

SECTION I

Time—35 minutes

23 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 company employee generates a series of five-digit product codes in accordance with the following rules:

The codes use the digits 0, 1, 2, 3, and 4, and no others.

Each digit occurs exactly once in any code.

The second digit has a value exactly twice that of the first digit.

The value of the third digit is less than the value of the fifth digit.

1. If the last digit of an acceptable product code is 1, it must be true that the
 - (A) first digit is 2
 - (B) second digit is 0
 - (C) third digit is 3
 - (D) fourth digit is 4
2. Which one of the following must be true about any acceptable product code?
 - (A) The digit 1 appears in some position before the digit 2.
 - (B) The digit 1 appears in some position before the digit 3.
 - (C) The digit 2 appears in some position before the digit 3.
 - (D) The digit 3 appears in some position before the digit 0.
3. If the third digit of an acceptable product code is not 0, which one of the following must be true?
 - (A) The second digit of the product code is 2.
 - (B) The third digit of the product code is 3.
 - (C) The fourth digit of the product code is 0.
 - (D) The fifth digit of the product code is 3.
4. Any of the following pairs could be the third and fourth digits, respectively, of an acceptable product code, EXCEPT:
 - (A) 0, 1
 - (B) 3, 4
 - (C) 1, 0
 - (D) 3, 0
5. Which one of the following must be true about any acceptable product code?
 - (A) There is exactly one digit between the digit 0 and the digit 1.
 - (B) There is exactly one digit between the digit 1 and the digit 2.
 - (C) There are at most two digits between the digit 1 and the digit 3.
 - (D) There are at most two digits between the digit 2 and the digit 4.

GO ON TO THE NEXT PAGE.

Questions 6–10

Exactly three films—*Gambhir*, *Haseen*, and *Lehenga*—are shown during a film club’s festival held on Thursday, Friday, and Saturday. Each film is shown at least once during the festival but never more than once on a given day. On each day at least one film is shown. Films are shown one at a time. The following conditions apply:

On Thursday *Haseen* is shown, and no film is shown after it on that day.

On Friday either *Gambhir* or *Lehenga*, but not both, is shown, and no film is shown after it on that day.

On Saturday either *Gambhir* or *Haseen*, but not both, is shown, and no film is shown after it on that day.

6. Which one of the following could be a complete and accurate description of the order in which the films are shown at the festival?
- (A) Thursday: *Lehenga*, then *Haseen*; Friday: *Lehenga*; Saturday: *Haseen*
 (B) Thursday: *Haseen*; Friday: *Gambhir*, then *Lehenga*; Saturday: *Lehenga*, then *Gambhir*
 (C) Thursday: *Haseen*; Friday: *Lehenga*; Saturday: *Lehenga*, then *Gambhir*
 (D) Thursday: *Gambhir*, then *Haseen*, then *Lehenga*; Friday: *Lehenga*; Saturday: *Gambhir*
7. Which one of the following CANNOT be true?
- (A) *Haseen* is the last film shown on each day of the festival.
 (B) *Lehenga* is shown on each day of the festival.
 (C) *Gambhir* is shown second on each day of the festival.
 (D) A different film is shown first on each day of the festival.
8. If *Lehenga* is never shown again during the festival once *Gambhir* is shown, then which one of the following is the maximum number of film showings that could occur during the festival?
- (A) three
 (B) four
 (C) five
 (D) six
9. If *Gambhir* is shown exactly three times, *Haseen* is shown exactly twice, and *Lehenga* is shown exactly once, then which one of the following must be true?
- (A) All three films are shown on Thursday.
 (B) Exactly two films are shown on Saturday.
 (C) *Haseen* and *Gambhir* are both shown on Friday.
 (D) *Gambhir* is the only film shown on Saturday.
10. If *Lehenga* is shown exactly three times, *Haseen* is shown exactly twice, and *Gambhir* is shown exactly once, then which one of the following is a complete and accurate list of the films that could be the first film shown on Thursday?
- (A) *Haseen*
 (B) *Lehenga*
 (C) *Gambhir*, *Haseen*
 (D) *Gambhir*, *Lehenga*

GO ON TO THE NEXT PAGE.

