



Chapter 9  
The Princeton  
Review LSAT  
Practice Test 1





## **ABOUT OUR PRINCETON REVIEW LSAT PRACTICE TESTS**

If you can't get your hands on some actual LSATs, our practice tests are the next best thing. As we said in Chapter 1, you should practice on real LSATs. Don't be fooled by the sample questions in the other books, which are only superficially similar to actual LSAT questions.

We have constructed our practice test using the same sophisticated procedures and statistical methods used in creating actual LSATs. Thousands of Princeton Review students have taken these tests, so we know they are an excellent predictor of LSAT scores. They include the four sections that contribute to your LSAT score; we have spared you the trouble of taking the unscored experimental section and Writing Sample.

## **How to Take These Tests**

Be sure to review the chapters in this book before sitting down to take these tests. Clear some table space, turn off your phone and try to complete each test in one sitting. You may want to take a break after completing the first three sections. If possible, have a friend time you. Trust us: Timing yourself is not nearly the same experience as having someone else do it for you.

SECTION I  
Time—35 Minutes  
24 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 veterinarian will be using four large animal cages for transport: Cage 1, Cage 2, Cage 3, and Cage 4. Each cage has an upper berth and a lower berth, and each berth will be occupied by exactly one animal, either male or female. The following rules govern assignment of animals to cage berths:

Exactly three berths will contain males.

The upper berths of Cages 1 and 2 will contain females.

If a cage has a male in one of its berths, it will carry a female in the other.

If a male is assigned to the lower berth of Cage 3, then the upper berth of Cage 4 will contain a male.

1. If a female is assigned to both berths of Cage 3, then which one of the following could be two other berths that also contain females?
- (A) the upper berth of Cage 1 and the lower berth of Cage 2
  - (B) the lower berth of Cage 1 and the upper berth of Cage 4
  - (C) the lower berth of Cage 1 and the upper berth of Cage 2
  - (D) the upper berth of Cage 2 and the lower berth of Cage 4
  - (E) the lower berth of Cage 2 and the lower berth of Cage 4

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2. It CANNOT be true that females are assigned to both
- (A) the lower berth of Cage 1 and the lower berth of Cage 4
  - (B) the lower berth of Cage 1 and the lower berth of Cage 2
  - (C) the lower berth of Cage 1 and the upper berth of Cage 3
  - (D) the lower berth of Cage 2 and the lower berth of Cage 4
  - (E) the upper berth of Cage 3 and the lower berth of Cage 4
3. If the upper berth of Cage 4 contains a female, then a female must also be assigned to which one of the following berths?
- (A) the lower berth of Cage 1
  - (B) the lower berth of Cage 4
  - (C) the lower berth of Cage 2
  - (D) the lower berth of Cage 3
  - (E) the upper berth of Cage 3
4. If a male is assigned to the lower berth of Cage 3, which one of the following is a complete and accurate list of the berths that CANNOT be assigned males?
- (A) the upper berth of Cage 1, the upper berth of Cage 2
  - (B) the upper berth of Cage 1, the upper berth of Cage 2, the upper berth of Cage 3
  - (C) the upper berth of Cage 1, the upper berth of Cage 2, the lower berth of Cage 4
  - (D) the upper berth of Cage 1, the upper berth of Cage 2, the upper berth of Cage 3, the lower berth of Cage 4
  - (E) the upper berth of Cage 1, the lower berth of Cage 1, the upper berth of Cage 2, the upper berth of Cage 3, the lower berth of Cage 4
5. If the lower berth of Cage 2 contains a female, then it could be true that females are assigned to both
- (A) the lower berth of Cage 1 and the upper berth of Cage 4
  - (B) the lower berth of Cage 1 and the lower berth of Cage 4
  - (C) the upper berth of Cage 3 and the upper berth of Cage 4
  - (D) the lower berth of Cage 3 and the lower berth of Cage 4
  - (E) the lower berth of Cage 3 and the upper berth of Cage 3

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Questions 6–11

In a single day, exactly seven airplanes—J, K, L, M, N, P, and Q—are the only arrivals at an airport. No airplane arrives at the same time as any other plane, and no plane arrives more than once that day. Each airplane flies either a domestic flight or an international flight. The following conditions apply:

No two consecutive arrivals are international flights.

P arrives some time before both K and M.

Exactly two of the planes that arrive before P are international flights.

J is the sixth arrival.

Q arrives sometime before L.

6. Which one of the following could be the order, from first to last, in which the airplanes arrive?

- (A) N, Q, L, P, M, J, K
- (B) N, P, Q, L, M, J, K
- (C) Q, M, L, K, P, J, N
- (D) Q, L, K, P, M, J, N
- (E) L, Q, P, K, J, M, N

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7. For which one of the following pairs of airplanes is it the case that they CANNOT both be international flights?
- (A) J and N
  - (B) K and J
  - (C) L and M
  - (D) M and K
  - (E) N and Q
8. If N is the third arrival, then which of the following airplanes must be a domestic flight?
- (A) J
  - (B) K
  - (C) L
  - (D) M
  - (E) Q
9. If exactly three of the arrivals are domestic flights, then which one of the following airplanes must be a domestic flight?
- (A) J
  - (B) K
  - (C) L
  - (D) M
  - (E) Q
10. For how many of the seven airplanes can one determine exactly how many airplanes arrived before it?
- (A) 1
  - (B) 2
  - (C) 3
  - (D) 4
  - (E) 5
11. Which one of the following pairs of airplanes CANNOT arrive consecutively at the airport?
- (A) L and P
  - (B) N and P
  - (C) P and K
  - (D) P and M
  - (E) P and Q

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Questions 12–18

A total of six pieces of fruit are found in three small baskets: one in the first basket, two in the second basket, and three in the third basket. Two of the fruits are pears—one Bosc, the other Forelle. Two others are apples—one Cortland, one Dudley. The remaining two fruits are oranges—one navel, one Valencia. The fruits' placement is consistent with the following:

There is at least one orange in the same basket as the Bosc pear.

The apples are not in the same basket.

The navel orange is not in the same basket as either apple.

12. Which of the following could be an accurate matching of the baskets to the pieces of fruit in each of them?
- (A) basket one: Forelle pear  
basket two: Dudley apple, navel orange  
basket three: Bosc pear, Cortland apple, Valencia orange
  - (B) basket one: Dudley apple  
basket two: Bosc pear, navel orange  
basket three: Forelle pear, Cortland apple, Valencia orange
  - (C) basket one: navel orange  
basket two: Cortland apple, Bosc pear  
basket three: Forelle pear, Dudley apple, Valencia orange
  - (D) basket one: Valencia orange  
basket two: Cortland and Dudley apples  
basket three: navel orange, Bosc and Forelle pears
  - (E) basket one: Valencia orange  
basket two: Bosc pear, navel orange  
basket three: Forelle pear, Cortland and Dudley apples

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13. Which one of the following CANNOT be true?
- (A) A pear is in the first basket.
  - (B) An apple is in the same basket as the Forelle pear.
  - (C) An orange is in the first basket.
  - (D) The oranges are in the same basket as each other.
  - (E) Neither apple is in the first basket.
14. Which one of the following must be true?
- (A) An apple and a pear are in the second basket.
  - (B) An orange and a pear are in the second basket.
  - (C) At least one apple and at least one pear are in the third basket.
  - (D) At least one orange and at least one pear are in the third basket.
  - (E) At least one orange and at least one apple are in the third basket.
15. If both pears are in the same basket, which one of the following could be true?
- (A) The Cortland apple is in the third basket.
  - (B) An orange is in the first basket.
  - (C) Both oranges are in the second basket.
  - (D) The Bosc pear is in the second basket.
  - (E) The Cortland apple is in the first basket.
16. Which one of the following must be true?
- (A) An apple is in the first basket.
  - (B) No more than one orange is in each basket.
  - (C) The pears are not in the same basket.
  - (D) The Dudley apple is not in the same basket as the Valencia orange.
  - (E) The Valencia orange is not in the first basket.
17. If the Bosc pear is not in the third basket, which of the following could be true?
- (A) The Cortland apple is in the second basket.
  - (B) The Forelle pear is in the second basket.
  - (C) The Dudley apple is in the third basket.
  - (D) The navel orange is in the third basket.
  - (E) The Valencia orange is in the second basket.
18. If the Forelle pear and the Cortland apple are in the same basket, which one of the following must be true?
- (A) The Cortland apple is in the second basket.
  - (B) The Valencia orange is in the second basket.
  - (C) The Dudley apple is in the second basket.
  - (D) The Dudley apple is in the first basket.
  - (E) The Valencia orange is in the third basket.

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Questions 19–24

A live radio show features five bands—the Foghorns, the Geriatrics, the Hollowmen, the Inkstains, and the Jarheads—that will sing ten songs. Each band performs exactly two of the songs: One band performs songs 1 and 6, one band performs songs 2 and 7, one band performs songs 3 and 8, one band performs songs 4 and 9, and one band performs songs 5 and 10. The following conditions apply:

Neither of the Geriatrics' songs is performed immediately before either of the Hollowmen's.

The Foghorns do not sing the ninth song.


The Jarheads' first song is after (but not necessarily immediately after) the Inkstains' first song.

At least one of the Foghorns' songs is immediately after one of the Jarheads' songs.

19. Which one of the following could be an accurate list of the bands performing the first five songs, in order from song 1 to song 5?

- (A) Foghorns, Geriatrics, Inkstains, Hollowmen, Jarheads
- (B) Geriatrics, Inkstains, Jarheads, Foghorns, Hollowmen
- (C) Hollowmen, Inkstains, Foghorns, Geriatrics, Jarheads
- (D) Jarheads, Geriatrics, Inkstains, Hollowmen, Foghorns
- (E) Inkstains, Jarheads, Foghorns, Geriatrics, Hollowmen

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20. If the Foghorns sing the eighth song, then for exactly how many of the ten songs can one determine which band sings the song?
- (A) ten
  - (B) eight
  - (C) six
  - (D) four
  - (E) two
21. If the Jarheads sing the fourth song, then which one of the following could be true?
- (A) The Foghorns sing song 1.
  - (B) The Foghorns sing song 3.
  - (C) The Geriatrics sing song 5.
  - (D) The Hollowmen sing song 3.
  - (E) The Inkstains sing song 5.
22. Which one of the following could be true?
- (A) The Foghorns sing song 4.
  - (B) The Geriatrics sing song 5.
  - (C) The Hollowmen sing song 5.
  - (D) The Inkstains sing song 10.
  - (E) The Jarheads sing song 6.
23. The Foghorns CANNOT perform which one of the following songs?
- (A) song 1
  - (B) song 2
  - (C) song 3
  - (D) song 6
  - (E) song 10
24. Which one of the following could be an accurate list of the bands performing the last five songs, in order from song 6 to song 10?
- (A) Foghorns, Inkstains, Geriatrics, Jarheads, Hollowmen
  - (B) Geriatrics, Hollowmen, Inkstains, Jarheads, Foghorns
  - (C) Hollowmen, Geriatrics, Inkstains, Jarheads, Foghorns
  - (D) Inkstains, Geriatrics, Jarheads, Foghorns, Hollowmen
  - (E) Jarheads, Foghorns, Geriatrics, Inkstains, Hollowmen

**S T O P**

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT WORK ON ANY OTHER SECTION IN THE TEST.

