SECTION I

Time—35 minutes

26 Questions

<u>Directions</u>: 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 <u>best</u> 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.

 Why should the disappearance of beetles, plants, or birds concern us? First, a species, the irreplaceable product of millions of years of development, is of intrinsic value. Another, perhaps more compelling, reason to conserve biological diversity is pure self-interest. Like every species, ours is intimately dependent on others for its well-being. Time after time, creatures, even those once thought useless or harmful, are found to play crucial roles in natural systems. Predators driven to extinction no longer keep populations of potential pests in check; earthworms or termites killed by pesticides no longer aerate soils; mangroves cut for firewood no longer protect coastlines from the erosive force of the sea.

The above argument as a whole seeks to establish that

- (A) it is only selfish people who wish to conserve biological diversity
- (B) whether species to which people pay little attention become extinct is not of great importance except to scientists
- (C) there are no species in nature that are, properly considered, harmful to people
- (D) species of plant and animal life should be preserved because they are valuable both in themselves and for the well-being of people
- (E) to protect coastlines from erosion by the sea, it is necessary to plant mangroves or other such species along the coasts

2. Davisville's mayor: The Davisville Airport is actually located in the city of Millersburg. Millersburg officials have argued that it is illegal for restaurants in the Davisville Airport to serve alcoholic beverages because Millersburg has outlawed alcoholic beverages. But they are mistaken. Since the City of Davisville owns the Davisville Airport, and it is legal for restaurants to serve alcoholic beverages in Davisville, it is legal for them to do so in the Davisville Airport.

Which one of the following principles, if valid, most helps to justify the reasoning in the Davisville mayor's argument?

- (A) Ownership takes precedence over any other factor in determining which city's laws apply in a facility owned by one city but located in another.
- (B) If one city owns a facility located in another city and a dispute about legal jurisdiction arises, then the city that owns the facility should offer to sell it to the other city.
- (C) If one city owns a facility located in another city, government officials of both cities should settle through negotiation which city's laws apply in that facility.
- (D) A facility located outside of a city is not subject to the laws of that city even if the facility is owned by the city.
- (E) If one city owns a facility located in another city, the residents of both cities should determine which city's laws apply in that facility.

3. The pigment that gives fresh blueberries their deep purplish-blue color is found in the berry's skin—not in its flesh, which is pale green. Therefore, since the smaller the berry, the more skin there is in relation to the rest of the berry, it follows that a pie filling made from a pound or two of fresh, whole blueberries _____.

Which one of the following most logically completes the argument?

- (A) should be made of the freshest berries available
- (B) will taste the same whether the berries used are large or small
- (C) will taste good only if made of high-quality berries
- (D) will be darker if small berries rather than large ones are used
- (E) will be more flavorful if large berries rather than small ones are used
- 4. Ecologist: Smallpox, one of the worst diseases ever to afflict humans, has in some outbreaks killed as much as 50 percent of local populations. The last known surviving cultures of variola—the smallpox virus—are confined to two high-security laboratories. Some scientists are anxious to destroy the remaining variola cultures, to which humans are susceptible. Research on the cultures, however, may someday lead to important benefits for humans, and so the cultures should not be destroyed.

Which one of the following, if true, would do most to strengthen the ecologist's argument?

- (A) Smallpox has killed millions of humans over the centuries, and when it reaches the stage of an epidemic it is extremely difficult to eradicate.
- (B) It is more likely that the virus, if left available to researchers, will lead to an important medical breakthrough than that the virus will be accidentally released from the laboratory.
- (C) Variola is a rare type of virus in that it can only be transmitted from one human to another, yet does not affect rats, monkeys, or insects.
- (D) It is becoming increasingly important to prevent any nation from acquiring the means to wage biological warfare.
- (E) It is likely that the virus, if released, will develop a resistance to vaccines previously used to control it.

5. Miguel has four family members who plan to come to his graduation on Sunday afternoon, but it is likely that only three of them will be allowed to attend. Normally graduation is held in the football stadium, where there is no limit on the number of family members who can attend. However, the ceremony is relocated to the gymnasium if it rains, and each graduate receives just three admission tickets for use by family members.

The conclusion of the argument is most strongly supported if which one of the following is assumed?

- (A) Miguel's graduating class is much larger than usual.
- (B) Miguel has lost one of the admission tickets to be used if the ceremony is held in the gymnasium.
- (C) The weather service has indicated that there is a very high likelihood of rain on Sunday afternoon.
- (D) Miguel has several friends who have fewer than three family members coming to graduation.
- (E) Miguel has a fifth family member who is unable to come to his graduation.
- 6. Elephants are often observed licking clay from mud holes. There is ample evidence that other animals ingest clay because it neutralizes toxins in their diets. Since elephants eat many plants that contain toxic compounds, their licking of clay is probably triggered by toxins too.

Which one of the following, if true, most strengthens the argument?

- (A) Some of the clay that elephants lick contains minerals that are nutritionally essential for any animal.
- (B) Elephants typically drink water immediately before or after they lick clay.
- (C) Older elephants typically ingest more clay than young elephants do.
- (D) Elephants do not lick clay at times when their diet consists almost entirely of toxin-free foods.
- (E) The clay that elephants ingest does not contain any compounds that are toxic to them.

7. Economist: In our country, the price of cola is regulated by the Cola Commission. Decades ago, when the commission was formed, such regulation was reasonable because there was a monopoly on cola production. Now, however, fierce competition in this market keeps cola prices low. So the Cola Commission should be abolished.

The economist's reasoning is most vulnerable to criticism on the grounds that it fails to consider the possibility that

- (A) the Cola Commission regulates aspects of the cola industry other than cola's price
- (B) no new competitors have entered the economist's country's cola market in the last several years
- (C) many dedicated and talented people serve on the Cola Commission
- ending regulation of cola prices in the economist's country will have no effect on these prices, which are already below the ceilings set by the Cola Commission
- (E) the Cola Commission was originally set up by economists
- 8. The aesthetic reaction to a work of art depends on the immediate environment, and true appreciation of art requires that it be presented in an environment that allows for lengthy, solitary deliberation. Hence it is unfortunate that art museums have recently invented the notion of the "art-show event," for which historically important, rarely seen works are collected into a show that is then heavily advertised and brings in huge crowds.

The statements above, if true, most strongly support which one of the following?

- (A) People who really love and understand art tend to avoid museum art-show events.
- (B) The more time one spends and the fewer people that are around, the more one will like a work of art.
- (C) Most of the people who go to museum art-show events do not know how to appreciate art and fail to realize what they are missing.
- (D) Art museum directors are forced to put on art-show events in order to raise money.
- (E) Museum art-show events do not facilitate proper appreciation of art.

9. The average life expectancy of people who drink alcohol heavily is lower than that of people who do not drink heavily, and people who smoke tobacco have lower life expectancies on average than those who refrain from smoking. Yet the average life expectancy of people who both drink heavily and smoke tends to decrease when such people give up drinking.

Which one of the following most helps to reconcile the discrepancy described above?

- (A) Most heavy drinkers who are also smokers tend to smoke more heavily if they stop drinking.
- (B) The life expectancy of smokers who stop smoking increases, even if they have smoked for many years.
- (C) The average life expectancy of relatively light smokers is lower than that of people who have never smoked at all.
- (D) The life expectancy of smokers who are heavy drinkers usually increases if they give up both smoking and drinking.
- (E) Most heavy smokers who are not heavy drinkers tend to gain weight if they stop smoking.
- 10. Publishers, like all private businesses, have always been concerned about profitability. But, while it used to be at least possible to get a book published that was unlikely to be popular, and hence unlikely to be a moneymaker, profitability is now the sole criterion. Thus, no matter how much literary merit a book possesses, it will not be published in today's market if it looks like it will not be popular.

Which one of the following sentences most accurately expresses the main conclusion of the argument?

- (A) Books of literary merit cannot be published in today's market.
- (B) Publishers used to select books for publication based on literary merit.
- (C) Good books are published now only if they are also likely to be popular.
- (D) It is harder to get a book published today than it once was.
- (E) Unpopular books are not likely to make money for the publisher.

11. Scientists hypothesized that the end of a certain geological period came about when a cataclysmic meteor impact near the equator caused debris to fly up into the atmosphere, where it was scattered by winds, blocking out the sunlight and abruptly killing off many species. In European rock layers, the fossil record of the boundary layer that marks the end of the period supports this picture of rapid, mass extinction of life. But the boundary layer in the Antarctic is much thicker, so that it appears that the extinction process there lasted a much longer time, contrary to what the hypothesis would have predicted.

Which one of the following, if true, resolves the apparent discrepancy noted above?

- (A) Although scientists have traditionally used the last appearance of creatures called ammonites to define the boundary layer, they recently found ammonites 20 meters above the previously identified boundary layer in the Antarctic.
- (B) It was recently discovered that Europe accumulated sediment at a slower rate than did the Antarctic region, so that a layer of sediment of a given thickness represents a longer period of time in Europe than it does in the Antarctic.
- (C) The controversy over whether the mass extinctions at the end of the geological period resulted from the impact of a meteor began only in 1979.
- (D) The findings in Europe agree with data about the boundary layer from all other mid-latitude sites.
- (E) The rock layers in the Antarctic were examined many years after the rock layers in Europe.

12. Heern: I object to the mayor's proposal that taxicabs pick up and drop off passengers only at designated stops. This proposal aims to reduce traffic jams and accidents, but if the mayor herself were affected by such a law, she would oppose it. Thus the proposal is without merit.