Questions 11–17

A cruise line is scheduling seven week-long voyages for the ship *Azad*. Each voyage will occur in exactly one of the first seven weeks of the season: weeks 1 through 7. Each voyage will be to exactly one of four destinations: Guadeloupe, Jamaica, Martinique, or Trinidad. Each destination will be scheduled for at least one of the weeks. The following conditions apply to *Azad*'s schedule:

Jamaica will not be its destination in week 4.

Trinidad will be its destination in week 7.

Azad will make exactly two voyages to Martinique, and at least one voyage to Guadeloupe will occur in some week between those two voyages.

Guadeloupe will be its destination in the week preceding any voyage it makes to Jamaica.

No destination will be scheduled for consecutive weeks.

11. Which one of the following is an acceptable schedule of destinations for *Azad*, in order from week 1 through week 7?
- (A) Guadeloupe, Jamaica, Martinique, Trinidad, Guadeloupe, Martinique, Trinidad
 (B) Guadeloupe, Martinique, Trinidad, Martinique, Guadeloupe, Jamaica, Trinidad
 (C) Jamaica, Martinique, Guadeloupe, Martinique, Guadeloupe, Jamaica, Trinidad
 (D) Martinique, Trinidad, Guadeloupe, Jamaica, Martinique, Guadeloupe, Trinidad
12. Which one of the following CANNOT be true about *Azad*'s schedule of voyages?
- (A) *Azad* makes a voyage to Trinidad in week 6.
 (B) *Azad* makes a voyage to Martinique in week 5.
 (C) *Azad* makes a voyage to Jamaica in week 6.
 (D) *Azad* makes a voyage to Jamaica in week 3.
13. If *Azad* makes a voyage to Trinidad in week 5, which one of the following could be true?
- (A) *Azad* makes a voyage to Trinidad in week 1.
 (B) *Azad* makes a voyage to Martinique in week 2.
 (C) *Azad* makes a voyage to Guadeloupe in week 3.
 (D) *Azad* makes a voyage to Martinique in week 4.
14. If *Azad* makes a voyage to Guadeloupe in week 1 and a voyage to Jamaica in week 5, which one of the following must be true?
- (A) *Azad* makes a voyage to Jamaica in week 2.
 (B) *Azad* makes a voyage to Martinique in week 6.
 (C) *Azad* makes a voyage to Martinique in week 3.
 (D) *Azad* makes a voyage to Guadeloupe in week 6.
15. If *Azad* makes a voyage to Guadeloupe in week 1 and to Trinidad in week 2, which one of the following must be true?
- (A) *Azad* makes a voyage to Martinique in week 3.
 (B) *Azad* makes a voyage to Martinique in week 4.
 (C) *Azad* makes a voyage to Martinique in week 5.
 (D) *Azad* makes a voyage to Guadeloupe in week 3.
16. If *Azad* makes a voyage to Martinique in week 3, which one of the following could be an accurate list of *Azad*'s destinations in week 4 and week 5, respectively?
- (A) Guadeloupe, Trinidad
 (B) Jamaica, Guadeloupe
 (C) Martinique, Trinidad
 (D) Trinidad, Jamaica
17. Which one of the following must be true about *Azad*'s schedule of voyages?
- (A) *Azad* makes a voyage to Guadeloupe either in week 1 or else in week 2.
 (B) *Azad* makes a voyage to Martinique either in week 2 or else in week 3.
 (C) *Azad* makes at most two voyages to Guadeloupe.
 (D) *Azad* makes at most two voyages to Jamaica.

GO ON TO THE NEXT PAGE.