SECTION II  
Time—35 Minutes  
25 Questions

**Directions:** The questions in this section are based on the reasoning contained in brief statements or passages. For some questions, more than one of the choices could conceivably answer the question. However, you are to choose the best answer; that is, the response that most accurately and completely answers the question. You should not make assumptions that are by commonsense standards implausible, superfluous, or incompatible with the passage. After you have chosen the best answer, blacken the corresponding space on your answer sheet.

1. Educator: By itself, the expert advice delivered in a workshop setting does not cause a young writer to be able to craft short stories; rather, the repeated effort of writing new stories in the context of a short-story workshop can be a cause. When any individual writes many short stories, the quality of that person's stories inevitably increases. As a result, the new short-story workshops offered by this school will increase the quality of short stories written by its students.

The conclusion drawn by the educator follows logically if which one of the following is assumed?

- (A) The new short-story workshops offered by the school will increase the number of its students who write a significant number of new short stories.
- (B) The advice delivered by instructors in the new short-story workshops will be superior to the advice previously offered by writing teachers in the school.
- (C) The new short-story workshops will be attended by a large number of the school's students.
- (D) The introduction of writing workshops represents a new emphasis in the school curriculum.
- (E) Any young writer, regardless of his or her ability to craft short stories, can improve through repeated efforts at writing.

2. Last year, the challenger in this election proposed a plan to solve the city's waste-disposal problems. Just recently, the incumbent proposed a plan that is nearly the same. The incumbent claims that he was not aware of the challenger's plan and that their similarities are due to the fact that the solution is merely a matter of common sense. Yet both plans involve similar increases in spending on recycling, both recommend the decommissioning of the same waste incinerators, and both rely on a system of so-called "green landfills," a revolutionary theory not employed by any other city in the world.

The main point of the argument is that

- (A) the challenger's plan and the incumbent's plan have many similarities
- (B) both plans have been advanced in an effort to attract the same large bloc of votes
- (C) the incumbent's plan is similar to the challenger's in ways that suggest that this similarity is the product of more than coincidence
- (D) the incumbent proposed his plan only after it was learned that the challenger's plan had wide popular support
- (E) new plans that are introduced by political candidates sometimes take their opponents' plans into account

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3. Kristen: Compared to a direct business tax cut, a personal income tax cut is a better way to stimulate our state's economy. A personal income tax cut would give residents greater in-pocket income. With this increase in income, individuals will be encouraged to start their own businesses. In addition, individuals will be more likely to spend more money at existing businesses.

Mark: A personal income tax cut is not the most effective way to help business. There is no guarantee that individuals will in fact start new businesses, and the additional income may be used to purchase products from a different state or even a different country.

Mark objects to Kristen's argument by

- (A) suggesting that a personal income tax cut is no more important than a direct business tax cut
- (B) claiming that Kristen has reached a premature conclusion based on an inadequate understanding of the consequences of a business tax cut
- (C) demonstrating that the negative impact of a personal income tax outweighs the positive effects
- (D) questioning Kristen's use of the ambiguous phrase "in-pocket income"
- (E) indicating that the positive consequences that Kristen predicts may not occur

4. Concerned citizen: The county government's new ordinance limiting the types of materials that can be disposed of in trash fires violates our rights as citizens. The fact that local environmental damage results from the burning of certain inorganic materials is not the primary issue. The real concern is the government's flagrant disregard for the right of the individual to establish what is acceptable on his or her own property.

Which one of the following principles, if accepted, would justify the concerned citizen's conclusion?

- (A) Legislative violation of an individual's right to privacy is not justifiable unless the actions of that individual put others at risk.
- (B) The right of an individual to live in a safe environment takes precedence over the right of an individual to be exempt from legislative intrusion.
- (C) An individual's personal rights supersede any right or responsibility the government may have to protect a community from harm.
- (D) An individual has a moral obligation to act in the best interest of the community as a whole.
- (E) A compromise must be found when the right of an individual to act independently conflicts with the responsibility of the government to provide protection for the local environment.

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5. As part of a new commitment to customer satisfaction, an electronics company sent a survey to all customers who had purchased its electronic personal organizer in the previous month. The survey, which was sent through the mail, asked customers to give personal information and to rate their satisfaction with the product. Of customers who returned the survey, more indicated that they had a negative opinion of the product's performance than indicated a neutral or positive opinion. On the basis of these results, the company, hoping to increase customer satisfaction, decided to allocate a large amount of capital to redesigning the product.

Which one of the following, if true, indicates the most serious flaw in the method of research used by the company?

- (A) The company relied on a numerical system of rating responses rather than on open-ended questions that allow for more detailed feedback.
- (B) Customers who were dissatisfied with the information display of the organizer outnumbered customers who were dissatisfied with the variety of functions offered by the organizer.
- (C) Studies show that customer dissatisfaction with a new product is highest during the first year of the product's release and gradually decreases over the following years.
- (D) The marketing division has found that responses to their mail-in surveys are generally accurate.
- (E) People who are satisfied with a product or have no strong opinion about it are less likely to be motivated to return a mail-in questionnaire.

6. Adolphus: The proposed system of computer control for the city's subway traffic, once it is implemented, will lead to greater on-time service and fewer accidents. We must secure whatever resources are required to implement the new system immediately.

Jean: The current financial state of the transit authority is such that the immediate implementation of the new system would require an increase in fares, which the public would not support. We should delay the implementation of the new system until the transit authority can set money aside for the transition and build support for it among riders.

Adolphus and Jean disagree with each other over whether

- (A) the system of computer control will achieve its anticipated benefits
- (B) the public would support higher fares to increase on-time service and reduce accidents
- (C) it is possible to implement the proposed system of computer control quickly
- (D) the proposed system of computer control could be implemented without increasing subway fares
- (E) the existing system of control for the city's subways should be retained for some period of time

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7. Because the consequences of an action intended to conserve the environment cannot be fully predicted, a wise principle is that such an action should be taken only when the likely consequence of inaction is less acceptable than any foreseeable negative consequence of the action.

Which one of the following provides the best illustration of the principle above?

- (A) A system of canals is proposed to preserve threatened wetlands. Without the canals, the wetlands will vanish, so the objections of area farmers should not be allowed to prevent the canal system from being built.
- (B) New roads are proposed to make it easier for conservationists to reach the areas inhabited by an endangered bird species. Because these same roads would increase the access of logging companies to these sensitive areas, the roads should not be built.
- (C) A threatened moss thrives in a remote, uninhabited area that is not currently protected by law. Because the area is not important for either residential or industrial purposes, there is no possible negative consequence of passing a law to limit access to the area. Thus, such a law should be passed to protect the moss.
- (D) A rare species of mink is found only in one area and has long been hunted for its fur. The proposal that all hunting be banned in the area, however, should not be implemented. Mule deer living in the same area contribute to destruction of the mink's habitat, and without hunting to limit the mule deer population, it is possible that the mink will die out completely.
- (E) Tailings—the waste left over from mining—lead to severe water pollution in some mountain areas. Because most of the mining companies responsible for this pollution no longer exist, it is impossible to demand that they clean it up. Therefore, no matter how negatively taxpayers may react, taxes must be used to fund the cleanup of mine tailings.

8. Columnist: Our local public schools are desperately in need of community support, not just from tax revenues, but also from sources such as auxiliary fund-raisers and volunteer work. Although the mayor has often been seen participating in these activities and claims that the public schools are our community's most important assets, there is no reason to believe that his participation is sincere. After all, his own children attend a local private school instead of the public schools.

The columnist's reasoning is most vulnerable to criticism on the grounds that it presumes, without providing justification, that

- (A) the mayor's participation in fund-raising activities for local public schools is motivated solely by a desire for positive public perception
- (B) the mayor could lend greater support to the local public schools by having his children attend them
- (C) the mayor sends his children to a local private school so that they will not contribute to the serious problems of overcrowding in the local public schools
- (D) no politician can plausibly profess support for any public institution which the politician does not use
- (E) there is no reason to believe that the mayor's support for the public schools is sincere if he has no direct personal interest in seeing their needs met

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9. A recent study seems to suggest that, contrary to popular perception, vocational and technical programs do a better job of preparing their students for the workforce than traditional four-year colleges do. This study indicated that just below 60 percent of vocational and technical school graduates found full-time employment within two years of graduation, whereas only 50 percent of those who graduated from four-year colleges did. Nevertheless, the study's official conclusion was that four-year colleges are in fact better at preparing their students for the workforce than are vocational and technical programs.

Which one of the following, if true, most helps to resolve the apparent discrepancy between the study's findings and its official conclusion?

- (A) Presidents and trustees of four-year colleges work to shape public perceptions of their institutions.
- (B) The study investigated a wide variety of both four-year colleges and vocational and technical programs over a period of a decade.
- (C) Most graduates of vocational and technical programs who find employment within two years of graduation work in the professions for which they were trained.
- (D) Increased demand for health care workers, nearly all of whom attend schools that were classified by the study as vocational, caused the employment rate among graduates of these schools to exceed 90 percent.
- (E) More than 20 percent of the graduates of four-year colleges go on to professional schools that require more than two years to complete but only admit graduates of four-year colleges, and the vast majority of these students find employment when they seek it.

10. Howard: Why is it that, in physics, the direction of electric field is defined as the direction in which a positive charge experiences force? Electrons, which are negatively charged, are the particles that move in electric current, yet by the standard definition, they move in a direction opposite to the electric field.