The reasoning in Heern's argument is most vulnerable to criticism on the grounds that this argument

- (A) infers, from the claim that a proposal will not achieve one of its aims, that the proposal is entirely without merit
- (B) presumes, without providing justification, that the proposed law would not be the most effective way to reduce traffic jams and accidents
- (C) takes for granted that the frequency and location of designated stops would inconvenience most taxicab users
- (D) takes for granted that other people would share the mayor's dissatisfaction with the proposed law
- (E) focuses on the mayor's preferences instead of addressing the merits of the proposal
- 13. Recent studies indicate that people who spend significant time browsing the World Wide Web do so at the expense of time spent in face-to-face interaction with other people. This has led some to fear that social isolation will greatly increase because of the popularity of browsing the Web. But, since browsing the Web is just one of many popular solitary activities, and any time spent on a solitary activity is time spent not interacting face-to-face with other people, such fears are unwarranted.

Which one of the following most accurately describes the role played in the argument by the view that social isolation will greatly increase because of the popularity of browsing the Web?

- (A) It is the overall conclusion of the argument.
- (B) It is the claim that the argument attempts to undermine.
- (C) It is a concession that is made to those who might otherwise disagree with the conclusion of the argument.
- (D) It is presented as evidence that independently supports the conclusion of the argument.
- (E) It is a premise that, together with another premise, is meant to support the conclusion of the argument.

14. Animals generally avoid foods that are harmful to them and favor those that benefit them. Thus it is surprising that gypsy moth caterpillars prefer to eat leaves that contain high concentrations of certain naturally occurring toxins called alkaloids, even though caterpillars grow faster on alkaloid-free diets.

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

- (A) In the alkaloid-containing plants on which gypsy moth caterpillars feed, the toxins are found only in the leaves.
- (B) Caterpillars whose growth is inhibited by the consumption of alkaloids are more vulnerable to attack by predators.
- (C) The alkaloid-containing plants on which gypsy moth caterpillars feed increase their production of toxins when their leaves are injured.
- (D) Alkaloids that have been eaten by caterpillars are poisonous to parasitic wasp larvae that feed on caterpillars' internal tissues.
- (E) Only gypsy moth caterpillars, not adult gypsy moths, feed on the leaves of alkaloidcontaining plants.
- 15. Commentator: The quality of health care is declining. Medical schools have been graduating fewer people than are needed to replace retiring physicians. Furthermore, on average, a physician now spends only 15 minutes with a patient on the patient's first visit.

Which one of the following, if true, most weakens the commentator's argument?

- (A) The average length of all patient-physician visits is 20 minutes.
- (B) More and more people are seeking physicians, thus increasing the number of patients that physicians treat.
- (C) Most patients do not like to spend an inordinate amount of time in physicians' offices.
- (D) Five years ago, the average first patient-physician visit lasted 10 minutes.
- (E) Most patients visiting a physician are suffering from ailments that are not life threatening.

Questions 16-17

- 16. Nadia: Directors of films that depict historical figures and events have a responsibility to represent those figures and events in a manner that is as faithful as possible to the facts. Otherwise, directors are likely to produce biased or misleading presentations of such events that will be accepted by audiences as historical fact.
 - Ariel: But even a historical film is and should be the expression of its director's artistic sensibility. Rather than constrain directors, what must be done is to educate film audiences to see film as art rather than as history, thereby ensuring that historical films are not accepted uncritically as historical fact.

Which one of the following is the point at issue between Nadia and Ariel?

- (A) whether the people who make up film audiences are likely to believe that what they see in films is an accurate depiction of historical figures and events
- (B) whether film directors have an obligation to represent historical figures and events in a manner that is as faithful as possible to the facts
- (C) whether it is possible for films that depict historical figures and events to be vehicles for a director's artistic sensibility
- (D) whether directors of films that depict historical figures or events tend to misrepresent those figures and events
- (E) whether it is possible to make a film that depicts historical figures and events in a way that is faithful to the known facts
- 17. Which one of the following is an assumption made by Ariel's argument?
 - (A) Some films that depict historical figures and events do so in a manner that is faithful to the facts.
 - (B) A director's artistic sensibility necessarily results in distortion of historical figures and events in film.
 - (C) It is less objectionable to alter how a film audience might interpret a historical film than it is to interfere with the expression of a film director's artistic sensibility.
 - (D) Directors make historical films with the intention of influencing audiences' understanding of the particular figures and events depicted in the films.
 - (E) Films that offer biased or misleading presentations of history are more appealing to audiences than are films that offer strictly factual presentations of history.

18. Politician: There should be a mandatory prison sentence for everyone convicted of a violent crime. Some people object to such a policy on the grounds that it overlooks differences among individual cases that, if taken into consideration by judges and juries, could result in less prison overcrowding. But we can dismiss this objection since these critics would take a different view if they had themselves been victims of violent crime.

The politician's argument is most vulnerable to criticism on the grounds that this argument

- (A) fails to clearly distinguish violent crime from nonviolent crime
- (B) takes for granted that one's view is unjustified if one would, under different circumstances, take a different view
- (C) takes for granted that prison overcrowding is caused mainly by a policy of mandatory prison sentences
- (D) attempts to establish a factual generalization using anecdotal evidence
- (E) takes for granted that, without mandatory prison sentences, judges and juries would always give sentences that are too lenient
- 19. The folk medicine of many different cultures has extolled the use of garlic both to prevent and to cure many diseases. Modern medical research is absorbing some of these beliefs. Recent studies indicate that many of the more than 50 sulphur compounds that can be produced from garlic (depending upon whether it is boiled, fried in oil, or dried) have medicinal utility. Some of these compounds lower blood cholesterol, others reduce platelet clumping, while still others shrink some kinds of tumors. Other plants and herbs recommended by traditional medicine may also prove valuable for medicine generally.

Each of the following statements is supported by the information above EXCEPT:

- (A) The belief that garlic is an effective way to prevent or cure some diseases is not limited to a small number of closely related cultures.
- (B) The cures of modern medicine are not always different from those of folk medicine.
- (C) It can be medically beneficial to reduce platelet clumping or to lower blood cholesterol.
- (D) Garlic that is neither boiled, fried in oil, nor dried has no medicinal value.
- (E) Research on some traditional medications has yet to be conducted by modern medical researchers.

20. Journalism professor: Since the number of reportable facts confronting any journalist is extraordinarily large, every journalist must employ a principle of selection. However, any such principle of selection is bound to be subjective, for it involves value judgments. Therefore, the view that there is any degree of objectivity in journalistic reporting is a myth. This means that, for example, no newspaper article is more objective than any other.

The journalism professor's argument is flawed because it

- draws a conclusion regarding what is right or wrong entirely on the basis of evidence regarding matters of fact
- (B) concludes that a practice completely lacks a quality on the basis of evidence for its lacking the pure form of that quality
- (C) fails to justify its presumption that judgments about fact and judgments about value are indistinguishable
- (D) fails to distinguish between the methods employed by individual members of a particular profession and the methods endorsed by the profession as a whole
- (E) attempts to justify a claim about a particular trait on the basis of irrelevant attributes of a profession

21. Albumin, one element of blood plasma, is an effective substitute for plasma in treating or preventing shock, the collapse of blood vessels due to a drop in the liquid volume of the bloodstream. Injected into the bloodstream, albumin absorbs enough liquid from surrounding tissues to keep the blood vessels open. It has an advantage over plasma because it can be made available for emergencies while taking up a fraction of the shipping and storage space of plasma.

Of the following, which one best illustrates the principle illustrated by the stated advantage of using albumin as a substitute for plasma?

- (A) The use of nonmetallic composites rather than solid metals can increase the cost of aircraft but enables them to be built stronger.
- (B) A newspaper can increase advertising revenue without increasing its bulk or weight if it is printed in a smaller format.
- (C) Hardbound books can be a better choice than paperbacks despite their extra bulk if the books need to be more durable than paperbacks.
- (D) Dehydrated foods have much the same food value as ordinary foods and are more convenient for hikers because they are lighter and take up less space in backpacks.
- (E) An advantage that compact discs have over vinyl records is that they are also used for storing information for computers, so advances in computer disc technology will probably apply to compact discs used for music.

22. A customer returning defective merchandise should be given an immediate refund if the merchandise was defective when purchased and was not on sale; if the customer is returning merchandise that is not defective or was damaged by customer negligence or customer abuse, the customer should be referred to the manager.

Which one of the following judgments conforms most closely to the principle stated above?

- (A) A customer purchased a lawn mower, which became inoperative after the customer used it only five times. Even though the lawn mower was not on sale when purchased, the customer should be referred to the manager.
- (B) A customer purchased twelve bags of cement at the regular price, to build a walkway. The walkway was completed with only ten bags and the customer wishes to return the two remaining bags. The customer should be given an immediate refund.
- (C) A customer purchased a VCR that was on sale. Even though the VCR failed to rewind videocassettes upon the customer's arrival home, the customer should be directed to the manager.
- (D) A customer purchased a set of wrought-iron patio furniture at the regular price. The welding on two of the chairs was faulty, causing both to collapse during their first use. The customer should be given an immediate refund.
- (E) A customer purchased a microwave oven that stopped working after the customer accidentally dropped it. The oven was not on sale and was not damaged by abuse, so the customer should be given an immediate refund.

- 23. Jamal: It's incorrect to maintain that current data suggest a weakness in the economy. Stocks are paying higher dividends than ever and corporations' profits are very high. Yet you criticize corporations on the basis of wage data, which are the only data showing a decline.
 - Jennifer: You're right that only wage data show a decline, but those data are important because they show a shift of income from companies' workers to their shareholders. The statistics you cite mean little to the expanding numbers of workers finding it increasingly difficult to make a living.

Jamal's and Jennifer's statements provide the most support for holding that they agree about the truth of which one of the following?

