every one of my questions, no matter how trivial.
- Which one of the following most closely parallels the flawed reasoning in the argument above?
- (A) Anyone who grows up in a large family is accustomed to making compromises. Meredith is accustomed to making compromises, so she might have grown up in a large family.
 - (B) Anyone who is not in favor of this proposal is ill informed on the issue. Jeanne opposes the proposal, so she is ill informed on the issue.
 - (C) No one who likes music misses a performance of the symphony. Paul likes music, yet last week he missed a performance of the symphony.
 - (D) Anyone who works two or more jobs is unable to find a balance between professional and personal life. Maggie has only one job, so she can find a balance between her professional and personal life.
 - (E) No one who is hot-tempered and strong-willed will succeed in this business. Jeremy is strong-willed, so he will not succeed in this business.

GO ON TO THE NEXT PAGE.



11. The annual *Journal for Publication*, which often solicits articles, publishes only those articles that are both submitted before March 6 and written by certified psychoanalysts. Stevens, who publishes frequently in psychoanalytic literature, submitted an article to the *Journal* before March 6. This article was accepted for publication in the *Journal*.

Which one of the following conclusions follows logically from the statements above?

- (A) Stevens is a psychoanalyst.
- (B) The *Journal* frequently accepts Stevens' articles.
- (C) Stevens is an authority on a large number of topics in psychoanalysis.
- (D) The *Journal* asked Stevens to write an article.
- (E) Stevens' recently accepted article will be interesting to *Journal* readers.

Questions 12–13

Arguing that there was no trade between Europe and East Asia in the early Middle Ages because there are no written records of such trade is like arguing that the yeti, an apelike creature supposedly existing in the Himalayas, does not exist because there have been no scientifically confirmed sightings. A verifiable sighting of the yeti would prove that the creature does exist, but the absence of sightings cannot prove that it does not.

12. Which one of the following best expresses the point of the argument?
- (A) Evidence for the existence of trade between Europe and East Asia in the early Middle Ages is, like evidence for the existence of the yeti, not scientifically confirmed.
 - (B) In order to prove that in the early Middle Ages there was trade between Europe and East Asia it is necessary to find both Asian and European evidence that such trade existed.
 - (C) That trade between Europe and East Asia did not exist in the early Middle Ages cannot be established simply by the absence of a certain sort of evidence that this trade existed.
 - (D) The view that there was trade between Europe and East Asia in the early Middle Ages can only be disproved by showing that no references to this trade exist in surviving records.
 - (E) There is no more evidence that trade between Europe and East Asia existed in the early Middle Ages than there is that the yeti exists.
13. Which one of the following considerations, if true, best counters the argument?
- (A) Most of the evidence for the existence of trade between Europe and East Asia in the early Middle Ages is archaeological and therefore does not rely on written records.
 - (B) Although written records of trade in East Asia in the early Middle Ages survived, there are almost no European documents from that period that mention trade at all.
 - (C) Any trade between Europe and East Asia in the early Middle Ages would necessarily have been of very low volume and would have involved high-priced items, such as precious metals and silk.
 - (D) There have been no confirmed sightings of the yeti, but there is indirect evidence, such as footprints, which if it is accepted as authentic would establish the yeti's existence.
 - (E) There are surviving European and East Asian written records from the early Middle Ages that do not mention trade between the two regions but would have been very likely to do so if this trade had existed.



14. When the economy is in a recession, overall demand for goods and services is low. If overall demand for goods and services is low, bank interest rates are also low. Therefore, if bank interest rates are not low, the economy is not in a recession.

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

- (A) If the restaurant is full, the parking lot will be full, and if the parking lot is full, the restaurant is full, so if the parking lot is not full, the restaurant is not full.
- (B) If the fish is ready, it is cooked all the way through, and if it is cooked through it will be white, so if the fish is not white, it is not ready.
- (C) If pterodactyls flew by flapping their wings, they must have been warm-blooded, so if they were cold-blooded, they must have flown only by gliding, if they flew at all.
- (D) If you want to put in pleats, you will have to double the amount of material for the skirt, and that means you will have none left for the top, so if you put in pleats you will not be able to make the top.
- (E) If economic forecasters are right, there will be inflation, and if there is inflation, the governing party will lose the election, so if it does lose the election, the economic forecasters were right.

15. Twenty years ago the Republic of Rosinia produced nearly 100 million tons of potatoes, but last year the harvest barely reached 60 million tons. Agricultural researchers, who have failed to develop new higher-yielding strains of potatoes, are to blame for this decrease, since they have been concerned only with their own research and not with the needs of Rosinia.

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

- (A) Any current attempts by agricultural researchers to develop higher-yielding potato strains are futile.
- (B) Strains of potatoes most commonly grown in Rosinia could not have produced the yields last year that they once did.
- (C) Agricultural researchers often find concrete solutions to practical problems when investigating seemingly unrelated questions.
- (D) Wide fluctuations in the size of the potato crop over a twenty-year period are not unusual.
- (E) Agricultural research in Rosinia is funded by government grants.