Linda: The standard definition was developed at a time when it was known that two types of charge existed, but not that only one of them was involved in the conduction of electric current. The definition of electric field, by chance, depends upon positive charge, which generally does not move in an electric circuit.

Howard: Your explanation cannot be correct. It has been known for some time now that electrons are the only charges involved in the conduction of current, yet the definition of electric field has remained unchanged.

Which one of the following additional items of information, if true, could best be used by Linda to counter Howard's objection to her explanation?

- (A) Subsequent development of physical theories related to electricity led to the wide adoption of the standard definition before its shortcomings were known, and to change it now would cause widespread confusion.
- (B) Theories of magnetism, which is related to electricity, also incorporate standard definitions that take the behavior of positive charge as their bases.
- (C) Students who learn the theory of electricity may initially be frustrated by its conventional dependence on the behavior of positive charge, but it does not prevent students from comprehending and correctly using that theory.
- (D) There exist presentations of the theory of electricity that base their definitions around the behavior of negative charge, but anyone learning physics according to these presentations must be aware of the standard definitions in order to interpret the scientific literature surrounding electricity correctly.
- (E) The choice of either positive charge or negative charge as the basis for standard definitions in the physical theory of electricity is arbitrary, and has no effect on the accuracy or completeness of the results of that theory.

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11. Once, dieticians advocated radically reducing the proportion of total dietary calories from fat and increasing the proportion from carbohydrates as a method of aiding weight loss. One result of this advice has been an increased incidence of diabetes. Now, dieticians advocate radically reducing the proportion of dietary calories from carbohydrate and increasing the proportion from proteins and fat as a method of aiding weight loss. There is already evidence that this advice is leading to an increase in the incidence of heart disease and certain kinds of cancer. There can be little doubt that, whatever dieticians may recommend, radical changes to diet made for the purpose of losing weight do not contribute to overall health.

The reasoning in the argument is flawed because the argument

- (A) takes for granted that the only possible reason for making radical dietary changes is to increase overall health
- (B) takes for granted that diabetes is a less serious condition for those who suffer from it than is heart disease or cancer
- (C) fails to consider the role of exercise in conjunction with dietary changes as an important factor in successful weight loss
- (D) ignores the possibility that, even without advice from dieticians, many people who do not change their eating habits will develop serious health problems
- (E) fails to consider that a radical reduction in calories consumed from all dietary sources may lead both to weight loss and to improved overall health

12. Dentist: Many children today eat so much sugary processed food that tooth decay has become a more serious problem than ever. Periodic brushing can protect children's teeth only if they also receive regular twice-yearly professional cleanings. Hence, the dental reimbursement plans offered by most companies are inadequate to protect the dental health of at least some children.

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

- (A) In the past, children did not require twice-yearly professional cleanings to protect their teeth from decay.
- (B) Some dental reimbursement plans offered by companies are adequate to protect the dental health of children who do not consume sugary processed food.
- (C) No single dental reimbursement plan suits the dental health needs of all families.
- (D) The dental reimbursement plans offered by some companies do not provide for regular twice-yearly professional cleanings for children.
- (E) Children now are more likely than ever before to experience serious problems as the result of tooth decay.

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13. Recent media coverage indicates that the incidence of malfeasance and fraud among securities traders has increased over the past decade. Economists believe that this is due to changes in how securities traders are compensated. Whereas ten years ago most traders were paid only a fixed percentage of the value of each transaction, now virtually all of them also receive commissions on the basis of profit generated for their employers.

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

- (A) An increased incentive for trader malfeasance is associated with payment based on a fixed percentage of each transaction.
- (B) A decreased risk of trader fraud is associated with paying traders an increased percentage of each transaction.
- (C) A decreased propensity for malfeasance and fraud is caused by changes in trader compensation that place greater emphasis on making profit for their employers.
- (D) Fraud by a securities trader may lead to an increased profit-related commission that more than offsets any loss in compensation associated with the decreased value of that transaction.
- (E) Fraud and malfeasance would no longer be a problem if traders were compensated solely on the basis of the value of each trader's transactions.

14. A study of former college athletes revealed that, as a group, they are five times less likely to die before the age of fifty than are members of the population at large. The advice to derive from this is clear: Colleges should vastly expand their athletic departments so as to allow a greater proportion of all students to participate in athletics, thereby increasing the overall life expectancy of their student population.

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

- (A) Because participation in college athletics requires tremendous academic discipline, college athletes are better suited to succeed in society than are students who do not participate in college athletics.
- (B) The students who voluntarily compete in college athletics are more predisposed to good health than are those who do not.
- (C) Few colleges have the resources to increase spending on athletics, a nonessential university program.
- (D) People who become active after leading sedentary lives can remarkably decrease their chances of contracting heart disease.
- (E) Women, whose average life expectancies exceed men's by seven years, have traditionally had fewer opportunities to participate in college athletics than have men.

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Questions 15–16

To determine the suitability of candidates for this position, the human resources director evaluates each candidate's advantages; job candidates with greater advantages are more likely to be offered the position. Factors such as work experience and relevant job skills are important in these evaluations, yet age should also be an important consideration. Younger candidates demand lower salaries and are less likely to have family obligations that would interfere with job responsibilities.

15. Which one of the following, if true, most undermines the argument?
- (A) Younger workers are more likely to miss work due to social activities than they are to miss work due to family obligations.
  - (B) Younger workers are more likely to change jobs or quit on short notice if they do not like a new job than are older workers.
  - (C) Younger workers are more likely to be willing to work long hours and travel frequently than are older workers.
  - (D) Older workers are more likely to insist on regular working hours and reasonable compensation than are younger workers.
  - (E) Older workers without family obligations are more similar to younger workers in their professional behavior and expectations than they are to older workers with family obligations.
16. The claim that age should be an important consideration in evaluating job candidates plays which one of the following roles in the argument?
- (A) a premise of the argument
  - (B) the conclusion of the argument
  - (C) support offered for one of the argument's premises
  - (D) a consideration that potentially calls the argument's conclusion into question
  - (E) an explanation of circumstances under which the argument's conclusion is true
17. An airline representative announced the introduction of a new pricing system that uses sophisticated computer technology. Based on up-to-the-minute information on sales, the system identifies and continually updates peak times of high demand and off-peak times of low demand, keeping prices high when demand is high and lowering prices to attract customers when demand is low. As a result, the airline anticipates that large numbers of customers will choose to travel off-peak to experience savings, whereas those who wish to travel at peak times will enjoy greater availability due to higher prices. The airline therefore anticipates that the majority of customers will experience significant benefits as a result of the new system.

Which one of the following indicates an error in the reasoning on the part of the airline?

- (A) The airline's conclusion is based on an unproven premise.
- (B) The airline displays a naive trust in the possibilities of technology.
- (C) The airline fails to factor in the cost of implementing the new system.
- (D) The airline's conclusion rests on a result that would potentially cancel out the anticipated benefit.
- (E) The airline fails to establish the exact number of customers who would benefit from the change.

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18. A physicist theorized that the present distribution of matter in the universe was largely determined by random clumping of primeval particles during the early stages of the universe's formation. When computer simulations developed by the physicist showed that several different clumping patterns led to substantially similar distributions of matter, the physicist did not report the results. A journalist who learned about the results of the simulations reported them and accused the physicist of suppressing experimental findings that contradict her theory. The physicist countered that the computer simulations were inconclusive because they depended in part upon present theories of the universe's formation.

Which one of the following, if true, most strengthens the physicist's counterargument?

- (A) Other experiments conducted by the physicist showed that clumping of primeval particles could influence the later distribution of matter in the universe.
- (B) The clumping patterns used by the physicist in the computer simulation were not randomly generated.
- (C) Present theories of the universe's formation include principles that allow only slight variations in the distribution of matter.
- (D) Every computer simulation yet devised to model the formation of the universe depends to some degree upon present theories of the universe's formation.
- (E) It is impossible to determine the theoretical accuracy of the assumptions used in developing any computer simulation of the universe's formation.

19. Scholar: Only those who can tell the difference between right and wrong should be held responsible for their wrong actions. It is for this reason that defendants who have serious developmental disabilities or mental illnesses cannot be held responsible for their crimes. However, many children are able to tell the difference between right and wrong and yet are not held responsible for their crimes. Therefore, \_\_\_\_\_.

Which one of the following most logically completes the last sentence of the scholar's argument?

- (A) it is the ability of the parent or parents to tell the difference between right and wrong that is most relevant to determining responsibility when a child is accused of a crime
- (B) not all those who are held responsible for a wrong action can tell the difference between right and wrong
- (C) it cannot be true that the ability to distinguish between right and wrong is sufficient to hold a defendant responsible for his or her criminal actions
- (D) it is unjust for children, or for those who have serious developmental disabilities or mental illnesses, to be found guilty of any crime
- (E) only those who can be held responsible for their criminal actions are able to tell the difference between right and wrong

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20. Statistics show that there is a direct correlation between the ammonia content and the cleaning power of industrial-strength floor and tile cleaners; simply stated, the more ammonia, the better the cleaner. However, in a nationwide survey of commercial food services, cleaning supervisors uniformly replied that for any floor and tile cleaner to be effective, it must be used on a given surface twice a day with the right proportion of cleaner to water, and must be applied with well-maintained mops. The survey thus proves that ammonia content is not relevant to the efficacy of floor and tile cleaners after all.

Which one of the following best identifies the flawed reasoning in the passage above?

- (A) There is no reason to assume that effective floor and tile cleaning is the only use for floor and tile cleaner.
- (B) It cannot be assumed that industrial-strength floor and tile cleaners contain comparable levels of ammonia.
- (C) It is unreasonable to conclude that the ammonia content is not relevant to a cleaner's efficacy just because there are requirements for the proper use of industrial-strength floor and tile cleaners.
- (D) It cannot be assumed that the efficacy of all industrial-strength floor and tile cleaners depends on the same procedures for use.
- (E) It is unreasonable to assume that the makers of industrial-strength floor and tile cleaners are unaware that food services don't always use them properly.

21. Products containing naproxen sodium produce relief from pain and fever by blocking prostaglandins. As a consequence of recent technological advances, production costs for pain and fever medications containing naproxen sodium, allowing for both packaging and marketing costs, are one-fifth of what they were ten years ago, while the corresponding cost for medications using the ingredient ibuprofen, which is produced by different means, has increased. Therefore, naproxen sodium is a less costly ingredient to use in medication for the prevention of pain and fever relief than ibuprofen.