- (A) Statistical information tends to reflect the biases of its compilers.
- (B) Income should not be redistributed from workers to shareholders.
- (C) The decline in wages is a worrisome economic trend.
- (D) The current priorities of many corporations are misplaced.
- (E) Corporations are currently making considerable profits.
- 24. Because the recycling of glass is not typically costeffective, there is a shortage of glass recycling facilities and glass recycling is not an obligation we all bear. So some people ought not to recycle glass.

Which one of the following arguments contains a flaw in reasoning most similar to that in the argument above?

- (A) It is false that you should break your promise, so you do not have an obligation to break your promise.
- (B) Because operating museums is so expensive, the government can no longer afford to support them. So private foundations that can afford to do so have an obligation to provide the financial support that the government previously provided.
- (C) Anyone who rides a bicycle at night ought not to ride on a highway. So we ought not to bike on the highway during our trip today.
- (D) Some convention participants do not have to register on the first day of the convention since their flights were delayed past midnight. So some participants should not register on the first day of the convention.
- (E) Only if everyone ought to contribute should I contribute. But some people ought not to contribute, so I do not have to contribute either.

25. Peterson, the current world record holder in the women's 100-meter backstroke, has ranked first in the world for seven years. Her performance in recent competitions was disappointing, but during training she unofficially beat her official world record time. So she can be expected to set a new world record in the 100-meter backstroke during the upcoming world competition.

Which one of the following, if true, most strengthens the argument?

- (A) Peterson is widely expected to win the 100-meter backstroke in the next world competition.
- (B) Peterson had the flu during a recent competition.
- (C) Peterson has also set world records in several other swimming events.
- (D) Peterson is the only active world-class swimmer in the world to have set a world record in the 100-meter backstroke.
- (E) Peterson has in each of the past seven years swum faster during world competitions than during training for those competitions.
- 26. There were several early attempts to forge a reconciliation between Shintoism and Buddhism based on mutual respect among their adherents. The evidence for this includes extant sculptures depicting Shinto gods wearing Buddhist vestments.

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

- (A) Most sculptures contemporaneous with the sculptures mentioned were intended to have religious significance.
- (B) No sculptures that have not survived depicted Shinto gods wearing Buddhist vestments.
- (C) Early attempts at reconciling Shintoism with Buddhism were successful.
- (D) Shintoism did not originate as a sect of Buddhism.
- (E) The depiction of Shinto gods wearing Buddhist vestments was not intended to represent the triumph of Shintoism over Buddhism.

SECTION II

Time—35 minutes

26 Questions

<u>Directions</u>: Each set of questions in this section is based on a single passage or a pair of passages. The questions are to be answered on the basis of what is <u>stated</u> or <u>implied</u> in the passage or pair of passages. For some of the questions, more than one of the choices could conceivably answer the question. However, you are to choose the <u>best</u> answer; that is, the response that most accurately and completely answers the question, and blacken the corresponding space on your answer sheet.

Following the Russian Revolution of 1917, the elite intellectual community to which the poet Marina Tsvetaeva (1892–1941) belonged disintegrated. The Bolsheviks—the leaders of the revolution that

- (5) instituted the Soviet system of government in Russia—conducted violent reprisals against perceived political enemies, including intellectuals. Tsvetaeva saw the Bolsheviks' seizure of power as a catastrophe, and she left Moscow for the Russian
- (10) countryside. Village life enriched her poetry and enhanced her awareness of what it meant to be Russian; she discovered an affinity with artisans, laborers, and farmers. Her poetic ear was opened to the colloquial Russian spoken by the villagers, as
- (15) opposed to the literary Russian she was accustomed to. This linguistic encounter awakened her interest in Russian folklore and transformed her diction and meter, changes that remained with her even after she emigrated, first to Prague and later to Paris.
- (20) Tsvetaeva eventually returned to Russia and it is certainly possible to quote passages from her journals out of context that show her speaking positively about the "revolutionary" spirit of poetry, or complaining bitterly of the émigré life. She also
- (25) admired Vladimir Mayakovsky, the officially sanctioned "poet of the Revolution," and wrote approvingly of Soviet children's books. But while these facts have been manipulated by Soviet scholars in an attempt to annex Tsvetaeva to Soviet literature,
- (30) the fact remains that she never embraced or even reconciled herself to the Soviet system.
 Some Soviet scholars tried to get around this fact by claiming that Tsvetaeva rejected the revolution
- because she lacked political sophistication, when
 (35) actually she understood its atrocities and injustices and therefore could never accept it. Other scholars, while acknowledging her opposition to the revolution, saw it as a mere result of her husband's volunteering to fight the Bolsheviks. However, it was her
- (40) opposition that had influenced him to take that course; her first poems containing anti-Bolshevik sentiments were written months before the revolution. Why was Tsvetaeva more critical of the revolution than were her contemporaries? Many
- (45) Russian intellectuals who endorsed the revolution experienced a psychological conflict: they had longed abstractly for revolution, but once it arrived they found themselves confronted with a reality deserving of condemnation—not to mention the political
- (50) necessity of endorsing that reality. Tsvetaeva was

spared this psychological conflict. While she had harbored revolutionary sentiments as an adolescent, these had long since been superseded by artistic aspirations. She could thus write about the ironies and

- (55) injustices of life after the revolution from a detached viewpoint, a perspective that, in conjunction with her physical distance from Russia, allowed her to assess circumstances more honestly than her contemporaries and to produce poems that expressed what only later
- (60) generations were able to see as clearly.
- 1. The author's statement that Soviet scholars attempted to "annex Tsvetaeva to Soviet literature" (line 29) means that they tried to
 - (A) force Tsvetaeva to alter her poetry so that it explicitly supported the revolution
 - (B) relate Tsvetaeva's poems to Russian folklore
 - (C) stigmatize Tsvetaeva as a writer who refused to support the revolution
 - (D) encourage Tsvetaeva to write favorably about Soviet literature
 - (E) find a way to present Tsvetaeva as a poet who supported the revolution
- 2. Which one of the following statements is LEAST supported by the passage?
 - (A) Tsvetaeva's opposition to the revolution influenced her husband's decision to fight the Bolsheviks.
 - (B) Some Soviet scholars recognized that Tsvetaeva opposed the revolution.
 - (C) Tsvetaeva expressed admiration for Mayakovsky in order to win favor with Soviet scholars.
 - (D) Tsvetaeva's exile from Russia had a beneficial effect on her poetry.
 - (E) Some intellectuals who remained in Russia after the revolution endorsed the Bolsheviks as a result of political pressure.

- 3. Which one of the following statements about the effect of the Russian Revolution of 1917 on Russian writers is most supported by the information in the passage?
 - (A) Most Russian writers felt compelled to protest the social changes caused by the revolution.
 - (B) Russian writers who had longed for revolution felt more pressure to endorse the revolution than Tsvetaeva did.
 - (C) Russian writers whose works were politically neutral received the most critical acclaim after the revolution.
 - (D) The revolution led many Russian writers to distance themselves from injustices and write in a more ironic style.
 - (E) The quality of works by Russian writers generally improved in the years after the revolution.
- 4. Which one of the following aspects of Tsvetaeva's career does the author appear to value most highly?
 - (A) her retention of a colloquial poetic style after her emigration
 - (B) her approval of some Soviet literature and her eventual return to Russia
 - (C) her ability to write poetry in a variety of social circumstances
 - (D) the influence she exerted on her husband's decision to oppose the Bolsheviks
 - (E) her ability to write honestly and with detachment about life after the revolution
- 5. The author introduces Mayakovsky in lines 24–26 in order to provide an example of
 - (A) an aspect of Tsvetaeva's intellectual life that was misused by Soviet scholars
 - (B) an intellectual whose political fate contrasted with that of Tsvetaeva
 - (C) the type of work considered acceptable by Soviet scholars
 - (D) a poet whose work served as a model for Tsvetaeva's change in poetic style
 - (E) one of the figures of Soviet literature whose work influenced Tsvetaeva to return to Russia

- 6. Which one of the following is most closely analogous to Tsvetaeva's experience in the Russian countryside as that experience is described in the passage?
 - (A) A city veterinarian who treats house pets spends a year in the country assisting a farm veterinarian in order to learn new skills in anticipation of changing his specialization.
 - (B) A composer who lives in the city spends a summer in a cabin in the woods in order to complete a musical piece that draws heavily on the sounds of nature.
 - (C) A Canadian architect visits Morocco in order to study particular buildings to get inspiration for her work, then returns and creates a design significantly different from her previous work.
 - (D) A painter who can no longer afford to live in the city relocates to a rural town and discovers great inspiration for his works in the landscape there.
 - (E) A Mexican college student majoring in German enrolls for a semester at a German university, then decides her language skills will benefit if she remains there another semester.
- 7. Which one of the following statements is most strongly supported by the information in the passage?
 - (A) Few émigré Russian intellectuals other than Tsvetaeva returned to Russia after the revolution.
 - (B) Soviet critics looked unfavorably on the use of Russian folklore in works of literature.
 - (C) The violent reprisals accompanying the Russian Revolution of 1917 were less to be feared in the countryside than in Moscow.
 - (D) Tsvetaeva's work was ultimately judged more harshly by Soviet scholars because she eventually returned to Russia.
 - (E) Tsvetaeva was one of the first Russian writers to incorporate the language of artisans, laborers, and farmers into literature.