Questions 18–23

There are exactly three recycling centers in Ganga Nagar: Center 1, Center 2, and Center 3. Exactly five kinds of material are recycled at these recycling centers: glass, newsprint, plastic, tin, and wood. Each recycling center recycles at least two but no more than three of these kinds of material. The following conditions must hold:

- Any recycling center that recycles wood also recycles newsprint.
 - Every kind of material that Center 2 recycles is also recycled at Center 1.
 - Only one of the recycling centers recycles plastic, and that recycling center does not recycle glass.
18. Which one of the following could be an accurate account of all the kinds of material recycled at each recycling center in Ganga Nagar?
- (A) Center 1: newsprint, plastic, wood; Center 2: newsprint, wood; Center 3: glass, tin, wood
 - (B) Center 1: glass, newsprint, tin; Center 2: glass, newsprint, tin; Center 3: newsprint, plastic, wood
 - (C) Center 1: glass, newsprint, wood; Center 2: glass, newsprint, tin; Center 3: plastic, tin
 - (D) Center 1: glass, plastic, tin; Center 2: glass, tin; Center 3: newsprint, wood
19. Which one of the following is a complete and accurate list of the recycling centers in Ganga Nagar any one of which could recycle plastic?
- (A) Center 1 only
 - (B) Center 3 only
 - (C) Center 1, Center 2
 - (D) Center 1, Center 3

20. If Center 2 recycles three kinds of material, then which one of the following kinds of material must Center 3 recycle?
- (A) glass
 - (B) newsprint
 - (C) plastic
 - (D) tin
21. If each recycling center in Ganga Nagar recycles exactly three kinds of material, then which one of the following could be true?
- (A) Only Center 2 recycles glass.
 - (B) Only Center 3 recycles newsprint.
 - (C) Only Center 1 recycles plastic.
 - (D) Only Center 3 recycles tin.
22. If Center 3 recycles glass, then which one of the following kinds of material must Center 2 recycle?
- (A) glass
 - (B) newsprint
 - (C) plastic
 - (D) tin
23. If Center 1 is the only recycling center that recycles wood, then which one of the following could be a complete and accurate list of the kinds of material that one of the recycling centers recycles?
- (A) plastic, tin
 - (B) newsprint, wood
 - (C) newsprint, tin
 - (D) glass, wood

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. Economist: Every business strives to increase its productivity, for this increases profits for the owners and the likelihood that the business will survive. But not all efforts to increase productivity are beneficial to the business as a whole. Often, attempts to increase productivity decrease the number of employees, which clearly harms the dismissed employees as well as the sense of security of the retained employees.

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

- (A) If an action taken to secure the survival of a business fails to enhance the welfare of the business's employees, that action cannot be good for the business as a whole.
- (B) Some measures taken by a business to increase productivity fail to be beneficial to the business as a whole.
- (C) Only if the employees of a business are also its owners will the interests of the employees and owners coincide, enabling measures that will be beneficial to the business as a whole.
- (D) There is no business that does not make efforts to increase its productivity.
- (E) Decreasing the number of employees in a business undermines the sense of security of retained employees.

2. All Labrador retrievers bark a great deal. All Saint Bernards bark infrequently. Each of Rani's dogs is a cross between a Labrador retriever and a Saint Bernard. Therefore, Rani's dogs are moderate barkers.

Which one of the following uses flawed reasoning that most closely resembles the flawed reasoning used in the argument above?

- (A) All students who study diligently make good grades. But some students who do not study diligently also make good grades. Jyoti studies somewhat diligently. Therefore, Jyoti makes somewhat good grades.
- (B) All type A chemicals are extremely toxic to human beings. All type B chemicals are nontoxic to human beings. This household cleaner is a mixture of a type A chemical and a type B chemical. Therefore, this household cleaner is moderately toxic.
- (C) All students at Hansa School live in Hari Nagar. All students at Eashan School live in Vijay Nagar. Members of the Prakash family attend both Hansa and Eashan. Therefore, some members of the Prakash family live in Hari Nagar and some live in Vijay Nagar.
- (D) All transcriptionists know shorthand. All engineers know calculus. Bala has worked both as a transcriptionist and as an engineer. Therefore, Bala knows both shorthand and calculus.
- (E) All of Karuna's dresses are very well made. All of Chitra's dresses are very badly made. Half of the dresses in this closet are very well made, and half of them are very badly made. Therefore, half of the dresses in this closet are Karuna's and half of them are Chitra's.

GO ON TO THE NEXT PAGE.

3. A century in certain ways is like a life, and as the end of a century approaches, people behave toward that century much as someone who is nearing the end of life does toward that life. So just as people in their last years spend much time looking back on the events of their life, people at a century's end _____.

Which one of the following most logically completes the argument?