The conclusion of the argument is properly drawn if which one of the following is assumed?

- (A) The cost of producing pain and fever medication containing ibuprofen has increased over the past ten years.
- (B) Ten years ago, ibuprofen was used more than five times as often as naproxen sodium.
- (C) None of the recent technological advances in producing pain and fever medication with naproxen sodium can be applied to the production of medication using ibuprofen.
- (D) Ten years ago, the cost of producing pain and fever medication with the ingredient naproxen sodium was less than five times the cost of producing medications with ibuprofen.
- (E) The cost of producing pain and fever medication with naproxen sodium is expected to decrease further, while the cost of producing similar medications using ibuprofen is not expected to decrease.

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22. Some critics of Western medicine blame medical schools for encouraging doctors to treat sick people as defective machines rather than as feeling humans. These critics believe that if medical schools dedicate a greater portion of their curriculum to teaching compassion and medical ethics, the overall quality of medical treatment will improve. But if doctors are trained to identify with their patients too strongly, they may be reluctant to recommend courses of treatment that, although painful, are necessary to maximize the patients' chances of recovery.

The critics' reasoning provides grounds for accepting which one of the following statements?

- (A) It is easier for a doctor to recommend painful chemotherapy to a cancer patient when that doctor has an understanding of his or her ethical responsibilities to the patient.
- (B) It is more difficult to know what course of treatment is appropriate for a patient with a liver disorder if a doctor does not identify with that patient as a defective machine.
- (C) It is easier for a doctor to recommend a transplant for a patient who is experiencing kidney failure if the doctor feels sympathy for the difficulty that patient will experience in recovering from surgery.
- (D) It is easier for a doctor who feels compassion for a patient experiencing chronic pain to treat that patient effectively, particularly when the chronic pain does not seem to be caused by any known medical disorder.
- (E) It is easier for doctors to think of their patients as defective machines than it is to think of them as feeling humans.

23. Increasing the starting pay for our sales agents will allow us to attract and hire more new sales agents next year; unfortunately, such an increase would anger experienced sales agents, causing more of them to quit next year. The increase in new hires we would be able to attract at the higher pay rate does not exceed the increase in the number of experienced sales agents who would quit, so increasing the starting pay of our sales agents will not increase the overall number of sales agents we employ.

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

- (A) Building a dam on this river would decrease the incidence of flooding in the lowlands downstream, but a dam would destroy the river's natural beauty. Tourism is an important component of the area's economy, so the building of a dam on this river is not justified.
- (B) Spending additional money on safety training would result in greatly increased costs for our manufacturing operation; because accidents in our manufacturing operation cost more on an annual basis than the increased costs associated with better safety training, improving that training will increase company profits.
- (C) Increasing the speed of our assembly line will increase the rate at which goods are produced; at the same time, an increase in the speed of our assembly line will increase the rate of defects. The number of additional losses due to defects will be greater than the number of additional goods produced by the assembly line, so increasing the speed of our assembly line will not increase the number of finished goods we produce.
- (D) A new interstate highway will allow travelers to bypass the downtown area, leading to an increase in the rate at which travelers pass through our city; the increased rate of travel will encourage travelers to select routes passing through our city, leading to an increase in patronage of local businesses outside downtown. Therefore, we should build a new interstate highway.
- (E) An earlier harvest will allow our tomatoes to reach market shelves more quickly, and will also decrease the number of our tomatoes that spoil before they are sold. However, an earlier harvest will lead to unripe tomatoes being put on market shelves. Because an unripe tomato can be safely eaten, whereas a spoiled tomato cannot, an earlier harvest will make our tomatoes safer for consumers.

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24. Spokesperson: Horror movies are extremely popular among young moviegoers. A recent study of teenagers and young adults concluded that, after attending horror movies, they were more likely to engage in aggressive or violent behavior. However, experts agree that the methodology of this study was seriously flawed. There can be no doubt, then, that horror movies do not contribute to aggressive or violent behavior among young people who watch them.
- The reasoning in the spokesperson's argument is flawed because that argument
- (A) takes one failure to prove a contention as confirmation of the falsity of that contention
  - (B) treats the occurrence of one event preceding a change in behavior as sufficient proof that the event contributed to causing the change in behavior
  - (C) accepts the judgment of experts as definitive proof of a contention when evidence suggests that the contention is untrue
  - (D) fails to consider the possibility that a lack of proof for one contention may constitute proof requiring the acceptance of some other contention
  - (E) neglects to specify that those conducting the study did not have an ulterior motive in reaching the study's erroneous conclusions

25. Those who read a book without having been exposed to any reviews of it are more likely to say they enjoyed the book than they are to say that they did not. Yet when readers who previously claimed to enjoy a book are exposed to several negative reviews of it and then are asked whether they would read the book again, a majority of them say they would not. Thus, exposure to reviews about a book may cause readers to change their opinions of that book.

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

- (A) Readers with favorable opinions of a book they have read are not unlikely to say they would read that book again.
- (B) Exposure to reviews of a book they have previously read causes readers to notice flaws in the book that they did not notice on a first reading.
- (C) Readers are not more likely to enjoy reading a book they have purchased than they are to enjoy reading a book they have borrowed from a library or a friend.
- (D) Readers who claim to have enjoyed a book and are subsequently exposed to positive reviews of it are also likely to say they will not read the book again.
- (E) Whether a book receives positive or negative reviews is an accurate reflection of that book's quality.

**S T O P**

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT WORK ON ANY OTHER SECTION IN THE TEST.

SECTION III  
Time—35 minutes  
27 Questions

**Directions:** Each passage in this section is followed by a group of questions to be answered on the basis of what is stated or implied in the passage. For some questions, more than one of the choices could conceivably answer the question. However, you are to choose the best answer, that is, the response that most accurately and completely answers the question, and blacken the corresponding space on your answer sheet.

Questions 1–5 are based on the following passage:

- One of the most prolific authors of all time, Isaac Asimov was influential both in science fiction and in the popularization of science during the twentieth century, but he is also justly famous for the scope of his interests. Although the common claim that Asimov is the only author to have written a book in every category of the Dewey decimal system is untrue, its spirit provides an accurate picture of the man: a dedicated humanist who lauded the far-reaching power of reason. His most famous work, the *Foundation* trilogy, can be read as an illustration of Asimov's belief in reason and science, but even while he expressed that belief, science itself was calling it into question.
- (15) *Foundation* describes a time in which a vast empire spanning the galaxy is on the verge of collapse. Its inevitable doom is a consequence not of its size, but of the shortsightedness of its leaders. In this environment, a scientist named Hari Seldon devises an all-encompassing plan to help human civilization recover from the trauma of the empire's coming collapse. Using mathematics, Seldon is able to predict the future course of history for thousands of years, and he takes steps that are geared toward guiding that future in a beneficial direction. The trope of the benevolent and paternalistic scientist shaping existence from behind the scenes, present in much of Asimov's fiction, is never more explicit than in the *Foundation* series, which describes with an epic sweep the course and progress of the Seldon Plan.
- (30) As naïve and, perhaps, self-serving as the conceit of *Foundation* may seem to contemporary readers, it retains to some degree its ability to comfort by offering an antidote to the complex and unpredictable nature of experience. Science in Asimov's time was, in popular conceptions, engaged in just this pursuit: discerning immutable laws that operate beneath a surface appearance of contingency, inexplicability, and change. But even while Asimov wrote, science itself was changing. In physics, the study of matter at the subatomic level showed that indeterminacy was not a transitory difficulty to be overcome, but an essential physical principle. In biology, the sense of evolution as a steady progress toward better-adapted forms was being disturbed by proof of a past large-scale evolution taking place in brief explosions of frantic change. At the time of Asimov's death, even mathematics was gaining popular notice for its interest in chaos and inexplicability. Usually summarized in terms of the so-called "butterfly effect," chaos theory showed that perfect prediction could take place only on the basis of perfect information, which was by nature impossible to obtain. Science had dispensed with the very assumptions that motivated Asimov's idealization of it in the Seldon Plan. Indeed, it was possible to see chaos at work in *Foundation* itself: As sequels multiplied and began to be tied into narrative threads from Asimov's other novels, the urge to weave one grand narrative spawned myriad internal inconsistencies that were never resolved.

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1. Which one of the following most accurately expresses the main point of the passage?
  - (A) Isaac Asimov's greatest work, the *Foundation* trilogy, is an expression of the common trope of the benevolent and paternalistic scientist.
  - (B) Popularizations of science are always to some degree dependent on idealizations and simplifications of that science, as Isaac Asimov's work demonstrates.
  - (C) The impossibility of the conceit on which Isaac Asimov's *Foundation* trilogy is based demonstrates that Asimov's fiction was based on imperfect understandings of science.
  - (D) The central figure of Hari Seldon in Isaac Asimov's *Foundation* trilogy is a manifestation of humanism's idealization of reason and science.
  - (E) Isaac Asimov's idealization of science as revealed in his *Foundation* series was called into question by the science of his time, which was increasingly focused on chaos and indeterminacy.
2. Which one of the following statements most accurately expresses the purpose of the final paragraph?
  - (A) The ultimate failure of the *Foundation* series as a coherent scientific narrative is discussed.
  - (B) A claim is made about the purpose of Asimov's writing and then is finally rejected.
  - (C) A key theme of Asimov's *Foundation* series is described and discoveries in science that seem contrary to that theme are outlined.
  - (D) The history of science is used to demonstrate the falsity of a widely believed claim about the power of human reason.
  - (E) The works of Asimov are used as evidence against a popular belief that Asimov encouraged but may not have personally held.
3. The author's reference to a common claim made about Isaac Asimov (lines 5–8) serves to
  - (A) demonstrate that many untrue beliefs are held about him
  - (B) illustrate the broad scope of his interests and writings
  - (C) undermine the claim that he was a prolific writer
  - (D) substantiate his belief in the power of human reason
  - (E) indicate that he was interested only in science
4. With respect to the Seldon Plan, the author's attitude can most properly be described as
  - (A) amused at the naïve conception of history it implies
  - (B) uncertain of the practical impossibility of its application
  - (C) ambivalent because of the reliance on human reason it requires
  - (D) convinced that it illustrates Asimov's attitude toward science
  - (E) confident that continued scientific progress will make it practicable
5. Which one of the following statements best illustrates the "butterfly effect" as it is described in the passage's third paragraph?
  - (A) A system implemented to predict the weather worldwide for the next century is soon found to be inaccurate because it was supplied with incomplete data.
  - (B) Efforts to predict the result of a nuclear reaction fail because of indeterminacy inherent in the behavior of subatomic particles.
  - (C) The fossil record indicates that certain adaptations found in many organisms appeared soon after a past catastrophic event.
  - (D) Scientific predictions about the future course of human history are found to be reasonably accurate once existing social theories are reconciled.
  - (E) A map that is less detailed than the area it represents is found not to include all the important features of that area.