The liberal use of spices in cooking is commonly thought to be correlated with hot climate. Analyzing nearly 5,000 recipes published in traditional cookbooks from 36 countries, researchers confirmed

- (5) that, as a rule, the hotter the country's climate, the more spices are called for in its recipes, and that many of the spices commonly used in tropical and subtropical areas are used little, if at all, in colder climates. Spice use varies in this way not only
- (10) between countries, but also between regions of the same country with significant temperature differences, such as northeastern and southwestern China. Several explanations for the phenomenon have been suggested: hot spices cool people by promoting
- (15) perspiration; food spoils faster in hot climates, and potent seasonings can make spoiled foods palatable; spices grow plentifully in the tropics, and people tend to eat what is locally available; and spices provide important nutrients that foods otherwise lack.
- (20) But each of these explanations is flawed. The purpose of spices cannot be primarily to provide nutrients, because most are used in such tiny quantities that they contribute little of nutritive value. The "cooling" explanation fails to account for the use
- (25) of spices in general since, among the multitude of prominently used spices, only hot peppers induce sweating, and even they do so only in some people. The claim that spice use originally developed to make spoiled foods more palatable is also questionable,
- (30) since the practice would have been naturally discouraged by increased illness from food poisoning. Nor is agricultural convenience an adequate explanation; researchers have found no relationship between mean annual temperature and numbers of
- (35) spices that grow in each country, and indeed have found that people will eschew locally grown spices while going to great lengths to obtain imported ones. A recent study suggests another pragmatic basis
- for the correlation: Many spices naturally contain
 (40) chemicals that kill or suppress microorganisms that cause spoilage and food poisoning. Many spices that appear most often and most abundantly in recipes from hot climates—especially garlic, onion, and hot peppers—inhibit most of the bacteria species against
- (45) which they have been tested. And many spices that have relatively weak antibiotic effects when used alone become much more potent when combined, for example in chili powder (typically a mixture of red pepper, paprika, garlic, cumin, and oregano).
- (50) The researchers acknowledge that flavor is the obvious reason for using spices. But as they point out, the flavors of many widely used spices are not initially appealing. Rather, people have to learn to like them, which suggests that using spices is more
- (55) than a matter of taste. In climates that are particularly favorable for the growth of food-borne microbes, people may have acquired and culturally maintained this preference for spicy foods ultimately because spices help cleanse foods of pathogens and thereby
- (60) contribute to the health and longevity of people who consume them.

- 8. Which one of the following most accurately expresses the main point of the passage?
 - (A) There is evidence that the use of highly spiced foods may have developed in hot climates because spices can inhibit the growth of microorganisms, thus helping to prevent illness by protecting foods against spoilage.
 - (B) There is inadequate evidence for the commonly proposed theories that explain the correlation between spice use and climate in terms of the cooling properties of spices, their health benefits, or their local availability in warm regions.
 - (C) Recent research provides statistical support for the widespread belief that people in hot climates use a wider variety and a greater abundance of spices in their foods than do people in cooler climates.
 - (D) A recent study tends to corroborate the widespread belief of people in hot climates that spices inhibit the spread of harmful microorganisms.
 - (E) Research indicates a direct correlation between mean annual temperature and the consumption of the kinds of spices that inhibit the growth of microorganisms, but this correlation has yet to be explained.
- 9. Which one of the following does the author cite in support of the suggestion that using spices is more than a matter of taste?
 - (A) Researchers have found a statistical correlation between spice consumption and longevity in tropical countries.
 - (B) Research has shown that many spices strengthen the human immune system.
 - (C) Spice combinations are traditionally used mainly in foods that otherwise would be especially vulnerable to spoilage.
 - (D) An appreciation of the flavors imparted by many commonly used spices must be acquired.
 - (E) Many spices that are traditionally combined in recipes from hot climates are used singly in recipes from cooler climates.

- 10. It can be inferred from the passage that the author would be most likely to agree with which one of the following statements?
 - (A) People in general do not initially like the flavors of highly nutritious foods.
 - (B) Given the choice between imported foods and locally grown ones, people in warm climates usually prefer the former.
 - (C) The ultimate reason for the use of spices is not necessarily flavor.
 - (D) Many of the most frequently and abundantly used spices are expensive and difficult to obtain in the areas in which they are produced.
 - (E) Telltale flavors of stale foods cannot be masked by the liberal use of potent spices.

- 11. The passage includes examples of which one of the following?
 - (A) previously advanced theories attempting to explain the preservative properties of spices
 - (B) traditionally used food seasonings that are not considered to be spices
 - (C) specific recipes that originated in hot regions and call for the liberal use of spices
 - (D) specific foods that are especially vulnerable to the development of pathogenic microorganisms
 - (E) specific spices that are among the most effective in inhibiting bacterial growth

Immune systems, even in their immature states, have a vast repertoire of white blood cells called lymphocytes, one specific to each of an astronomical number of different antigens, including the body's

- (5) own components, that have the potential to trigger an immune system attack. However, the immune system somehow ordinarily develops self-tolerance and does not attack the body's own tissues. The long-accepted model according to which the immune system protects
- (10) the body by distinguishing self from nonself is being called into question by new research in immunology. According to the established model, called the self-nonself theory, in the fully developed immune system, lymphocytes bumping into their
- (15) complementary antigens produce an immune reaction—the lymphocyte begins reproducing, cloning itself into a defending army. But before the immune system is fully developed, when a lymphocyte latches onto its matching antigen, the lymphocyte is killed
- (20) off or somehow permanently suppressed. Since these antigens are presumably the body's own, the body learns in this way to tolerate itself first, after which it shifts to its mature defensive mode.
- Studies conducted on mice have been cited as
 (25) evidence for this view of immunologic development. Unlike humans, mice are born with still developing immune systems. Newborn brown mice injected with cell samples from genetically unrelated white mice were later able to accept skin transplants from those
- (30) white mice without rejecting the tissue. However, the same tolerance-building reaction failed to occur in adults. According to the self-nonself theory, the fledgling immune systems of the brown mice developed tolerance because all or most of the
- (35) lymphocytes specific to the cells in the injected samples were neutralized.

Recent studies, however, suggest that whether an immune system reacts to a stimulus with aggression or tolerance is not simply a matter of whether or not

- (40) that system is fully developed. Researchers have discovered that newborn mice will develop immunity against small, nonlethal doses of viruses, suggesting that not all antigens encountered by immature systems are routinely tolerated. Another team of
- (45) researchers has found that newborn mice injected with cell samples from unrelated mice do develop immune reactions to the antigens carried by some types of those cells, and that, conversely, under the right conditions adult mice can be induced to develop
 (50) tolerance to foreign antigens.

These results do not by themselves disprove the self-nonself theory, but they do undermine one of its experimental underpinnings. Some scientists have therefore put forward a promising alternative to the

- (55) self-nonself theory in an attempt to account for these new experimental findings. Their theory holds that when cells are actually being damaged or destroyed by an invader, they emit danger signals. It is these signals that trigger an aggressive immune response
- (60) and not the mere recognition by lymphocytes of antigens foreign to the body.

- 12. Which one of the following most accurately characterizes the author's attitude toward the alternative to the self-nonself theory mentioned in the final paragraph?
 - (A) guarded skepticism toward its experimental underpinnings
 - (B) hopefulness that it will adequately account for new findings
 - (C) enthusiastic agreement with its central assertion
 - (D) admiration of the simplicity of its hypotheses
 - (E) confidence that it will replace the self-nonself theory
- 13. The primary purpose of the passage is to
 - (A) compare the merits of arguments supporting an established theory with those of arguments supporting an alternative theory
 - (B) introduce evidence discrediting one theory and call for the development of an alternative theory
 - (C) challenge the evidence that has been cited in support of an established theory
 - (D) explain why immune systems attack some antigens but do not attack a body's own components
 - (E) raise questions about an established theory and describe an alternative theory
- 14. According to the passage, which one of the following is a tenet of the model proposed as an alternative to the self-nonself theory?
 - (A) An immune system always initiates an aggressive response to its first exposure to any particular antigen.
 - (B) Antigens themselves play no role in triggering lymphocytes to clone themselves into a defending army.
 - (C) Some signals other than mere contact with complementary antigens prompt lymphocytes to proliferate.
 - (D) A lymphocyte reproduces only when it is being destroyed.
 - (E) All antigens encountered by immature immune systems are routinely tolerated.

- 15. What is the main purpose of the fourth paragraph?
 - (A) to present evidence that is not explained by a long-accepted theory
 - (B) to provide additional evidence in support of a long-accepted theory
 - (C) to distinguish the premises of a long-accepted theory from its conclusions
 - (D) to call into question techniques used in experiments cited in support of a long-accepted theory
 - (E) to suggest how a long-accepted theory might account for other types of phenomena
- 16. Which one of the following experimental findings is mentioned in the passage as a challenge to the self-nonself theory?
 - (A) Newborn mice tolerate their bodies' own antigens.
 - (B) Newborn brown mice do not develop immunity to some doses of viruses.
 - (C) Adult brown mice sometimes do not develop immunity to viruses to which they had no previous exposure.
 - (D) Adult mice can develop tolerance to foreign antigens.
 - (E) Mature brown mice reject skin grafts from white mice to which they had no previous exposure.

- 17. Based on the passage, which one of the following statements can be most reasonably inferred from the self-nonself theory?
 - (A) The mature immune system recognizes most of a body's lymphocytes, but none of its antigens, as self.
 - (B) A particular virus that the mature body encounters may be accepted as self in small doses, but as nonself in larger doses.
 - (C) Whether an antigen is included as self or nonself generally depends on the body's early experience with the antigen.
 - (D) All antigens for which the body has complementary lymphocytes are usually included as self.
 - (E) Throughout its life the body continually accepts additional different kinds of antigens as self.