- (A) reminisce about their own lives
 - (B) fear that their own lives are about to end
 - (C) focus on what the next century will bring
 - (D) become very interested in the history of the century just ending
 - (E) reflect on how certain unfortunate events of the century could have been avoided
4. Consumer: The latest *Chintan Report* suggests that Omkar prepackaged meals are virtually devoid of nutritional value. But the *Chintan Report* is commissioned by Dilip Foods, Omkar's largest corporate rival, and early drafts of the report are submitted for approval to Dilip Foods' public relations department. Because of the obvious bias of this report, it is clear that Omkar's prepackaged meals really are nutritious.

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

- (A) treats evidence that there is an apparent bias as evidence that the *Chintan Report's* claims are false
- (B) draws a conclusion based solely on an unrepresentative sample of Omkar's products
- (C) fails to take into account the possibility that Omkar has just as much motivation to create negative publicity for Dilip as Dilip has to create negative publicity for Omkar
- (D) fails to provide evidence that Dilip Foods' prepackaged meals are not more nutritious than Omkar's are
- (E) presumes, without providing justification, that Dilip Foods' public relations department would not approve a draft of a report that was hostile to Dilip Foods' products

5. Scientist: Earth's average annual temperature has increased by about 0.5 degrees Celsius over the last century. This warming is primarily the result of the buildup of minor gases in the atmosphere, blocking the outward flow of heat from the planet.

Which one of the following, if true, would count as evidence against the scientist's explanation of Earth's warming?

- (A) Only some of the minor gases whose presence in the atmosphere allegedly resulted in the phenomenon described by the scientist were produced by industrial pollution.
 - (B) Most of the warming occurred before 1940, while most of the buildup of minor gases in the atmosphere occurred after 1940.
 - (C) Over the last century, Earth received slightly more solar radiation in certain years than it did in others.
 - (D) Volcanic dust and other particles in the atmosphere reflect much of the Sun's radiation back into space before it can reach Earth's surface.
 - (E) The accumulation of minor gases in the atmosphere has been greater over the last century than at any other time in Earth's history.
6. An undergraduate degree is necessary for appointment to the executive board. Further, no one with a felony conviction can be appointed to the board. Thus, Manu, an accountant with both a bachelor's and a master's degree, cannot be accepted for the position of Executive Administrator, since he has a felony conviction.
- The argument's conclusion follows logically if which one of the following is assumed?
- (A) Anyone with a master's degree and without a felony conviction is eligible for appointment to the executive board.
 - (B) Only candidates eligible for appointment to the executive board can be accepted for the position of Executive Administrator.
 - (C) An undergraduate degree is not necessary for acceptance for the position of Executive Administrator.
 - (D) If Manu did not have a felony conviction, he would be accepted for the position of Executive Administrator.
 - (E) The felony charge on which Manu was convicted is relevant to the duties of the position of Executive Administrator.

7. Ethicist: The most advanced kind of moral motivation is based solely on abstract principles. This form of motivation is in contrast with calculated self-interest or the desire to adhere to societal norms and conventions.

The actions of which one of the following individuals exhibit the most advanced kind of moral motivation, as described by the ethicist?

- (A) Bobby contributed money to a local charity during a charity drive at work because he worried that not doing so would make him look stingy.
- (B) Walter contributed money to a local charity during a charity drive at work because he believed that doing so would improve his employer's opinion of him.
- (C) Deepa's employers engaged in an illegal but profitable practice that caused serious damage to the environment. Deepa did not report this practice to the authorities, out of fear that her employers would retaliate against her.
- (D) Jayashree's employers engaged in an illegal but profitable practice that caused serious damage to the environment. Jayashree reported this practice to the authorities out of a belief that protecting the environment is always more important than monetary profit.
- (E) Lalitha's employers engaged in an illegal but profitable practice that caused serious damage to the environment. Lalitha reported this practice to the authorities only because several colleagues had been pressuring her to do so.
8. Proponents of the electric car maintain that when the technical problems associated with its battery design are solved, such cars will be widely used and, because they are emission-free, will result in an abatement of the environmental degradation caused by auto emissions. But unless we dam more rivers, the electricity to charge these batteries will come from nuclear or coal-fired power plants. Each of these three power sources produces considerable environmental damage. Thus, the electric car _____.