16. An ancient Pavonian text describes how an army of one million enemies of Pavonia stopped to drink at a certain lake and drank the lake dry. Recently, archaeologists discovered that water-based life was suddenly absent just after the event was alleged by the text to have occurred. On the basis of reading the text and an account of the archaeological evidence, some students concluded that the events described really took place.

Which one of the following is a questionable technique used by the students to reach their conclusion?

- (A) making a generalization about historical events on the basis of a single instance of that type of event
- (B) ignoring available, potentially useful counterevidence
- (C) rejecting a hypothesis because it is seemingly self-contradictory
- (D) considering people and locations whose existence cannot be substantiated by modern historians
- (E) taking evidence that a text has correctly described an effect to show that the text has correctly described the cause

GO ON TO THE NEXT PAGE.



17. Samples from the floor of a rock shelter in Pennsylvania were dated by analyzing the carbon they contained. The dates assigned to samples associated with human activities formed a consistent series, beginning with the present and going back in time, a series that was correlated with the depth from which the samples came. The oldest and deepest sample was dated at 19,650 years before the present, plus or minus 2,400 years. Skeptics, viewing that date as too early and inconsistent with the accepted date of human migration into North America, suggested that the samples could have been contaminated by dissolved “old carbon” carried by percolating groundwater from nearby coal deposits.

Which of the following considerations, if true, argues most strongly against the suggestion of the skeptics?

- (A) No likely mechanism of contamination involving percolating groundwater would have affected the deeper samples from the site without affecting the uppermost sample.
- (B) Not every application of the carbon-dating procedure has led to results that have been generally acceptable to scientists.
- (C) There is no evidence that people were using coal for fuel at any time when the deepest layer might have been laid down.
- (D) No sample in the series, when retested by the carbon-dating procedure, was assigned an earlier date than that assigned to a sample from a layer above it.
- (E) No North American site besides the one in Pennsylvania has ever yielded a sample to which the carbon-dating procedure assigned a date that was comparably ancient.

18. Those influenced by modern Western science take it for granted that a genuine belief in astrology is proof of a credulous and unscientific mind. Yet, in the past, people of indisputable intellectual and scientific brilliance accepted astrology as a fact. Therefore, there is no scientific basis for rejecting astrology.

The argument is most vulnerable to criticism on which one of the following grounds?

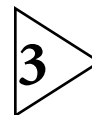
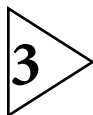
- (A) A belief can be consistent with the available evidence and accepted scientific theories at one time but not with the accepted evidence and theories of a later time.
- (B) Since it is controversial whether astrology has a scientific basis, any argument that attempts to prove that it has will be specious.
- (C) Although the conclusion is intended to hold in all cultures, the evidence advanced in its support is drawn only from those cultures strongly influenced by modern Western science.
- (D) The implicit assumption that all practitioners of Western science believe in astrology is false.
- (E) The fact that there might be legitimate nonscientific reasons for rejecting astrology has been overlooked.

19. Amy McConnell is considering running for election against the incumbent, Gregory Lutz. If Lutz has a large campaign fund, then he is already far ahead, and McConnell will not run against him. If Lutz does not have a large campaign fund, McConnell will scrutinize Lutz’s record for any hints of scandal that she could use against him. Anything of a scandalous nature would increase McConnell’s chances of winning, and she would campaign for election. If Lutz has a clean record, however, McConnell will not run against him.

Given the information in the passage, which one of the following must be false?

- (A) Lutz does not have a large campaign fund, and McConnell does not run against him.
- (B) Lutz’s record contains items that would increase McConnell’s chances of winning, and she runs against him.
- (C) Lutz’s record contains scandalous items, and McConnell does not run against him.
- (D) Lutz’s record contains nothing that would increase McConnell’s chances of winning, and she runs against him.
- (E) Lutz has a large campaign fund, and McConnell does not run against him.

GO ON TO THE NEXT PAGE.



20. Psychotherapy has been described as a form of moral coercion. However, when people are coerced, their ability to make choices is restricted, and the goal of psychotherapy is to enhance people's ability to make choices. Hence, psychotherapy cannot possibly be a form of coercion.

Which one of the following describes a flaw in the argument?

- (A) The position being argued against is redefined unfairly in order to make it an easier target.
 - (B) Psychotherapy is unfairly criticized for having a single goal, rather than having many complex goals.
 - (C) No allowance is made for the fact that the practice or results of psychotherapy might run counter to its goals.
 - (D) The goals of psychotherapy are taken to justify any means that are used to achieve those goals.
 - (E) It offers no argument to show that moral coercion is always undesirable.
21. Joel: A myth is a narrative told to convey a community's traditional wisdom. Myths are not generally told in the modern world because there are no longer bodies of generally accepted truths that can be conveyed in this way.