In 1968 the United States Congress passed the Fair Housing Act, intended to counter discrimination based on race, color, religion, sex, or national origin in the sale and leasing of housing. In *Havens Realty*

- (5) *Corp. v. Coleman* (1982), the United States Supreme Court attempted to define for the Fair Housing Act those persons who fulfill the "standing" requirement, which holds that only those parties having a personal stake in the outcome of a controversy are warranted
- (10) to bring suit. Specifically, the Court was asked to decide whether a "tester" (an individual who, without an intent to rent or purchase a dwelling, poses as a renter or purchaser for the purpose of investigating rental/sales practices) has standing. The Court was
- (15) also asked whether an organization has standing to sue on its own behalf. *Havens Realty Corp. v. Coleman* originated in a

class action suit filed in a local court in 1979. The plaintiffs were two testers—a black woman named

- (20) Sylvia Coleman and a white man named R. Kent Willis—and HOME, a nonprofit fair housing organization. The plaintiffs alleged that Havens Realty had engaged in discriminatory practices such as showing each tester apartments only in buildings
- (25) occupied primarily by that person's racial group and telling the plaintiffs conflicting stories regarding the availability of individual apartments. The court dismissed the plaintiffs' claims, holding that they lacked the required standing under the act. According
- (30) to the court, only a person who actually intended to rent would meet the act's requirements. The case eventually came before the United States Supreme Court, which held that Coleman and Willis, as testers, did have standing to sue. In
- (35) deciding the case, the Court looked to the appropriate sections of the Fair Housing Act. Section 804(d) states that it is unlawful "to represent to any person because of race, color, religion, national origin, or sex that any dwelling is not available ... when such
- (40) dwelling is in fact so available." The Court reasoned that the act "conferred on all persons a legal right to truthful information about available housing." The testers had therefore suffered the exact injury made unlawful by the statute and thus it is irrelevant
- (45) whether the tester intended to either rent or buy the dwelling.

The Court also had to resolve whether HOME had a right to sue as an organization. The Court held that, like the individual plaintiffs, HOME had to show

(50) a direct or threatened injury caused by the defendant. HOME averred that it had been frustrated by the defendant's discriminatory practices in its effort to assist equal access to housing, and had been forced to devote significant resources to identifying and

(55) counteracting the said discriminatory practices. The Court agreed that the injury alleged by HOME was concrete and decided that the organization did have standing in this case.

- 18. Which one of the following best states the main idea of the passage?
 - (A) Before the decision of the United States Supreme Court in *Havens Realty Corp. v. Coleman* the Fair Housing Act was not an effective weapon against discriminatory housing practices.
 - (B) The decision of the United States Supreme Court in *Havens Realty Corp. v. Coleman* served to highlight certain omissions in the Fair Housing Act.
 - (C) The decision of the United States Supreme Court in *Havens Realty Corp. v. Coleman* inadvertently diluted the effectiveness of the Fair Housing Act.
 - (D) The decision of the United States Supreme Court in *Havens Realty Corp. v. Coleman* was the most important to address the issue of who has a right to bring suit in legal cases.
 - (E) The decision of the United States Supreme Court in *Havens Realty Corp. v. Coleman* helped to clarify who had a right to bring suit under the Fair Housing Act.
- 19. According to the passage, Havens Realty was accused by the plaintiffs in *Havens Realty Corp. v. Coleman* of doing which one of the following?
 - (A) refusing to respond to one of the testers' explicit requests for information regarding a certain apartment
 - (B) providing the two testers with contradictory information regarding which apartments were available
 - (C) misrepresenting the ethnic makeup of certain apartment complexes to the testers
 - (D) refusing to rent a specific apartment to one of the testers
 - (E) devoting more time and attention to one tester than to the other
- 20. The passage suggests that the local court based its decision on which one of the following beliefs concerning Coleman?
 - (A) She was not personally affected by the defendant's practices.
 - (B) She did not accurately report the defendant's practices.
 - (C) She unintentionally abetted the defendant's practices.
 - (D) She devoted significant resources to identifying the defendant's practices.
 - (E) She provoked the defendant's practices by falsely identifying herself.

- 21. According to the passage, which one of the following was central to the Supreme Court's decision in the case of *Havens Realty Corp. v. Coleman*?
 - (A) legislators' statements explaining the original intent of the law that allegedly had been violated
 - (B) the precedent established by other cases that had been decided based on the law that allegedly had been violated
 - (C) the exact wording of the law that allegedly had been violated
 - (D) the arguments presented by the defendant's attorneys
 - (E) the best interests of society
- 22. Which one of the following is most similar to the activities and goals of testers, as they are described in the passage?
 - (A) A government agent poses as a potential buyer of drugs in order to build a case against a known drug dealer.
 - (B) The manager of a store hires an actor to pose as a customer in order to decide which employee should be awarded the monthly service bonus.
 - (C) A teenager poses as a college student in order to be granted entry to a college campus event.
 - (D) A journalist telephones a bank and poses as a private secretary in order to gain information for an article about a business executive's financial dealings.
 - (E) A consumer advocate poses as a tourist in order to identify taxicab companies that overcharge their passengers.
- 23. The passage suggests which one of the following about Havens Realty?
 - (A) Havens Realty showed many of the same apartments to both testers.
 - (B) Havens Realty claimed that some apartments were not available when in fact they were available.
 - (C) Havens Realty showed the testers apartments concentrated within a relatively small locality.
 - (D) Havens Realty had been shown to have engaged in discriminatory practices before the testers asked to be shown apartments.
 - (E) Havens Realty was presented with different requirements by each tester regarding the kind of apartment that he or she wanted to see.

- 24. Which one of the following best describes the organization of the passage?
 - (A) A piece of legislation is described and then the effect of the legislation on certain social practices is analyzed.
 - (B) A certain legal case with relevance to a piece of legislation is broadly introduced and then the history and resolution of the case is presented in greater detail.
 - (C) A legal problem related to a piece of legislation is posed and then several ways of solving that problem are examined in some detail.
 - (D) An illegal practice is described and legal safeguards against that practice are outlined and advocated.
 - (E) Several stages in the history of a legal issue are narrated and then several social and legal implications of that issue are suggested.
- 25. Which one of the following is most likely to be an example of the use of resources claimed by HOME to have been necessitated by the defendant?
 - (A) the hiring and training of security experts to protect HOME's offices
 - (B) the hiring of attorneys to fight off frivolous lawsuits filed against HOME by realty companies
 - (C) the hiring and training of testers to investigate the rental practices of realty companies
 - (D) the expansion of HOME's mission to combat a wider variety of civil rights abuses
 - (E) the compensation of HOME employees for hazards to their health and safety caused by housing management organizations
- 26. The "injury made unlawful by the statute" (lines 43–44) refers to which one of the following?
 - (A) refusal to rent housing to an individual or organization
 - (B) noncompliance with local regulations regarding housing practices
 - (C) the denial of accurate information about available housing
 - (D) rejection on insufficient grounds of a legitimate lawsuit
 - (E) facilitating the establishment of housing occupied primarily by a single racial group

SECTION III

Time—35 minutes

26 Questions

<u>Directions</u>: 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 <u>best</u> 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.

 Legal activist: The opportunities for presenting flawed science in the courtroom are numerous, and, over time, such flawed testimony in trials can influence procedural requirements for entire professions. For example, so-called expert witnesses in medical malpractice suits have testified that the use of electronic fetal monitors would have prevented certain delivery-room complications, even though their views were not corroborated by medical science. Yet, as a result of the decisions based on such testimony, the use of electronic fetal monitors during delivery has become the professional norm.

Which one of the following most accurately expresses the main conclusion drawn in the legal activist's argument?

- (A) Medical personnel should not be allowed to give legal testimony on topics in which they are not experts.
- (B) Scientists who are engaged in good science should not allow so-called experts to give deceptive courtroom testimony.
- (C) The scientific testimony at many trials is not as reliable as juries are led to believe.
- (D) Bad science presented in the courtroom is responsible for overuse of electronic fetal monitors during child delivery.
- (E) Unreliable scientific testimony given in trials can have marked effects on the procedures used by the experts in certain fields.

2. The continents of South America and Africa were once joined together as one landmass. Evidence for this claim can be found in the fact that fossils of mesosaurs, extinct reptiles, have been unearthed in both western Africa and eastern South America.

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

- (A) The fossils of mesosaurs are the only ones unearthed in both western Africa and eastern South America.
- (B) The fossils of mesosaurs found in western Africa are of the same geologic period as those unearthed in eastern South America.
- (C) Mesosaurs would not have become extinct if they had not inhabited both western Africa and eastern South America.
- (D) The fossils of mesosaurs were found very near the west African and east South American coasts.
- (E) Mesosaurs in Africa migrated from Europe and mesosaurs in South America migrated from Asia.

Questions 3-4

- Dr. López: As anthropologists, we are committed to learning about cultures without intervening in the lives of the people in those cultures. For this reason, we should observe people passively by means of on-site video and sound recordings, rather than conducting interviews with those people.
- Dr. Tseung: Whereas your aim is admirable, your method is completely misguided. After all, the mere presence of video cameras and recording devices invariably constitutes an intervention into the lives of the people being filmed or recorded.
- 3. Which one of the following is a point at issue between Dr. López and Dr. Tseung?
 - (A) whether the aim of most anthropologists is to learn about cultures without intervening in the lives of the people being studied
 - (B) whether it is less troublesome for anthropologists to conduct interviews than it is for them to make on-site video and sound recordings
 - (C) whether it is possible to observe people passively by means of on-site video and sound recordings without intervening in the lives of those people
 - (D) whether video and sound recording devices would be more intrusive in cultures in which those devices are relatively uncommon than they are in cultures in which they are relatively common
 - (E) whether interviews conducted by anthropologists with people from a particular culture are an effective means of learning about that culture
- 4. Dr. Tseung's response to Dr. López uses which one of the following argumentative strategies?
 - (A) It concurs with Dr. López's conclusion while offering different evidence in support of that conclusion.
 - (B) It charges that the proposed method, though it would succeed in some cases, would make it impossible to reach the goal in some other way in case the method failed.
 - (C) It offers new evidence that supports Dr. López's conclusion better than does the evidence used by Dr. López.
 - (D) It discredits Dr. López's motivations rather than addressing Dr. López's argument.
 - (E) It questions the truth of an assumption on which Dr. López's argument is based.