Which one of the following most logically completes the argument?

- (A) will have worse environmental consequences than its proponents may believe
- (B) will probably remain less popular than other types of cars
- (C) requires that purely technical problems be solved before it can succeed
- (D) will increase the total level of emissions rather than reduce it
- (E) will not produce a net reduction in environmental degradation

9. Although video game sales have increased steadily over the past 3 years, we can expect a reversal of this trend in the very near future. Historically, over three quarters of video games sold have been purchased by people from 13 to 16 years of age, and the number of people in this age group is expected to decline steadily over the next 10 years.

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

- (A) Most people 17 years old or older have never purchased a video game.
- (B) Video game rentals have declined over the past 3 years.
- (C) New technology will undoubtedly make entirely new entertainment options available over the next 10 years.
- (D) The number of different types of video games available is unlikely to decrease in the near future.
- (E) Most of the people who have purchased video games over the past 3 years are over the age of 16.
10. Double-blind techniques should be used whenever possible in scientific experiments. They help prevent the misinterpretations that often arise due to expectations and opinions that scientists already hold, and clearly scientists should be extremely diligent in trying to avoid such misinterpretations.

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

- (A) Scientists' objectivity may be impeded by interpreting experimental evidence on the basis of expectations and opinions that they already hold.
- (B) It is advisable for scientists to use double-blind techniques in as high a proportion of their experiments as they can.
- (C) Scientists sometimes neglect to adequately consider the risk of misinterpreting evidence on the basis of prior expectations and opinions.
- (D) Whenever possible, scientists should refrain from interpreting evidence on the basis of previously formed expectations and convictions.
- (E) Double-blind experimental techniques are often an effective way of ensuring scientific objectivity.

GO ON TO THE NEXT PAGE.

11. It is now a common complaint that the electronic media have corroded the intellectual skills required and fostered by the literary media. But several centuries ago the complaint was that certain intellectual skills, such as the powerful memory and extemporaneous eloquence that were intrinsic to oral culture, were being destroyed by the spread of literacy. So, what awaits us is probably a mere alteration of the human mind rather than its devolution.

The reference to the complaint of several centuries ago that powerful memory and extemporaneous eloquence were being destroyed plays which one of the following roles in the argument?

- (A) evidence supporting the claim that the intellectual skills fostered by the literary media are being destroyed by the electronic media
- (B) an illustration of the general hypothesis being advanced that intellectual abilities are inseparable from the means by which people communicate
- (C) an example of a cultural change that did not necessarily have a detrimental effect on the human mind overall
- (D) evidence that the claim that the intellectual skills required and fostered by the literary media are being lost is unwarranted
- (E) possible evidence, mentioned and then dismissed, that might be cited by supporters of the hypothesis being criticized

12. Suppose I have promised to keep a confidence and someone asks me a question that I cannot answer truthfully without thereby breaking the promise. Obviously, I cannot both keep and break the same promise. Therefore, one cannot be obliged both to answer all questions truthfully and to keep all promises.

Which one of the following arguments is most similar in its reasoning to the argument above?

- (A) It is claimed that we have the unencumbered right to say whatever we want. It is also claimed that we have the obligation to be civil to others. But civility requires that we not always say what we want. So, it cannot be true both that we have the unencumbered right to say whatever we want and that we have the duty to be civil.
- (B) Some politicians could attain popularity with voters only by making extravagant promises; this, however, would deceive the people. So, since the only way for some politicians to be popular is to deceive, and any politician needs to be popular, it follows that some politicians must deceive.
- (C) If we put a lot of effort into making this report look good, the client might think we did so because we believed our proposal would not stand on its own merits. On the other hand, if we do not try to make the report look good, the client might think we are not serious about her business. So, whatever we do, we risk her criticism.
- (D) If creditors have legitimate claims against a business and the business has the resources to pay those debts, then the business is obliged to pay them. Also, if a business has obligations to pay debts, then a court will force it to pay them. But the courts did not force this business to pay its debts, so either the creditors did not have legitimate claims or the business did not have sufficient resources.
- (E) If we extend our business hours, we will either have to hire new employees or have existing employees work overtime. But both new employees and additional overtime would dramatically increase our labor costs. We cannot afford to increase labor costs, so we will have to keep our business hours as they stand.