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Questions 6–12 are based on the following passage:

Renowned for its canals and rich history, the Italian city of Venice is most famous for the singular peril it faces: The city is sinking. Situated in a lagoon, in the midst of a marsh bordering on the Adriatic Sea,

- (5) Venice remained a capital of Mediterranean trade for centuries, in part because the few navigable channels through the lagoon were a closely guarded secret, and without that knowledge no enemy could hope to invade. In more recent times, Venice's distinctive character has
- (10) become a threat to the city's future even as it draws millions of visitors every year.

In the fourteenth century, city leaders became concerned that silt deposited by the four rivers that once emptied into Venice's lagoon was threatening to clog the deep channels on which their trading ships depended. The solution was a public works project of staggering scope: Over the course of two centuries, the rivers were diverted through canals so that they emptied elsewhere. Although this expedient preserved

(20) the deep channels leading to the city itself, it had an unanticipated effect: The main source of new sediment entering the lagoon was cut off, removing one major contributor in the dynamic reformation of the lagoon's landscape.

- (25) The "bedrock" on which Venice is built is a mile-thick layer of river sediment, deposited over a period of millennia. Such sediments naturally compact under the weight of the material above, and as a result, the land in Venice's lagoon has been sinking throughout its
- (30) history. With the rivers diverted, the major source of replenishment for the area's land is no longer operating, giving the upper hand to storm and tide in their efforts to reclaim the lagoon. But even were the rivers' former courses to be restored—an action no one seriously
- (35) recommends—that by itself would not constitute a solution to Venice's problem.

Archaeological data indicate that Venice's residents have historically coped with the land's subsidence by rebuilding. Multiple layers of old foundations

(40) demonstrate that Venice has been racing against the loss of land throughout its history; some floors from Roman times are now five feet below sea level. Although such solutions worked well in an atmosphere where historical preservation was not a priority,

(45) Venice's economic strength rests now on the foundation of tourism. The fact that modern-day Venice has become more a museum than a working city lends particular urgency and difficulty to the efforts to preserve it.

- (50) There is reason to believe that these efforts must be undertaken soon. Even while the land sinks, sea levels in the Adriatic Sea rise. Prediction is difficult, but most estimates put the water-level rise in the next century in the range of fifteen to thirty inches. A
- (55) century ago, Venice's signature landmark—St. Mark's Square—was flooded an average of nine times a year; now, after roughly ten inches of loss versus sea level, it is flooded one hundred times in an average year. Unless radical steps are taken, within another century,
- (60) most experts agree that it will be submerged year-round.
6. The primary purpose of the discussion in the second paragraph is to
- (A) argue that the blame for Venice's current problems rests with its past leaders
- (B) provide historical context that describes one contributing factor in Venice's dilemma
- (C) explain why the problem Venice faces is unique among the world's cities
- (D) show that human intervention in Venice's environment has taken place throughout its history
- (E) prove that the landscape of Venice's lagoon is being dynamically reformed
7. Given the descriptions in the passage, which one of the following is most analogous to the method by which Venetians have historically coped with their sinking land?
- (A) A Japanese shrine has stood in the same location for centuries, but because it has traditionally been constructed of materials that are not durable, it has been periodically rebuilt throughout its history.
- (B) A German castle was originally built on a river island that experienced severe erosion, so within the past century, the castle was moved to more stable ground on the riverbank.
- (C) A Roman temple was originally built of quarried marble, but since then, local residents have largely dismantled the building to use its marble in other construction.
- (D) An American armory built in the nineteenth century is no longer used for its original purpose but has instead been converted into a convention hall.
- (E) A Russian hotel that was a symbol of the former Soviet regime is demolished both because of its history and because contemporary residents now believe the building is an eyesore.

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8. The passage's predictions about the likely future incidence of flooding in St. Mark's Square would be most weakened if which one of the following were found to be true?
- (A) Variations in water level attributable to storm surge are primarily responsible for the current flooding in St. Mark's Square.
  - (B) The flooding in St. Mark's Square could be mostly prevented by the installation of inflatable gates in the channels leading into the lagoon, a massive project opposed by environmentalists.
  - (C) Steps taken in the Low Countries of Europe, many parts of which are below sea level, are effective at preventing flooding there.
  - (D) A moderate increase in the height of the canal walls at the edges of St. Mark's Square would prevent flooding, even if sea levels were to rise substantially.
  - (E) Although many proposed plans exist to halt the flooding of St. Mark's Square, most are controversial either because they are too radical or because they are likely to be ineffective.
9. Each of the following can be inferred from the passage EXCEPT:
- (A) The earliest buildings constructed in the lagoon of Venice are now below sea level.
  - (B) River sediments deposited in the lagoon of Venice compacted over time even before humans settled in the area.
  - (C) Venice's primary source of economic viability is no longer Mediterranean trade.
  - (D) Water levels in the Adriatic Sea are rising at a faster rate than are water levels in other large bodies of water worldwide.
  - (E) Some factor other than secrecy surrounding the navigable channels of the lagoon has contributed to Venice's economic security.
10. The passage's author would be most likely to agree with which one of the following statements concerning modern-day Venice?
- (A) The preservation of its historic buildings should be a priority.
  - (B) The environmental health of the salt marshes in its lagoon must be protected.
  - (C) Its survival depends on stopping the subsidence of land on which it is built.
  - (D) Moderate measures are adequate to protect it from rising sea levels.
  - (E) It must become more of a working city than it currently is to survive.
11. Based on the passage, the author most likely holds which one of the following opinions concerning past alterations to Venice's environment?
- (A) They are solely responsible for Venice's current difficulties.
  - (B) They were undertaken without full knowledge of their consequences.
  - (C) They must be reversed for Venice to survive.
  - (D) They have contributed to the rise in water levels in the Adriatic Sea.
  - (E) They could have been prevented by responsible city leadership.
12. From the passage, it can be inferred that
- (A) water levels in the Adriatic Sea will rise more than twenty inches in the next century
  - (B) the level of land in Venice's lagoon will sink more than ten inches in the next century
  - (C) St. Mark's Square will flood fewer than one hundred times per year over the next century
  - (D) Venice is likely to lose more elevation versus sea level in the next century than it did in the previous century
  - (E) some of Venice's historical landmarks will be lost in the next century

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Questions 13–19 are based on the following passage:

The work of Amartya Sen, winner of the Nobel Prize for economics in 1998, has helped usher in a new era in the field as it is practically applied throughout the world. Institutions such as the United Nations have adopted his ideas in measuring and aiding the development of emerging economies, and the consequences of the social-choice theory he employs have garnered much public attention.

- (5) The classic defining work of social choice theory is Ken Arrow's careful investigation of voting through a series of thought experiments. The result—Arrow's Impossibility Theorem—showed that no method of conducting a majority-decision vote can be guaranteed to conform to the basic requirements of democracy.
- (10) A simple example illustrates Arrow's idea: For an electorate of three voters—1, 2, and 3—there are three candidates—A, B, and C. Voter 1 prefers A to B, and B to C; voter 2 prefers B to C, and C to A; voter 3 prefers C to A, and A to B. In such an electorate, a runoff between A and B declares A the winner; a runoff between B and C is won by B; and a runoff between A and C is won by C. Whichever candidate wins, that candidate is actually less preferable to the electorate than the candidate who was not involved in the runoff.

The work for which Sen was awarded his Nobel Prize is, in essence, an application of such methods to national economies, politics, and public welfare. Just as Arrow focused on paradoxes within democratic systems, Sen investigated instances such as famine in which capitalist market systems seem not to function properly, according to traditional economic public-choice principles. Public choice focuses on self-interest as the driving factor in economics; Sen, in a famous quote, shows the flaw in this view: “Can you direct me to the railway station?” asks the stranger. ‘Certainly,’ says the local, pointing in the opposite direction, toward the post office, ‘and would you post this letter for me on your way?’ ‘Certainly,’ says the stranger, resolving to open it to see if it contains anything worth stealing.” Factors other than self-interest exert their influence at every level within a society, and only by incorporating them can a theory truly describe how economies function.

- (45) This departure from traditional views has made Sen's work a subject in the ongoing debate over globalization. Partisans who advocate the spread of capitalism and democracy have called Sen everything from an anarchist to a Marxist; opponents of globalization use his work as proof that these institutions are not the boon they are supposed to be. By doing so, both sides misrepresent Sen's concerns. One of his early works demonstrated the conditions under which Arrow's Impossibility Theorem does not apply to democratic elections, and Sen is most famous for his notion of “capability” as an antidote to economic injustice. The specific forms “capability” takes—education and equal access—are precisely

- (60) those that are called for in theoretical formulations of how choice-driven markets and democracies are supposed to function. Sen's work is an examination of the failures of these core systems, but it is also a roadmap to realizing their promise.