5. To succeed in a particular career, a person must have both talent and tenacity. Hans did not succeed in his career. Therefore, he must not have had both talent and tenacity.

Which one of the following contains the same logical flaw as that in the passage above?

- (A) If a person does not have both strong muscles and efficient oxygen transfer, that person cannot run far. Therefore, if Erica can run far, either she has strong muscles or else she has efficient oxygen transfer.
- (B) To make good coffee, you need clear water and fresh coffee beans. Whoever made this bad coffee must not have used both clear water and fresh coffee beans.
- (C) Some plants grow fast when given fertilizer or a lot of light. Therefore, this fast-growing plant received either fertilizer or a lot of light.
- (D) To become healthy, adult dogs need both food and love. This adult dog received food but no love. Therefore, it must be unhealthy.
- (E) It does not always snow when it is cold and cloudy. Therefore, it need not be either cold or cloudy for it to snow.
- 6. Occultist: If there are ghosts, then they are supernatural beings. But science studies only natural phenomena. Therefore, there can be no scientific basis for criticizing the evidence that leads people to believe in ghosts.

The occultist's argument is most vulnerable to criticism on the grounds that it takes for granted that

- (A) the evidence that leads people to believe in ghosts cannot consist of natural phenomena
- (B) people who believe in ghosts do so on the basis of evidence
- (C) there are no methods for ascertaining the truth or falsity of any belief about the supernatural
- (D) other supernatural beings are not responsible for the evidence that leads people to believe in ghosts
- (E) the denial of the existence of ghosts is motivated by an irrational desire to deny that there are any supernatural events

7. Politician: The level of violence in the United States is higher than that in every other industrialized country. Some people attribute this entirely to a lenient judicial system, but this cannot be right, for the judicial systems in many other industrialized countries are just as lenient.

The politician's argument attempts to undermine the explanation by

- (A) providing an alternative explanation
- (B) arguing that the purported fact it is intended to explain is actually untrue
- (C) presenting evidence that contradicts an assumption that the explanation relies on
- (D) submitting evidence that the United States does not have a lenient judicial system
- (E) showing that the explanation relies on a misguided notion of the purpose of judicial systems
- The habit many students on today's campuses have of scribbling in their textbooks is inexcusable. It is harmful to books, aesthetically displeasing, and distracting to readers who buy the textbooks used.

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

- (A) The number of students selling their textbooks when their courses are over is smaller today than it was a few years ago.
- (B) Most students who buy used textbooks say they are aesthetically indifferent to the scribbling and sometimes find it helpful.
- (C) Many recent surveys show that books in public libraries are abused more than textbooks.
- (D) In most areas, scribbling in textbooks is not illegal.
- (E) Many students do not scribble in their textbooks.

9. Journalist: The advice of social scientists is frequently overlooked by politicians making social policy. Because it is not unreasonable to discount scientific assertions backed by weak evidence, politicians should not generally be criticized for ignoring social science, for social scientists, unlike physical scientists, seldom agree on the claims made even within their own specialty.

Which one of the following is an assumption required by the journalist's argument?

- (A) Only policy that is based on scientific findings is credible.
- (B) When creating policy, politicians' decisions should be determined by relevant scientific findings, except when the evidence for those findings is weak.
- (C) Politicians should follow the advice of experts on issues about which those experts agree among themselves.
- (D) The failure of scientists to agree that a claim within their specialty is true can indicate that the evidence for the claim is not strong.
- (E) Most politicians believe that some assertions of the social sciences are backed by weak evidence.
- 10. In fifth-century B.C. Athenian courts, prosecutors scolded juries far more often for lenience than for harshness. We may conclude that Athenians considered themselves overly inclined to allow people to escape the punishment they deserved in the name of misguided mercy.

The reasoning in the argument above is flawed because it fails to consider the possibility that

- (A) the opinions of the Athenian prosecutors did not represent popular opinion
- (B) the Athenian prosecutors considered themselves too harsh
- (C) although Athenians considered themselves too lenient, they might not actually have been too lenient
- (D) the people of a culture are not the best judges of the culture
- (E) the mercy the Athenians showed was not always misguided

11. Genetic analyses show that all varieties of domestic dogs are descendants of the wolf, and studies show that wolves have brains nearly twice the size of those of dogs of comparable size and that wolves are correspondingly more intelligent. But given that there are about 38 thousand wolves in North America, while there are over 50 million domestic dogs, it is obvious that dogs have been amply compensated, from an evolutionary standpoint, for the losses produced by their association with humanity.

Which one of the following principles most helps to justify the reasoning above?

- (A) Domestication of animals by humans tends to decrease the native intelligence of those animals.
- (B) Evolutionary success is not always attained by the group or species whose members are most fit.
- (C) Evolutionary success of a species is determined by genetic rather than environmental factors.
- (D) It need not be the case that an organism's chances of survival will be enhanced by its having a larger brain and a higher intelligence.
- (E) Evolutionary success of a species should be measured by the number of individuals in that species rather than by the abilities of those individuals.
- 12. Investigators of the fire at the Shelburne factory have determined that the traces of gasoline on the property resulted from a leaking truck and were not, as they previously thought, the work of an arsonist. The investigators had originally maintained that the fire could have resulted from arson, faulty wiring, or an explosion of factory equipment. However, in light of all the evidence collected so far, they are currently exploring only the faulty-wiring theory.

The statements above provide the most support for which one of the following inferences?

- (A) The traces of gasoline on the property constitute the only indication of arson that the investigators have found.
- (B) The gasoline leaking from the truck did not help to cause the truck to explode.
- (C) The investigators have physical evidence that the wiring in the Shelburne factory was faulty.
- (D) The investigators believe that the fire was not caused by an explosion of factory equipment.
- (E) The investigators have until now seriously explored only the possibility that the fire resulted from arson.

13. Even a slight change in the timing of this traffic light would cause a traffic backup. On the one hand, if the timing were slower, traffic would back up waiting for the light to turn green. On the other hand, if the timing were faster, traffic would back up because too few cars would get through each green light. Therefore, this traffic light was timed to keep traffic from backing up.

The pattern of reasoning in which one of the following arguments is most similar to that in the argument above?

- (A) According to the law of supply and demand, even a slight change in the price of a product will affect profits. For instance, if the price goes up, fewer products will be sold; if the price goes down, a company will make less money on each item. Therefore, a company's profits will be affected by the law of supply and demand.
- (B) Even a slight change in this spaghetti sauce recipe will result in an unhealthful sauce. On the one hand, if too many tomatoes are used, the sauce will be too acidic; on the other hand, if too few tomatoes are used, the sauce will not have enough vitamin C. Therefore, this recipe is designed to produce healthful spaghetti sauce.
- (C) Even a slight increase in the speed limit will result in more traffic fatalities. If people drive faster, they will be involved in more accidents; if drivers are in more accidents, they are more likely to be killed. Therefore, current speed limits are designed to minimize driving fatalities.
- (D) Objects in nature show the same complexity as many objects created by humans. If a natural object shows the same complexity as an object created by humans, then it was also the result of design. Therefore, objects in nature are the result of design rather than chance.
- (E) Even a slight change in this diet will result in unhealthy eating. On the one hand, eating larger portions will cause weight gain; on the other hand, eating smaller portions will not provide sufficient nutrients. Therefore, the patient ought to follow this diet exactly.

14. Democratic governments are unlikely to take a morally principled stand on controversial issues, because there are almost always groups of people with differing principles who strongly resist any policy that consistently adheres to any particular moral principle. Thus, the compromises that opposition groups force on democratic governments make policies about controversial issues morally arbitrary.

The reasoning in the argument is most vulnerable to criticism on the grounds that it fails to consider the possibility that

- (A) democratic governments are no more arbitrary than most people, who often fail to adhere strictly to their professed moral principles
- (B) democratic governments benefit citizens more by failing to take a stand on controversial issues than by adhering strictly to moral principles
- (C) democratic governments appeal to moral principles in effecting compromises between those with opposing moral principles
- (D) any form of government is more efficient when it is not overly restricted by moral principles
- (E) other forms of government are no more likely to take a stand on controversial moral issues than are democratic governments
- 15. When a certain gland becomes cancerous in humans, it produces high levels of a particular protein. A blood test can determine the level of this protein well before a cancer of the gland could be detected by other means. Some doctors recommend that aggressive anticancer treatment should be begun as early as possible for anyone who is tested and is found to have high levels of the protein.

Which one of the following, if true, most seriously weakens the doctors' recommendation?

- (A) Enlargement of the gland, a common condition infrequently associated with cancer, results in high levels of the protein.
- (B) The blood test for the protein has been in use for some time to monitor the condition of patients who have been diagnosed as having cancer of the gland.
- (C) So far, no patients whose protein levels were found to be normal have subsequently developed cancer of the gland.
- (D) Of those patients who have taken the test, very few under the age of 40 had high levels of the protein in their blood.
- (E) Before the blood test became available, about one third of all cases of cancer of the gland were detected in early stages.

16. Essayist: Some linguists claim that competent speakers of a language have explicit knowledge of the rules of grammar for that language. However, linguistic ability is not the possession and utilization of a body of knowledge, or rules of grammar, but is more similar to a skill like riding a bicycle. Just as the typical cyclist does not need to know physics, neither does the language user need to know grammar rules.

Which one of the following most accurately expresses a principle underlying the essayist's argument?