GO ON TO THE NEXT PAGE.

13. Standard aluminum soft-drink cans do not vary in the amount of aluminum that they contain. Fifty percent of the aluminum contained in a certain group (M) of standard aluminum soft-drink cans was recycled from another group (L) of used, standard aluminum soft-drink cans. Since all the cans in L were recycled into cans in M and since the amount of material other than aluminum in an aluminum can is negligible, it follows that M contains twice as many cans as L.

The conclusion of the argument follows logically if which one of the following is assumed?

- (A) The aluminum in the cans of M cannot be recycled further.
 - (B) Recycled aluminum is of poorer quality than unrecycled aluminum.
 - (C) All of the aluminum in an aluminum can is recovered when the can is recycled.
 - (D) None of the soft-drink cans in group L had been made from recycled aluminum.
 - (E) Aluminum soft-drink cans are more easily recycled than are soft-drink cans made from other materials.
14. A cup of raw milk, after being heated in a microwave oven to 50 degrees Celsius, contains half its initial concentration of a particular enzyme, lysozyme. If, however, the milk reaches that temperature through exposure to a conventional heat source of 50 degrees Celsius, it will contain nearly all of its initial concentration of the enzyme. Therefore, what destroys the enzyme is not heat but microwaves, which generate heat.

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

- (A) Heating raw milk in a microwave oven to a temperature of 100 degrees Celsius destroys nearly all of the lysozyme initially present in that milk.
- (B) Enzymes in raw milk that are destroyed through excessive heating can be replaced by adding enzymes that have been extracted from other sources.
- (C) A liquid exposed to a conventional heat source of exactly 50 degrees Celsius will reach that temperature more slowly than it would if it were exposed to a conventional heat source hotter than 50 degrees Celsius.
- (D) Milk that has been heated in a microwave oven does not taste noticeably different from milk that has been briefly heated by exposure to a conventional heat source.
- (E) Heating any liquid by microwave creates small zones within it that are much hotter than the overall temperature that the liquid will ultimately reach.

15. A new government policy has been developed to avoid many serious cases of influenza. This goal will be accomplished by the annual vaccination of high-risk individuals: everyone 65 and older as well as anyone with a chronic disease that might cause them to experience complications from the influenza virus. Each year's vaccination will protect only against the strain of the influenza virus deemed most likely to be prevalent that year, so every year it will be necessary for all high-risk individuals to receive a vaccine for a different strain of the virus.

Which one of the following is an assumption that would allow the conclusion above to be properly drawn?

- (A) The number of individuals in the high-risk group for influenza will not significantly change from year to year.
- (B) The likelihood that a serious influenza epidemic will occur varies from year to year.
- (C) No vaccine for the influenza virus protects against more than one strain of that virus.
- (D) Each year the strain of influenza virus deemed most likely to be prevalent will be one that had not previously been deemed most likely to be prevalent.
- (E) Each year's vaccine will have fewer side effects than the vaccine of the previous year since the technology for making vaccines will constantly improve.

GO ON TO THE NEXT PAGE.

16. Tarun: Researchers at a local university claim that 61 percent of the information transferred during a conversation is communicated through nonverbal signals. But this claim, like all such mathematically precise claims, is suspect, because claims of such exactitude could never be established by science.

Shilpa: While precision is unobtainable in many areas of life, it is commonplace in others. Many scientific disciplines obtain extremely precise results, which should not be doubted merely because of their precision.

The statements above provide the most support for holding that Shilpa would disagree with Tarun about which one of the following statements?

- (A) Research might reveal that 61 percent of the information taken in during a conversation is communicated through nonverbal signals.
 - (B) It is possible to determine whether 61 percent of the information taken in during a conversation is communicated through nonverbal signals.
 - (C) The study of verbal and nonverbal communication is an area where one cannot expect great precision in one's research results.
 - (D) Some sciences can yield mathematically precise results that are not inherently suspect.
 - (E) If inherently suspect claims are usually false, then the majority of claims made by scientists are false as well.
17. Hospital executive: At a recent conference on nonprofit management, several computer experts maintained that the most significant threat faced by large institutions such as universities and hospitals is unauthorized access to confidential data. In light of this testimony, we should make the protection of our clients' confidentiality our highest priority.