13. Which one of the following most accurately expresses the main idea of the passage?
- (A) Although the work of Amartya Sen has been viewed as opposing democracy and global capitalism, in fact it is a defense of these ideas.
- (B) Amartya Sen's revolutionary use of social choice theory in economics has been widely misinterpreted but nevertheless offers hope that social justice can be achieved in capitalist and democratic systems.
- (C) The work of social choice theorists such as Ken Arrow and Amartya Sen has helped their theories supplant public choice theory as the most widely accepted theoretical approach to economics.
- (D) Amartya Sen's work delineates the circumstances under which commonly accepted notions of how economic and democratic systems operate can be said to be correct.
- (E) Social choice theory does not include considerations of self-interest in its evaluation of economic and democratic institutions.
14. Which one of the following titles provides the most complete and accurate summary of the passage's contents?
- (A) “Nobel Prizewinner Amartya Sen: Reluctant Economic Rebel”
- (B) “Social Choice Theory: Moving Beyond Self-Interest”
- (C) “Arrow's Impossibility Theorem: Why No Election Is Fair”
- (D) “Economics and Social Justice: Amartya Sen's Groundbreaking Work”
- (E) “Fighting the Future: The Rising Opposition to Globalization”

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15. The passage supports the inference that the author most likely holds which one of the following views?
- (A) Existing economic theories are incapable of explaining why self-interest fails to prevent famine and social injustice.
  - (B) No majority-decision election conducted under any circumstances is capable of fulfilling even the most basic promises of democracy.
  - (C) Those who believe that Amartya Sen's work is intended to oppose economic globalization misunderstand it.
  - (D) Social choice theory does not constitute a legitimate alternative to traditional theoretical explanations of economic action.
  - (E) Amartya Sen is the first economist to take social considerations into account in the analysis of institutions such as democratic elections and the free market.
16. As it is described in the passage, Ken Arrow's method for investigating democratic elections is most analogous to which one of the following?
- (A) To discern universal physical principles, a physicist imagines what it would be like to ride a beam of light.
  - (B) To evaluate existing theories of evolution, a paleontologist undertakes a survey of the fossil record.
  - (C) To learn about daily life in an ancient civilization, an anthropologist studies the traditional culture of the civilization's descendants.
  - (D) To evaluate the success of market reforms, an economist studies changes in key indicators.
  - (E) To discover political attitudes within a local area, a sociologist interviews religious leaders in the area.
17. The author's attitude toward social choice theory can be described most accurately as
- (A) skeptical that it will ever gain wide acceptance
  - (B) uncertain whether it correctly describes economic realities
  - (C) ambivalent about its critique of globalization
  - (D) satisfied that it represents an advance in economic understanding
  - (E) enthusiastic about its usefulness in reforming democratic elections
18. The passage suggests that which one of the following would provide the best definition of Sen's idea of "capability"?
- (A) willingness to fill multiple economic roles
  - (B) access to legal redress for injustice
  - (C) capacity to exercise democratic and economic choice
  - (D) knowledge of underlying principles of economics
  - (E) assistance through the redistribution of wealth
19. Each of the following is stated or implied by the passage EXCEPT:
- (A) Arrow's Impossibility Theorem does not hold for all democratic elections.
  - (B) Public choice theory does not provide a complete description of all economic transactions.
  - (C) The policies of the United Nations are not primarily concerned with aiding developing nations to achieve social justice.
  - (D) Amartya Sen's economic beliefs cannot properly be called Marxist.
  - (E) The precepts of social choice theory have not always informed economic policies.

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Questions 20–27 refer to the following passages:

**Passage A**

While *The Origin of Species* created a great stir when it was published in 1859, Darwinian thought was almost completely out of vogue by the turn of the twentieth century. It took Ronald Fisher’s “Great Synthesis” of the 1920s, which combined the genetic work of Gregor Mendel with Darwin’s ideas about natural selection, and Theodosius Dobzhansky’s “Modern Synthesis” of the 1930s, which built upon Fisher’s work with genetics within a species by focusing on how genetic variation could cause the origin of a new species, to begin to rehabilitate Darwin.

- (5) Yet what is remarkable is how very prescient Darwin, working without knowledge of the mechanisms of heredity, proved to be. As prominent biologist Ernst Mayr notes, what made Darwin’s theory so remarkable was his emphasis on “population thinking.” This contrasts to Jean-Baptiste Lamarck’s theory of evolution, popular throughout the nineteenth century, which posited that individuals changed through personal actions and will. Lamarckian theory is often exemplified by a giraffe constantly reaching up to eat leaves off high branches and passing on its lengthened neck to its children.

- (10) Such explanations bore a strong resemblance to children’s fables (and indeed Rudyard Kipling’s late nineteenth century *Just So Stories* build upon Lamarckian theories). Where Darwin differed was his insistence that significant variation was not based within one particular individual, but rather in the breeding population as a whole. Natural selection was not based on the actions or goals of one individual, but variations in the average character of the species.

**Passage B**

As Peter Bowler points out in his aptly named *The Non-Darwinian Revolution: Reinterpreting a Historical Myth*, nineteenth-century Darwinism was quite different from the Darwinism of today. Thomas Huxley, “Darwin’s Bulldog,” so called because of his tireless public campaigning for Darwinian thought, exemplifies this difference. As a result of his advocacy, by the end of the nineteenth century Huxley was the vehicle for Darwinian thought. Noted science fiction writer H. G. Wells, for instance, garnered all of his information about natural selection and evolution through Huxley’s lectures. Yet Huxley’s theories varied significantly from those of Darwin, focusing on the will of humankind.

- (5) In the preface to *Evolution and Ethics*, Huxley wrote that “we cannot do without our inheritance from the forefathers who were the puppets of the cosmic process; the society which renounces it must be destroyed from without. Still less can we do with too much of it; the society in which it dominates must be destroyed from within.” According to Huxley, humankind has moved past physical evolution to the realm of self-directed moral evolution. Huxley, then,

- (25) acknowledges that humankind has evolved under the pressure of natural selection and must remain aware of that fact or be “destroyed from without,” but he argues that a society that continues in the path that Nature has placed it will be “destroyed from within” because it will no longer be adapted to itself.
20. Based on the information in the passage, Rudyard Kipling most likely wrote stories
- (A) dedicated to enlightening humans by using animals as positive examples of proper behavior
  - (B) based on futuristic worlds which were populated by evolved subjects
  - (C) featuring individuals developing variation through the power of their desires
  - (D) seeking to exhibit the effects of population thinking in breeding populations
  - (E) portraying the effects of parental inheritance through examining the lives of children
21. Which of the following best represents Huxley’s beliefs?
- (A) Focusing on physical evolution leaves man as nothing more than a “puppet” of forces beyond his control; to succeed in life it is necessary to reject physical evolution in favor of moral change.
  - (B) The ideas of Charles Darwin needed to be carefully delineated through lectures so that his ideas about individual variation could be fully understood.
  - (C) By exerting personal will, humankind will be able to enact significant, lasting variation which will be demonstrated through the bodies of the children of those who seek change.
  - (D) While humankind is inescapably linked to its physical past and the material conditions of its evolution, it must be wary of being too attached to the path dictated by natural selection.
  - (E) Certain elements of Darwin’s theory about evolution had to be discarded so that the public would be willing to accept the thrust of the theory as a whole.
22. The authors of passage A and passage B would most likely agree that which of the following are most closely aligned in their thinking?
- (A) Lamarck and Huxley
  - (B) Kipling and Wells
  - (C) Mayr and Bowler
  - (D) Mendel and Huxley
  - (E) Dobzhansky and Wells

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23. Which of the following statements about Darwin is supported by both passages?
- (A) Darwin differed significantly from other theorists of evolution because he focused on breeding populations as a whole.
  - (B) The modern understanding of Darwin varies significantly from nineteenth-century beliefs about his theories.
  - (C) It was not until the early twentieth century that Darwinism as we know it began to emerge.
  - (D) Fiction writers were particularly interested in disseminating ideas about Darwin.
  - (E) Delineating the specific inheritance of the child is crucial to understanding how natural selection proceeds.
24. Which of the following best represents the difference between the two passages?
- (A) The first passage begins with current understandings of Darwinism and moves back in time, while the second passage begins with older understandings and moves forward in time.
  - (B) While the first passage focuses on the difference between two theories of evolution, the second paragraph traces differences between two individual interpreters of evolution.
  - (C) The first passage introduces a general theory, offers specific evidence, and then considers the ramifications of that theory, while the second paragraph does not consider the ramifications of the evidence it presents.
  - (D) The first passage is concerned with demonstrating a way in which Darwin is closely linked with modern thinkers, while the second passage is focused on how he differed from one of his contemporaries.
  - (E) The first passage provides a historical retrospective of the primary interpreters of Darwin, and the second passage centers on one particular interpreter.
25. Based on the information in passage B, Thomas Huxley would be most likely to object to which of the following claims in passage A?
- (A) It is impossible to truly understand natural selection without the benefit of modern genetic theory.
  - (B) It is likely that the giraffe developed a long neck due to the fact that it constantly stretched it to gain access to food.
  - (C) There are different ways to understand how evolution functions to change individuals.
  - (D) Variations in the average character of a population are the most crucial factor in the proper evolution of man.
  - (E) Allowing natural selection to dominate our society will lead to the destruction of humankind.
26. Which of the following best describes how variation is characterized in the two passages?
- (A) In passage A it is discussed in both individual and group situations, and in passage B it is seen as purely individual.
  - (B) In passage A it is discussed in both individual and group situations, and in passage B it is seen as focused on the group.
  - (C) In passage A it is discussed in physical terms, and in passage B it is discussed in moral and physical terms.
  - (D) In passage A it is discussed in terms of how breeding occurs, and in passage B it is discussed in moral terms.
  - (E) In passage A it is discussed in terms of how breeding occurs, and in passage B it is discussed in moral and physical terms.
27. Which one of the following situations is most closely analogous to the Lamarckian mode of variation?
- (A) An adult bird tries to change the environment for the benefit of its children.
  - (B) Seeking to morally adapt to its environment, a chimpanzee changes the way it woos its mate.
  - (C) A giraffe's bodily shape changes because it is unable to fit into the caves it traditionally sleeps in.
  - (D) Because of a change in the environment, a number of chimpanzees die out while others thrive and pass on their genes.
  - (E) Because it hunts for salmon with its mouth wide open, a bear gradually develops a straining mechanism between its teeth.

## STOP

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT WORK ON ANY OTHER SECTION IN THE TEST.

SECTION IV  
Time—35 Minutes  
25 Questions

**Directions:** The questions in this section are based on the reasoning contained in brief statements or passages. For some questions, more than one of the choices could conceivably answer the question. However, you are to choose the best answer; that is, the response that most accurately and completely answers the question. You should not make assumptions that are by common sense standards implausible, superfluous, or incompatible with the passage. After you have chosen the best answer, blacken the corresponding space on your answer sheet.