- (A) Not everyone follows the same set of rules in acquiring a skill.
- (B) No set of rules can exhaustively describe the behavior of someone who is engaged in a complex activity.
- (C) The level of knowledge of the rules governing an activity differs widely among participants in that activity.
- (D) There is a difference between knowing a set of rules and behaving in accordance with a set of rules.
- (E) Studying a description of a particular skill is of no help in acquiring that skill.
- 17. Economist: Ordinarily, when energy efficiency improves, less energy is used to satisfy the same needs. So presumably, if a country improves its energy efficiency, then ordinarily its energy consumption should decrease. Yet empirical data show that as a country's energy efficiency increases, energy consumption there either rises or stays the same.

Which one of the following, if true, most helps to explain the conflict between the economist's presumption and the empirical data?

- (A) When countries increase their energy efficiency, more energy-efficient appliances are bought than appliances that are not energy efficient.
- (B) Increases in energy efficiency in a country are typically accompanied by the introduction of new energy-consuming products.
- (C) When countries increase their energy efficiency, they usually sell their surplus of energy to other countries.
- (D) Different countries use different standards for calculating energy efficiency.
- (E) Causes other than increased energy efficiency can account for decreased energy consumption.

18. A survey has shown that public perceptions of comparative risks differ radically from the assessments of risk-management experts. For example, living near a nuclear power plant was judged a much greater risk by the survey respondents than it was by the experts. On the other hand, exposure to X-rays was judged a significantly lower risk by the survey respondents than it was by the experts. Psychologists have found that people tend to be more worried about risks they consider involuntary than about risks they consider voluntary. Thus the survey results were probably caused by the respondents' tendency to consider involuntary risks to be greater than they actually are.

Which one of the following is an assumption required by the argument?

- (A) It is not the case that involuntary risks are usually greater than voluntary risks.
- (B) People never consider risks that they are greatly worried about to be lower than they actually are.
- (C) Even risk-management experts sometimes consider involuntary risks to be greater than they actually are.
- (D) Not all of the survey respondents considered living near a nuclear power plant to be a voluntary risk.
- (E) The survey's respondents did not include people living near nuclear power plants.
- 19. Essayist: Many social critics have claimed that modern society has become so heavily regulated by corporate and government bureaucracies that individuals lead lives over which they feel they have nearly no control. That such a perceived loss of freedom is a complete myth, however, should be obvious from the fact that people who live in modern society voluntarily become members of clubs, political movements, and other small groups that place additional restrictions on their decisions.

Which one of the following, if true, most strengthens the essayist's argument?

- (A) Only people who think their lives are controlled by large, impersonal bureaucracies are willing to accept additional restrictions on their decisions.
- (B) Many people who live in societies that are not heavily regulated by corporate and government bureaucracies voluntarily become members of groups that place restrictions on their decisions.
- (C) Only people who do not feel highly restricted are willing to assume further restrictions on their decisions.
- (D) People do not feel highly restricted unless they are willing to assume further restrictions on their decisions.
- (E) People living in societies dominated by large institutions tend to desire participation in smaller, more intimate groups of people.

20. Critic: It has been argued that the real value of a product is not equal to the price people are willing to pay for it, on the grounds that this price often exceeds the cost of the labor required to create it, and the excess goes to the investor as an unjustifiably acquired profit. But since the existence of the product is as dependent on the investor's initial capital outlay as on the laborer's toil, this argument is fallacious.

The critic's argument requires assuming which one of the following?

- (A) An investor's profit is not justified in those cases in which the existence of the product does not depend on the investor's initial capital outlay.
- (B) The real value of a product is not completely determined by the cost of the labor needed to bring the product into existence.
- (C) People who make the initial investment required to create a product have a right to a greater percentage of the receipts from its sale than do those whose contributions occur later.
- (D) If people are willing to pay a given price for a product, then its real value is not greater than this price.
- (E) Everyone whose activity contributes to the creation of a product deserves an equal share of the proceeds from its sale.
- 21. Alexia: Our ignorance about the lives of so many novelists is unfortunate. How much deeper and more complete our appreciation of their works would be if we knew more about the personal wellsprings of their thought and art!
 - Malik: I disagree. Because we know virtually nothing of their personal lives, we can resist the temptation to reduce consideration of their works to biography and psychoanalysis, and instead engage each work on its own artistic terms.

The dialogue provides the most support for the claim that Alexia and Malik disagree over whether

- (A) understanding a novelist's work is of little or no value in understanding that novelist's life
- (B) understanding the personal wellsprings of the work of certain novelists is impossible without knowledge of their lives
- (C) a psychoanalytic approach provides an inadequate method of understanding a novelist's life
- (D) a novelist's work is not influenced by the details of his or her personal life
- (E) knowledge about a novelist's personal life can interfere with the appropriate understanding of that novelist's work

22. Reconstructing ships so that they have a double hull can protect them from serious damage in the roughly 20 percent of shipping accidents that unavoidably result from severe weather conditions. Avoidable human error, however, causes about 80 percent of shipping accidents. It would therefore be far more cost-effective to reduce damage to ships by retraining sailors than by reconstructing ships.

Which one of the following, if true, most strengthens the argument?

- (A) Damage from accidents can be reduced more cost-effectively by reducing the likelihood of accidents than by mitigating their effects.
- (B) One should always try to reduce the severity of the damage caused by each individual accident rather than try to minimize the number of accidents.
- (C) Reconstructing ships would provide protection from damage in accidents caused by human error.
- (D) The least expensive course of action in the long term is the one that minimizes the total cost of damage from accidents.
- (E) The most appropriate course of action is the one that most significantly reduces the severity of damage caused by accidents.
- 23. Negotiations between the union and the trucking industry will not resume unless one or the other of these parties agrees to make concessions. The trucking industry will not make any concessions without certain prior concessions being made by the union, and the union will make concessions only if the government agrees to act as mediator.

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

- (A) Negotiations between the union and the trucking industry will not resume.
- (B) The trucking industry will make no concessions.
- (C) Differences between the union and the trucking industry will be successfully negotiated if the government agrees to act as mediator.
- (D) If the union makes concessions, then the trucking industry will also make concessions.
- (E) Negotiations between the union and the trucking industry will not resume unless the government agrees to act as mediator.

24. Editorial: Despite the fact that recent military success has made the prime minister personally popular, her party will lose the next election unless the economy is no longer in recession; the electorate will blame the state of the economy on her, even though she is hardly responsible for it and her policies will be beneficial in the long run.

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

- (A) The prime minister's party will not win the next election if the electorate believes the prime minister is responsible for a continuing recession.
- (B) In the next election, voters will place as much weight on economic performance as on military success.
- (C) Voters tend to place excessive weight on economic issues.
- (D) The prime minister's party will win the next election if the economy shows some signs of recovery from the recession at the time of the election.
- (E) In the next election, the majority of voters will base their votes on which party's leader they admire most.

25. The total amount of fat that the average North American consumes each year has held steady since 1950, but nowadays North Americans consume less animal fat than in 1950, and more vegetable fat containing high levels of saturated fat. Both saturated and unsaturated fats are necessary to the human diet, since they are the only source of essential fatty acids (EFAs); however, most vegetable fats now consumed, unlike animal fats, do not contain EFAs. Because of this dietary shift from animal fat to vegetable fat, cardiovascular disease, neurological dysfunctions, and skin disorders are on the rise.

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

- (A) North Americans who consume inadequate amounts of EFAs are, on average, more susceptible to skin disorders than other North Americans are.
- (B) Almost all animal fats contain sufficient EFAs to prevent cardiovascular disease, neurological dysfunctions, and skin disorders.
- (C) Today, North Americans consume, on average, more saturated fat and less unsaturated fat than they did in 1950.
- (D) Vegetable fats provide more EFAs, on average, than animal fats provide.
- (E) The vegetable fats consumed today contain higher levels of saturated fat than most animal fats contain.

26. The body responds to the physical stress of moderate exercise by improving its physical condition. But one cannot increase the severity of exercise indefinitely and still improve one's physical fitness. This is because, under excessive stress, the body puts most of its energy into preventing organ damage. The ideal exercise is one that is just slightly more stressful than one's body can handle comfortably. Of course, the ideal intensity of exercise varies from person to person.

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

- (A) Any physical stress will improve fitness as long as the body does not have to put most of its energy into preventing organ damage.
- (B) Younger athletes can exercise harder before their bodies begin to put any energy into preventing organ damage than older athletes can.
- (C) Human bodies vary in the amount of physical stress they can handle comfortably.
- (D) The human body cannot improve its physical condition except through moderate exercise.
- (E) Some organ damage results from any exercise that is more stressful than one's body can handle comfortably.

SECTION IV

Time—35 minutes

22 Questions

Directions: Each group of questions in this section is based on a set of conditions. In answering some of the questions, it may be useful to draw a rough diagram. Choose the response that most accurately and completely answers each question and blacken the corresponding space on your answer sheet.

Questions 1–5

A researcher is evaluating exactly four medicines: W, X, Y, and Z. The only side effects the medicines can have are fatigue, headaches, palpitations, and sweating. The researcher knows the following to be true of the medicines' side effects:

Each medicine has at least one side effect.

- No medicine has both fatigue and palpitations as side effects.
- Medicine Z has no side effect in common with any of the other medicines.
- Medicines W and X have exactly one side effect in common.
- Fatigue is a side effect of medicine W.
- Palpitations are a side effect of medicine X.
- Sweating is not a side effect of medicine Y.

- 1. If sweating is not a side effect of medicine X, then which one of the following statements must be true?
 - (A) Fatigue is a side effect of medicine Y.
 - (B) Headaches are a side effect of medicine W.
 - (C) Headaches are a side effect of medicine Y.
 - (D) Headaches are a side effect of medicine Z.
 - (E) Palpitations are a side effect of medicine Y.