The hospital executive's argument is most vulnerable to which one of the following objections?

- (A) The argument confuses the causes of a problem with the appropriate solutions to that problem.
- (B) The argument relies on the testimony of experts whose expertise is not shown to be sufficiently broad to support their general claim.
- (C) The argument assumes that a correlation between two phenomena is evidence that one is the cause of the other.
- (D) The argument draws a general conclusion about a group based on data about an unrepresentative sample of that group.
- (E) The argument infers that a property belonging to large institutions belongs to all institutions.

18. Modern science is built on the process of posing hypotheses and testing them against observations—in essence, attempting to show that the hypotheses are incorrect. Nothing brings more recognition than overthrowing conventional wisdom. It is accordingly unsurprising that some scientists are skeptical of the widely accepted predictions of global warming. What is instead remarkable is that with hundreds of researchers striving to make breakthroughs in climatology, very few find evidence that global warming is unlikely.

The information above provides the most support for which one of the following statements?

- (A) Most scientists who are reluctant to accept the global warming hypothesis are not acting in accordance with the accepted standards of scientific debate.
 - (B) Most researchers in climatology have substantial motive to find evidence that would discredit the global warming hypothesis.
 - (C) There is evidence that conclusively shows that the global warming hypothesis is true.
 - (D) Scientists who are skeptical about global warming have not offered any alternative hypotheses to explain climatological data.
 - (E) Research in global warming is primarily driven by a desire for recognition in the scientific community.
19. Historian: The Land Party achieved its only national victory in Banestria in 1935. It received most of its support that year in rural and semirural areas, where the bulk of Banestria's population lived at the time. The economic woes of the years surrounding that election hit agricultural and small business interests the hardest, and the Land Party specifically targeted those groups in 1935. I conclude that the success of the Land Party that year was due to the combination of the Land Party's specifically addressing the concerns of these groups and the depth of the economic problems people in these groups were facing.

Each of the following, if true, strengthens the historian's argument EXCEPT:

- (A) In preceding elections the Land Party made no attempt to address the interests of economically distressed urban groups.
- (B) Voters are more likely to vote for a political party that focuses on their problems.
- (C) The Land Party had most of its successes when there was economic distress in the agricultural sector.
- (D) No other major party in Banestria specifically addressed the issues of people who lived in semirural areas in 1935.
- (E) The greater the degree of economic distress someone is in, the more likely that person is to vote.

20. Geetha: Munaf claims that the Aasa Nagar Neighbors Association overwhelmingly opposes the new water system, citing this as evidence of citywide opposition. The association did pass a resolution opposing the new water system, but only 25 of 350 members voted, with 10 in favor of the system. Furthermore, the 15 opposing votes represent far less than 1 percent of Aasa Nagar's population. One should not assume that so few votes represent the view of the majority of Aasa Nagar's residents.

Of the following, which one most accurately describes Geetha's strategy of argumentation?

- (A) questioning a conclusion based on the results of a vote, on the grounds that people with certain views are more likely to vote
 - (B) questioning a claim supported by statistical data by arguing that statistical data can be manipulated to support whatever view the interpreter wants to support
 - (C) attempting to refute an argument by showing that, contrary to what has been claimed, the truth of the premises does not guarantee the truth of the conclusion
 - (D) criticizing a view on the grounds that the view is based on evidence that is in principle impossible to disconfirm
 - (E) attempting to cast doubt on a conclusion by claiming that the statistical sample on which the conclusion is based is too small to be dependable
21. Driver: My friends say I will one day have an accident because I drive my sports car recklessly. But I have done some research, and apparently minivans and larger sedans have very low accident rates compared to sports cars. So trading my sports car in for a minivan would lower my risk of having an accident.