1. In France, children in preschool programs spend a portion of each day engaged in a program of stretching and exercise. Preschool programs in the United States, however, seldom devote time to a daily stretching and exercise program. In tests designed to measure cardiovascular fitness, children in the United States were outperformed by their French counterparts. It can therefore be determined that children attending preschool programs in the United States can achieve cardiovascular fitness only by engaging in a daily school program of stretching and exercise.
- Which one of the following is an assumption on which the argument depends?
- (A) A daily program of stretching and exercise will allow all children to achieve cardiovascular fitness.  
(B) Cardiovascular fitness is integral to one's overall health.  
(C) It has been proven that children who participate in stretching and exercise programs in preschool have better cardiovascular fitness than adults.  
(D) Stretching and exercise are necessary components of French children's superior cardiovascular fitness programs.  
(E) United States preschool children could make healthful dietary changes as well as changes to their daily fitness regimens.
2. In an effort to lessen the risk of liability, fertility clinics are seeking new methods of record keeping and storage that would help avoid donor sperm that might contain dangerous genes. Toward this end, a database is being developed to aid the clients in their screening of donor sperm. The database is exhaustively thorough, containing the medical histories of more than twenty thousand people, approximately half of them men.
- Which one of the following, if true, best explains why the database contains the records of almost ten thousand women?
- (A) Small fertility clinics, located in remote areas, wish to have access to a large selection of donor sperm.  
(B) Keeping genetic information on women is a standard procedure for many scientific clinics.  
(C) Some genetic disorders are not expressed until the onset of puberty.  
(D) Some genetic disorders may be carried by, but not manifested in, men who inherited the dangerous gene from their mothers.  
(E) Some genetic disorders are due to the effects of drugs and alcohol during puberty.

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3. If the Food and Drug Administration (FDA) does not relax some of its regulations governing the testing of experimental drugs, tens of thousands of U.S. citizens are sure to die as a result of certain diseases before an effective treatment is found and made generally available.

It can be concluded from the statement above that if the FDA does relax some of its regulations governing the testing of experimental drugs, then tens of thousands of U.S. citizens

- (A) will definitely die of certain diseases
  - (B) will probably die of certain diseases
  - (C) will probably not die of certain diseases
  - (D) will not die of certain diseases
  - (E) may still die of certain diseases
4. The level of blood sugar for many patients suffering from disease  $Q$  is slightly higher than the level of blood sugar in the general population. Nonetheless, most medical professionals believe that slightly increasing blood sugar levels is a successful means by which to treat disease  $Q$ .

This apparently contradictory argument can best be resolved by which one of the following statements?

- (A) Blood sugar levels for patients who have been cured of disease  $Q$  are virtually identical to the levels of blood sugar found in the general population.
- (B) Many of the symptoms associated with severe cases of disease  $Q$  have been recognized in laboratory animals with experimentally induced high blood pressure, but none of the animals developed disease  $Q$ .
- (C) The movement from inactive to advanced states of disease  $Q$  often occurs because the virus that causes  $Q$  flourishes during periods when blood sugar levels are slightly low.
- (D) The blood sugar level in patients with disease  $Q$  fluctuates abnormally in response to changes in blood chemistry.
- (E) Low levels of blood sugar are symptomatic of many other diseases that are even more serious than disease  $Q$ .

5. Activist: There are countries in which the number of handgun deaths per capita is less than one-tenth of the number in our country. Although not all of these countries outlaw handguns, most of them do. Therefore, to reduce the number of handgun deaths in our country, we must outlaw handguns.

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

- (A) The number of handgun deaths in a country is primarily determined by the rate of handgun ownership in that country.
  - (B) Some countries in which handguns are not outlawed have low numbers of handgun deaths per capita because of conditions that cannot be replicated in all other countries.
  - (C) The number of handgun deaths in a country may be reduced without a corresponding decrease in the number of per capita handgun deaths in that country.
  - (D) Laws forbidding the ownership of handguns are justified only insofar as those laws are effective in preventing handgun deaths.
  - (E) Accidents are not a significant cause of handgun deaths in countries where the number of per capita handgun deaths is relatively low.
6. Medical studies indicate that the metabolic rates of professional athletes are substantially greater than those of the average person. So, most likely, a person's speed and strength are primarily determined by that person's metabolic rate.

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

- (A) Some professional athletes are either faster or stronger than the average person.
- (B) Some professional athletes do not have higher metabolic rates than some people who are not professional athletes.
- (C) The speed and strength of people who are not professional athletes are not primarily determined by choices of diet and exercise.
- (D) Intensive training such as that engaged in by professional athletes causes an increase in metabolic rate.
- (E) Drugs that suppress metabolic rate have been shown to have the side effect of diminishing the speed and strength of those who are not professional athletes.

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7. Environmentalist: In most land ecologies, grasses are the basis of the food chain. Desertification of several North African areas over the past decade has caused the grasses there to die, leading to serious disruption of the ecology in those areas. Now it has been shown that warming in Antarctic waters is causing a die-off of krill there. Because krill is the basis of the food chain in ocean ecologies, we can anticipate that there will be serious disruption of the ecology in these waters.

The environmentalist's argument proceeds by

- (A) demonstrating that ocean ecologies are more delicate than land ecologies
  - (B) using an analogy to reach the conclusion that some ocean ecologies are in danger
  - (C) proving that the population of krill in Antarctic waters is decreasing
  - (D) asserting the role that grasses play in the health of land ecologies
  - (E) demonstrating that changes in temperature have categorically negative effects on all ecologies
8. Some residents of Woodbridge work the late shift at the nearby factory. Because of the fact that all of the residents of Woodbridge who own cars are also members of the Area Auto Club, the Woodbridge city manager concluded that none of the residents who work the late shift at the nearby factory own cars.

The city manager's conclusion is properly drawn if which one of the following is assumed?

- (A) None of the residents of Woodbridge who work the late shift at the nearby factory are members of the Area Auto Club.
- (B) None of the residents of Woodbridge who owns a car has failed to join the Area Auto Club.
- (C) Some of the residents of Woodbridge who do not work the late shift at the nearby factory do not own cars.
- (D) All residents of Woodbridge who do not work the late shift at the nearby factory own cars.
- (E) All residents of Woodbridge who are members of the Area Auto Club own cars.

9. Naturalist: It was once believed that only modern humans were capable of learning to use tools for obtaining food. Decades ago, archaeological evidence showed that extinct species of hominids closely related to modern humans also used tools for these purposes. What remained in doubt, however, was whether any existing nonhuman species could also learn to use tools. Some populations of chimpanzees use dried grasses to "fish" for termites, a high-protein delicacy. Moreover, evidence shows that this behavior is not instinctive but must be taught to and practiced by young chimpanzees. Some populations in the same area do not "fish" for termites in this way, although dried grasses and termite mounds are available to them.

Which one of the following most accurately expresses the conclusion of the naturalist's argument?

- (A) At least some behaviors of chimpanzees are learned, not instinctive.
- (B) Certain past assumptions about the uniqueness of modern humans have been shown to be false.
- (C) Evidence exists that animals other than modern humans and their closest relatives are capable of learning to use tools.
- (D) Only modern humans are capable of learning to use tools in ways that are not directly related to obtaining food.
- (E) Some species of hominids became extinct for reasons unrelated to their ability to use tools.

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10. Victor: Auto manufacturers report strong profit growth this year. This should not be taken to mean, however, that sales of new cars are increasing. Closer examination shows that the growth in auto manufacturers' profits is attributable solely to financing the sale of new cars.

Kim: I don't think that's right. After all, if they were not continuing to sell new cars, auto manufacturers could not profit from financing them, could they?

Kim's reply suggests that she misinterprets Victor's point to be that

- (A) overall sales of new cars are not increasing
- (B) auto manufacturers' profits this year were derived solely from financing
- (C) the financing of the past year's sales is not solely responsible for this year's profit growth
- (D) auto manufacturers should place increased emphasis on the sale and financing of used cars
- (E) only sales of new cars should be considered in evaluating the financial health of auto manufacturers

11. Most people believe that obtaining a master's in business administration (MBA) leads to increased pay. A recent survey, however, suggests that this belief is unfounded. Among the top executives at the nation's most prominent companies, there is no indication that pay rates are any higher for employees with an MBA than they are for employees in similar positions without one.

The argument above is flawed because it neglects the possibility that

- (A) an employee with an MBA may be more likely to attain a top executive position than a similarly able employee without one
- (B) the pay of top executives in the nation's most prominent companies may be higher than the pay of other employees in those same companies
- (C) pay rates for top executives may differ from company to company, even among the most prominent companies
- (D) an employee who obtains an MBA may learn job skills that are critical to success in a top executive position
- (E) top executives who obtain MBAs while holding their jobs may be better able than other executives to find similar positions in other companies in the event that they are laid off

12. Since Oscar received extensive training in how to repair motorcycles, he is able to repair many of their most common mechanical problems. However, Oscar does not understand how internal combustion engines work. When Oscar was given Lucy's motorcycle to repair, he was able to fix the problem, despite the fact that he did not understand what was causing it.

From the statements above, which one of the following can be properly inferred?

- (A) The problem with Lucy's motorcycle involved its engine.
- (B) Not all mechanical problems can be repaired only by mechanics who understand how an internal combustion engine works.
- (C) At least some good mechanics are able to fix mechanical problems without an understanding of what is causing them.
- (D) Oscar's mechanical training in how to repair motorcycles was incomplete.
- (E) Those common mechanical problems that Oscar cannot fix require an understanding of how an internal combustion engine works.

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13. Dr. Jackson: Many people criticize the advertisement of prescription drugs because they believe it causes patients to form mistaken beliefs about how their conditions should be treated. Surveys show, however, that in more than 60 percent of cases when a patient requests a prescription for a particular drug from a doctor, the doctor writes a prescription for the drug he or she has requested.

Dr. Morris: True, patients often receive the treatment they request. But this is most often because patients refuse to follow medical advice that does not agree with the beliefs they form about how they should be treated, not because the treatment they request is correct.

Which one of the following, if true, most supports Dr. Morris's counter to Dr. Jackson?

- (A) More than half of patients are sufficiently knowledgeable about their condition to request the correct treatment for it.
  - (B) Many national organizations that work on behalf of doctors are opposed to the advertisement of prescription drugs.
  - (C) Studies show that more than half of patients receive incorrect or excessive treatment for their medical problems.
  - (D) More than half of patients who receive the prescriptions they request from their doctors have previously requested the same prescription from another doctor and have been refused.
  - (E) Only a very few of the most common medical maladies for which patients seek treatment are most appropriately treated with prescription drugs.
14. It cannot be true that the lack of success of third-party candidates in national elections is due to the difficulties such candidates encounter in securing space on national ballots. Everyone who identifies him- or herself as a supporter of a third party has voted for a major-party candidate in at least one national election when a third-party candidate was listed on the ballot.
- Which one of the following most accurately describes a reasoning flaw in the argument?
- (A) The argument overlooks the possibility that the lack of success of third-party candidates in national elections may be due to the fact that their views on major issues prevent them from gaining broad support.
  - (B) The argument takes for granted that the media coverage devoted to third-party candidates for national office is comparable to that devoted to major-party candidates for those same offices.
  - (C) The argument treats as contradictory to some claim evidence that may instead provide support for that claim.
  - (D) The argument draws its conclusion through the use of a set of facts, not all of which can be true.
  - (E) The argument derives a statement about the behavior of all voters on the basis of partial information about the past voting preferences of only a few voters.