- 2. If sweating is not a side effect of medicine Z, then which one of the following statements must be true?
 - (A) Fatigue is a side effect of medicine Y.
 - (B) Headaches are a side effect of medicine W.
 - (C) Headaches are a side effect of medicine Y.
 - (D) Headaches are a side effect of medicine Z.
 - (E) Palpitations are a side effect of medicine Y.
- 3. Which one of the following statements could be true?
 - (A) Fatigue is a side effect of medicine X.
 - (B) Fatigue is a side effect of medicine Z.
 - (C) Headaches are a side effect of medicine X.
 - (D) Palpitations are a side effect of medicine W.
 - (E) Palpitations are a side effect of medicine Z.

- 4. If medicines W, X, and Y have a side effect in common, then which one of the following statements must be true?
 - (A) Fatigue is a side effect of medicine Y.
 - (B) Headaches are a side effect of medicine W.
 - (C) Headaches are a side effect of medicine Z.
 - (D) Palpitations are a side effect of medicine Y.
 - (E) Sweating is a side effect of medicine W.
- 5. If medicine Y has more than one side effect, then which one of the following statements must be true?
 - (A) Headaches are a side effect of medicine Y.
 - (B) Palpitations are a side effect of medicine Y.
 - (C) Sweating is a side effect of medicine W.
 - (D) Palpitations are not a side effect of medicine Y.
 - (E) Sweating is not a side effect of medicine Z.

Questions 6-13

Tracy's Flower Shop delivers exactly six types of flowers lilacs, magnolias, orchids, roses, tulips, and violets. Exactly six deliveries are made over a period of two consecutive days—Friday and Saturday. Three deliveries are made each day, at three different times each day—10 A.M., 2 P.M., and 4 P.M. Each of the six deliveries involves only one of the six types of flowers. The deliveries are made in accord with the following:

The violets are delivered on Friday.

The lilacs are delivered at some time before the tulips.

The violets are delivered at some time before the magnolias.

The orchids and the roses are delivered on the same day as one another.

- 6. Which one of the following could be an accurate list of the flowers in the order in which they are delivered, from first to last?
 - (A) magnolias, lilacs, violets, orchids, tulips, roses
 - (B) orchids, violets, roses, lilacs, magnolias, tulips
 - (C) roses, orchids, lilacs, tulips, violets, magnolias
 - (D) violets, orchids, magnolias, lilacs, tulips, roses
 - (E) violets, roses, orchids, tulips, magnolias, lilacs
- 7. If the roses are delivered on Friday at 2 P.M., then each of the following could be true EXCEPT:
 - (A) The violets are delivered on Friday at 4 P.M.
 - (B) The tulips are delivered on Saturday at 2 P.M.
 - (C) The orchids are delivered on Friday at 4 P.M.
 - (D) The magnolias are delivered on Friday at 4 P.M.
 - (E) The lilacs are delivered on Saturday at 2 P.M.
- 8. If the magnolias and the lilacs are delivered on Saturday, then which one of the following could be true?
 - (A) The orchids are delivered on Friday at 2 P.M.
 - (B) The orchids are delivered on Saturday at 10 A.M.
 - (C) The roses are delivered on Saturday at 4 P.M.
 - (D) The tulips are delivered on Friday at 4 P.M.
 - (E) The tulips are delivered on Saturday at 10 A.M.

- 9. Which one of the following could be an accurate list of the flowers in the order in which they are delivered, from first to last?
 - (A) lilacs, roses, orchids, violets, tulips, magnolias
 - (B) magnolias, violets, lilacs, orchids, roses, tulips
 - (C) orchids, lilacs, violets, magnolias, roses, tulips
 - (D) orchids, roses, violets, magnolias, tulips, lilacs
 - (E) roses, violets, orchids, lilacs, tulips, magnolias
- 10. Which one of the following could be true?
 - (A) The lilacs are delivered on Saturday at 4 P.M.
 - (B) The magnolias are delivered on Friday at 10 A.M.
 - (C) The magnolias are delivered on Friday at 2 P.M.
 - (D) The tulips are delivered on Friday at 10 A.M.
 - (E) The violets are delivered on Saturday at 4 P.M.
- 11. If the tulips are delivered on Friday, then which one of the following CANNOT be true?
 - (A) The magnolias are delivered on Friday at 2 P.M.
 - (B) The magnolias are delivered on Saturday at 4 P.M.
 - (C) The orchids are delivered on Saturday at 10 A.M.
 - (D) The roses are delivered on Saturday at 4 P.M.
 - (E) The violets are delivered on Friday at 4 P.M.

- 12. If the magnolias and the orchids are delivered on the same day, then which one of the following could be true?
 - (A) The roses are delivered on Friday.
 - (B) The lilacs are delivered on Saturday.
 - (C) The tulips are delivered on Saturday.
 - (D) The orchids are delivered before the violets.
 - (E) The violets are delivered before the lilacs.
- 13. If the tulips are delivered after the roses, then which one of the following must be true?
 - (A) The magnolias are delivered on Friday.
 - (B) The tulips are delivered on Saturday.
 - (C) The magnolias and the tulips are delivered on different days.
 - (D) The orchids and the tulips are delivered on different days.
 - (E) The tulips are delivered after the orchids.

Questions 14–18

During a seven-year period, an amusement park builds exactly seven roller coasters—the Firecracker, the Gobbler, the Hurricane, the Jackrabbit, the Lasso, the Niagara, and the Pretzel. No two roller coasters are built in the same year. Each roller coaster is either steel or wooden. The following conditions must apply:

- The Pretzel is built in the second year.
- The roller coaster built in the first year is steel, and the one built in the seventh year is wooden.
- The Lasso is built after the Firecracker.
- The Jackrabbit and the Gobbler are built before the Hurricane.
- Exactly two of the roller coasters built after the Hurricane are steel.
- Wooden roller coasters are not built in any two consecutive years.

- 14. Which one of the following could be the order, from first to last, in which the roller coasters are built?
 - (A) Gobbler, Jackrabbit, Pretzel, Hurricane, Firecracker, Lasso, Niagara
 - (B) Jackrabbit, Pretzel, Gobbler, Hurricane, Lasso, Firecracker, Niagara
 - (C) Jackrabbit, Pretzel, Gobbler, Hurricane, Niagara, Firecracker, Lasso
 - (D) Niagara, Pretzel, Gobbler, Jackrabbit, Hurricane, Firecracker, Lasso
 - (E) Niagara, Pretzel, Jackrabbit, Hurricane, Gobbler, Firecracker, Lasso

- 15. Which one of the following roller coasters must be steel?
 - (A) Firecracker
 - (B) Gobbler
 - (C) Hurricane
 - (D) Jackrabbit
 - (E) Lasso
- 16. If the Firecracker is built in a year immediately after a year in which a wooden roller coaster is built, then which one of the following must be true?
 - (A) The Gobbler is wooden.
 - (B) The Hurricane is wooden.
 - (C) The Firecracker is built in the sixth year.
 - (D) The Jackrabbit is built in the third year.
 - (E) The Lasso is built in the sixth year.

- 17. Each of the following roller coasters must be built before the Lasso EXCEPT:
 - (A) Firecracker
 - (B) Gobbler
 - (C) Hurricane
 - (D) Jackrabbit
 - (E) Niagara
- 18. If the Jackrabbit, the Hurricane, and the Firecracker are built in three consecutive years, in that order, then each of the following must be true EXCEPT:
 - (A) The Firecracker is built before the Niagara.
 - (B) The Gobbler is built before the Jackrabbit.
 - (C) The Hurricane is built before the Niagara.
 - (D) The Niagara is built before the Lasso.
 - (E) The Pretzel is built before the Jackrabbit.

Questions 19-22

On Tuesday evenings, the Community Center offers one session of each of the following six introductory classes: gymnastics, jazz dance, kung fu, meditation, tennis, and yoga. No other introductory classes are offered on Tuesdays. Each class is scheduled for exactly one hour, beginning at 5 P.M., 6 P.M., 7 P.M., or 8 P.M. Tuesday's schedule conforms to the following conditions:

- Yoga begins later than jazz dance but no later than kung fu.
- Meditation begins at the same time as exactly one other introductory class.
- No other introductory class begins at the same time as gymnastics.
- At most one of the other introductory classes begins later than gymnastics.

- 19. Which one of the following could be an accurate schedule of the Tuesday introductory classes?
 - (A) 5 P.M.: jazz dance, meditation
 - 6 P.M.: yoga
 - 7 P.M.: gymnastics
 - 8 P.M.: kung fu, tennis
 - (B) 5 P.M.: jazz dance 6 P.M.: meditation, tennis
 - 7 P.M.: yoga 8 P.M.: gymnastics, kung fu
 - (C) 5 P.M. jazz dance, meditation
 - 6 P.M.: yoga 7 P.M.: kung fu, tennis 8 P.M.: gymnastics
 - (D) 5 P.M.: jazz dance, tennis
 - 6 P.M.: meditation
 - 7 P.M.: kung fu, yoga
 - 8 P.M.: gymnastics(E) 5 P.M.: tennis, yoga
 - 6 P.M.: jazz dance, meditation 7 P.M.: gymnastics 8 P.M.: kung fu

- 20. If meditation is scheduled to begin later than tennis, then which one of the following could be true of the schedule?
 - (A) Jazz dance begins later than meditation.
 - (B) Kung fu begins later than gymnastics.
 - (C) Meditation begins later than kung fu.
 - (D) Tennis begins later than kung fu.
 - (E) Tennis begins later than yoga.

- 21. Which one of the following introductory classes could be the only class scheduled to begin at 5 P.M.?
 - (A) yoga
 - (B) tennis
 - (C) meditation
 - (D) kung fu
 - (E) gymnastics
- 22. Which one of the following introductory classes CANNOT be scheduled to start at 6 P.M.?
 - (A) gymnastics
 - (B) jazz dance
 - (C) kung fu
 - (D) meditation
 - (E) tennis

ANSWER KEY

SECTION I

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