Giselle: Of course there are myths in the modern world. For example, there is the myth of the machine: we see the human body as a machine, to be fixed by mending defective parts. This may not be a narrative, but what medically trained specialist can deny the existence of that myth?

Which one of the following most accurately characterizes Giselle's response to Joel's statement?

- (A) It offers a scientific explanation to a problem of literary theory.
- (B) It points out a weakness in Joel's position by advancing an analogous position.
- (C) It is based on an unsupported distinction between traditional societies and the modern world.
- (D) It assumes that Joel is a medically trained specialist.
- (E) It offers a counterexample that calls into question part of Joel's definition of myth.

22. The true scientific significance of a group of unusual fossils discovered by the paleontologist Charles Walcott is more likely to be reflected in a recent classification than it was in Walcott's own classification. Walcott was, after all, a prominent member of the scientific establishment. His classifications are thus unlikely to have done anything but confirm what established science had already taken to be true.

Which one of the following most accurately describes a questionable technique used in the argument?

- (A) It draws conclusions about the merit of a position and about the content of that position from evidence about the position's source.
- (B) It cites two pieces of evidence, each of which is both questionable and unverifiable, and uses this evidence to support its conclusions.
- (C) It bases a conclusion on two premises that contradict each other and minimizes this contradiction by the vagueness of the terms employed.
- (D) It attempts to establish the validity of a claim, which is otherwise unsupported, by denying the truth of the opposite of that claim.
- (E) It analyzes the past on the basis of social and political categories that properly apply only to the present and uses the results of this analysis to support its conclusion.

23. Anthony: It has been established that over 80 percent of those who use heroin have a history of having used marijuana. Such evidence would seem to prove that smoking marijuana definitely leads to heroin use.

Judith: Maybe smoking marijuana does lead to heroin use, but it is absurd to think that citing those statistics proves that it does. After all, 100 percent of the people who take up heroin had a previous history of drinking water.

Judith's reply to Anthony's argument relies on which one of the following argumentative strategies?

- (A) offering evidence suggesting that the statistics Anthony cites in support of his conclusion are inaccurate
- (B) undermining the credibility of his conclusion by showing that it is a statement from which absurd consequences can be derived
- (C) providing an example to show that not everything that promotes heroin use is unsafe
- (D) demonstrating that Anthony's line of reasoning is flawed by showing that such reasoning can lead to clearly false conclusions
- (E) calling into question the possibility of ever establishing causal connections solely on the basis of statistical evidence



24. Rumored declines in automobile-industry revenues are exaggerated. It is true that automobile manufacturers' share of the industry's revenues fell from 65 percent two years ago to 50 percent today, but over the same period suppliers of automobile parts had their share increase from 15 percent to 20 percent and service companies (for example, distributors, dealers, and repairers) had their share increase from 20 percent to 30 percent.

Which one of the following best indicates why the statistics given above provide by themselves no evidence for the conclusion they are intended to support?

- (A) The possibility is left open that the statistics for manufacturers' share of revenues come from a different source than the other statistics.
- (B) No matter what changes the automobile industry's overall revenues undergo, the total of all shares of these revenues must be 100 percent.
- (C) No explanation is given for why the revenue shares of different sectors of the industry changed.
- (D) Manufacturers and parts companies depend for their revenue on dealers' success in selling cars.
- (E) Revenues are an important factor but are not the only factor in determining profits.

Questions 25–26

Proposals for extending the United States school year to bring it more in line with its European and Japanese counterparts are often met with the objection that curtailing the schools' three-month summer vacation would violate an established United States tradition dating from the nineteenth century. However, this objection misses its mark. True, in the nineteenth century the majority of schools closed for three months every summer, but only because they were in rural areas where successful harvests depended on children's labor. If any policy could be justified by those appeals to tradition, it would be the policy of determining the length of the school year according to the needs of the economy.

25. Which one of the following principles, if accepted, would provide the strongest justification for the conclusion?
- (A) That a given social policy has traditionally been in force justifies maintaining that policy only if doing so does not conflict with more pressing social needs.
 - (B) Appeals to its own traditions cannot excuse a country from the obligation to bring its practices in line with the legitimate expectations of the rest of the world.
 - (C) Because appeals to tradition often serve to mask the real interests at issue, such appeals should be disregarded.
 - (D) Traditional principles should be discarded when they no longer serve the needs of the economy.
 - (E) The actual tradition embodied in a given practice can be accurately identified only by reference to the reasons that originally prompted that practice.
26. The argument counters the objection by
- (A) providing evidence to show that the objection relies on a misunderstanding about the amount of time each year United States schools traditionally have been closed
 - (B) calling into question the relevance of information about historical practices to current disputes about proposed social change
 - (C) arguing for an alternative understanding of the nature of the United States tradition regarding the length of the school year
 - (D) showing that those who oppose extending the school year have no genuine concern for tradition
 - (E) demonstrating that tradition justifies bringing the United States school year in line with that of the rest of the industrialized world

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.