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15. Sara: Our government devotes billions of tax dollars every year to foreign aid, although most experts agree that our social and economic infrastructure is badly in need of that money. It is unconscionable that our elected representatives consider the needs of our own citizens less important than the needs of citizens of other countries.

Ross: Foreign aid helps our country by assuring its security. If money were not spent on foreign aid to the most threatened governments in the world, we would need to spend a great deal more in military interventions when those governments collapsed.

From their statements, it can most properly be inferred that Sara and Ross disagree about whether

- (A) their country's spending on foreign aid ought to be increased
  - (B) failed governments pose a security threat to their country
  - (C) their country's social infrastructure is in need of additional investment
  - (D) their country's spending on foreign aid serves its citizens' needs
  - (E) decreased spending on foreign aid would necessitate additional military spending
16. In communities heavily affected by environmental regulation where such regulation directly benefits neither the companies that are most important to the community's economy nor the residents of that community, the government is perceived as being insensitive to the community's economic welfare. For this reason, the people in some communities heavily affected by environmental regulation are in favor of decreased taxes. When people believe that government considers the interests of others more important than their own, they tend to favor decreased taxes, believing this will limit the government's power over their lives.
- Which one of the following is an assumption on which the argument depends?
- (A) When government policy is perceived as being sensitive to a community's economic welfare, the people of that community do not wish to limit the government's power over their lives.
  - (B) Environmental regulation that directly benefits the companies that are most important to a community's economy leads to greater government support than environmental regulation that directly benefits only the residents of that community.
  - (C) A government's power over the lives of a community's residents depends on taxes collected from those residents.
  - (D) People in a community tend to believe that their government considers others' interests more important than their own unless that government is perceived as being sensitive to the community's economic welfare.
  - (E) Community members do not consider indirect benefits to themselves or to the companies that are most important to the community's economy in formulating their response to environmental regulation.

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17. Researcher: Heavily insulated homes trap radon gas much better than do poorly insulated homes. Therefore, those who live in heavily insulated homes are at greater risk for certain types of brain cancer because evidence shows that those who are being treated for brain cancer have high blood levels of the radioactive compounds that are found in those who are exposed to high levels of radon gas.

Which one of the following, if true, most undermines the researcher's argument?

- (A) Radon gas is commonly found even in homes that do not trap it well.
- (B) Exposure to radiation is known to lead to an increased incidence of cancer of all kinds.
- (C) Young people are particularly susceptible to the negative consequences of high levels of radon exposure.
- (D) Radioactive compounds are used in many cases to help develop an initial diagnosis of medical problems.
- (E) The most common brain cancer therapy involves radiation and leads to high blood levels of many radioactive compounds.

18. Food critic: Consumers should buy only wild salmon, not farmed salmon. Whereas the environmental damage associated with harvesting wild salmon is slight, salmon farms are significant causes of water pollution, and salmon that escape from the farms displace wild varieties, threatening biodiversity. The fact that farmed salmon is cheaper than wild varieties has led to a large increase in the popularity of salmon, which may eventually pose a threat to wild populations because of overfishing.

Which one of the following most accurately describes a flaw in the food critic's argument?

- (A) At least one of the potential disadvantages cited in arguing against a course of action applies at least as strongly to the alternative course of action the argument recommends.
- (B) The argument is constructed in such a way that it precludes the possibility of reaching any logical conclusion, if all of its premises are accepted as true.
- (C) It overlooks the possibility that some unspecified benefit of the choice argued against may outweigh any possible benefit of the choice argued for.
- (D) It concludes that one course of action is not permissible on the basis of a principle that is in greater need of support than the conclusion it is advanced to defend.
- (E) Its premises are presented in such a way that the argument presupposes the truth of the conclusion it is intended to support.

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19. Resentment is not a reasonable response to rejection because rejection is merely an expression of preference: Either a preference is purely personal, in which case the rejection could not have been anticipated, or else that preference is commonly held, in which case steps should have been taken in advance to avoid rejection.

Which one of the following, if assumed, enables the argument's conclusion to be properly drawn?

- (A) No emotional response to any action that could not have been anticipated is reasonable.
- (B) Resentment is not a reasonable response to any action which steps should have been taken in advance to avoid.
- (C) Resentment is not a reasonable response to any preference that is either purely personal or commonly held.
- (D) Responses to resentment indicate preferences that either could not have been anticipated or else could have been avoided.
- (E) No response to an expression of preference that steps should have been taken to avoid could reasonably have been anticipated.

20. According to newspaper reviews, some of the films released this year were of superior artistic quality. According to audience surveys, some of the films released this year involved exciting plots. Therefore, some of the films this year that involved exciting plots were also of superior artistic quality.

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

- (A) Judging from automotive magazines, some of the cars released this year were exceptionally fast, but according to automotive enthusiasts, none of the cars released this year is likely to become a classic. Thus not even the fastest car released this year is likely to become a classic.
- (B) According to consumer magazines, some of the new refrigerators introduced this year are exceptionally energy efficient. According to consumer surveys, energy efficiency plays some role in determining whether a customer is satisfied with a new refrigerator. Therefore, the reason some customers are satisfied with their new refrigerators is that they are exceptionally energy efficient.
- (C) Art says that snow is forecast for some parts of our area tomorrow, and Lois says that rain is forecast for some parts of our area tomorrow. Thus, tomorrow it will neither snow nor rain in some parts of our area.
- (D) Doctors say that some vaccines need be administered only once in a patient's lifetime, and drug companies say that some vaccines prevent measles, so some vaccine that prevents measles need be administered only once in a patient's lifetime.
- (E) According to publishers, most of the works of fiction published this year were novels. According to book reviewers, most of the works of fiction published this year were of inferior quality. Therefore, some of the novels published this year were of inferior quality.

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21. Stock options are the only investments that allow an individual investor to achieve high returns with limited liability. With relatively small risk, an individual investing in stock options can make profits of several hundred percent over a short period of time. Thus stock options represent a more efficient use of an individual's money than any other investment option.

Which one of the following, if assumed, enables the argument's conclusion to be properly inferred?

- (A) Investments other than stock options do not allow an individual investor to achieve high returns with limited liability.
- (B) The efficient use of an individual investor's money requires the possibility of achieving profit over a short period of time.
- (C) A profit of several hundred percent over a short period of time is considered a high return on an individual's investment.
- (D) An investment cannot be considered efficient unless it returns several hundred percent profit.
- (E) Investments that allow an individual to achieve high returns with limited liability represent a more efficient use of money than any other potential use.

22. Only corporate executives who behave ethically are likely to be promoted, but no corporate executive who makes wise business decisions is a poor employee. All corporate executives who behave ethically are both well respected and make wise business decisions, qualities lacking in many corporate executives who do not behave ethically.

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

- (A) No corporate executive who makes wise business decisions but does not behave ethically is well respected.
- (B) All corporate executives who are well respected but do not behave ethically make wise business decisions.
- (C) No corporate executive who is likely to be promoted is a poor employee.
- (D) All corporate executives who are not well respected are poor employees.
- (E) All corporate executives who are good employees behave ethically.

23. It cannot be true that everyone who donates money to charity is concerned with the well-being of others. After all, it is possible that donating money to charity may help some people lessen their own feelings of guilt.

Which one of the following arguments employs a principle of reasoning most similar to that illustrated by the argument above?

- (A) It cannot be true that the only reason for space exploration is scientific discovery. After all, there have been many space missions that have not contributed to scientific knowledge at all.
- (B) It cannot be true that income taxes are justified by the government's obligation to redistribute wealth. After all, many government programs paid for by tax money benefit wealthy individuals.
- (C) It cannot be true that Columbus was the one who discovered that Earth was not flat. After all, ancient mathematicians had calculated Earth's circumference centuries before Columbus was born.
- (D) It cannot be true that all those who become actors desire wealth and fame. After all, some actors may perform so that they can share their artistic vision with others.
- (E) It cannot be true that a meteor impact caused the extinction of the dinosaurs. After all, it is possible that climatic conditions similar to those following a meteor impact could have been created by a massive volcanic eruption.

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24. Appraiser: We know the following about the pottery made by artisan *A*. Pieces with a metallic glaze always feature a floral pattern but never have an hourglass shape. Pieces that are signed always have an hourglass shape, and pieces made in this century are always signed. A piece of pottery made by artisan *A* has recently come to my attention; it has a floral pattern and is signed.

From the appraiser's statements, which one of the following can be properly concluded about the piece of pottery by artisan *A* that has recently come to the appraiser's attention?

- (A) It has an hourglass shape and was made in this century.
- (B) It has an hourglass shape but was not made in this century.
- (C) It has an hourglass shape but does not have a metallic glaze.
- (D) It has a metallic glaze and was made in this century.
- (E) It lacks both an hourglass shape and a metallic glaze.

25. No doubt the presidential candidate who wins an election deserves credit for persistence and political aplomb, but the advisers who develop campaign strategy are often overlooked. Although presidential candidates sometimes take the lead in shaping their campaign's policy positions, most often it is political professionals who, in service to the campaign, devote their time and energy to crafting the candidate's message and persona. Campaign strategists play a crucial role in virtually every successful candidacy.

The claim that presidential candidates sometimes take the lead in shaping their campaign's policy positions plays which one of the following roles in the argument?

- (A) It indicates the circumstances to which the argument's conclusion is to be understood to apply.
- (B) It concedes that the shortcoming the argument intends to address does not exist in every instance.
- (C) It supports the argument's contention that political professionals devote time and energy to crafting the candidate's message and persona.
- (D) It suggests that the relationship between a candidate's policy and that candidate's persona is not as essential as some may believe it to be.
- (E) It is a premise on which other premises supporting the conclusion is based.

**S T O P**

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT WORK ON ANY OTHER SECTION IN THE TEST.