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

- (A) infers a cause from a mere correlation
- (B) relies on a sample that is too narrow
- (C) misinterprets evidence that a result is likely as evidence that the result is certain
- (D) mistakes a condition sufficient for bringing about a result for a condition necessary for doing so
- (E) relies on a source that is probably not well-informed

22. Editorialist: News media rarely cover local politics thoroughly, and local political business is usually conducted secretly. These factors each tend to isolate local politicians from their electorates. This has the effect of reducing the chance that any particular act of resident participation will elicit a positive official response, which in turn discourages resident participation in local politics.

Which one of the following is most strongly supported by the editorialist's statements?

- (A) Particular acts of resident participation would be likely to elicit a positive response from local politicians if those politicians were less isolated from their electorate.
 - (B) Local political business should be conducted less secretly because this would avoid discouraging resident participation in local politics.
 - (C) The most important factor influencing a resident's decision as to whether to participate in local politics is the chance that the participation will elicit a positive official response.
 - (D) More-frequent thorough coverage of local politics would reduce at least one source of discouragement from resident participation in local politics.
 - (E) If resident participation in local politics were not discouraged, this would cause local politicians to be less isolated from their electorate.
23. Philosopher: An action is morally right if it would be reasonably expected to increase the aggregate well-being of the people affected by it. An action is morally wrong if and only if it would be reasonably expected to reduce the aggregate well-being of the people affected by it. Thus, actions that would be reasonably expected to leave unchanged the aggregate well-being of the people affected by them are also right.

The philosopher's conclusion follows logically if which one of the following is assumed?

- (A) Only wrong actions would be reasonably expected to reduce the aggregate well-being of the people affected by them.
- (B) No action is both right and wrong.
- (C) Any action that is not morally wrong is morally right.
- (D) There are actions that would be reasonably expected to leave unchanged the aggregate well-being of the people affected by them.
- (E) Only right actions have good consequences.

24. Car companies solicit consumer information on such human factors as whether a seat is comfortable or whether a set of controls is easy to use. However, designer interaction with consumers is superior to survey data; the data may tell the designer why a feature on last year's model was given a low rating, but data will not explain how that feature needs to be changed in order to receive a higher rating.

The reasoning above conforms most closely to which one of the following propositions?

- (A) Getting consumer input for design modifications can contribute to successful product design.
- (B) Car companies traditionally conduct extensive postmarket surveys.
- (C) Designers aim to create features that will appeal to specific market niches.
- (D) A car will have unappealing features if consumers are not consulted during its design stage.
- (E) Consumer input affects external rather than internal design components of cars.

25. During the nineteenth century, the French academy of art was a major financial sponsor of painting and sculpture in France; sponsorship by private individuals had decreased dramatically by this time. Because the academy discouraged innovation in the arts, there was little innovation in nineteenth century French sculpture. Yet nineteenth century French painting showed a remarkable degree of innovation.

Which one of the following, if true, most helps to explain the difference between the amount of innovation in French painting and the amount of innovation in French sculpture during the nineteenth century?

- (A) In France in the nineteenth century, the French academy gave more of its financial support to painting than it did to sculpture.
- (B) The French academy in the nineteenth century financially supported a greater number of sculptors than painters, but individual painters received more support, on average, than individual sculptors.
- (C) Because stone was so much more expensive than paint and canvas, far more unsponsored paintings were produced than were unsponsored sculptures in France during the nineteenth century.
- (D) Very few of the artists in France in the nineteenth century who produced sculptures also produced paintings.
- (E) Although the academy was the primary sponsor of sculpture and painting, the total amount of financial support that French sculptors and painters received from sponsors declined during the nineteenth century.

SECTION III

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. Situation: Someone living in a cold climate buys a winter coat that is stylish but not warm in order to appear sophisticated.

Analysis: People are sometimes willing to sacrifice sensual comfort or pleasure for the sake of appearances.

The analysis provided for the situation above is most appropriate for which one of the following situations?

- (A) A person buys an automobile to commute to work even though public transportation is quick and reliable.
- (B) A parent buys a car seat for a young child because it is more colorful and more comfortable for the child than the other car seats on the market, though no safer.
- (C) A couple buys a particular wine even though their favorite wine is less expensive and better tasting because they think it will impress their dinner guests.
- (D) A person sets her thermostat at a low temperature during the winter because she is concerned about the environmental damage caused by using fossil fuels to heat her home.
2. After replacing his old gas water heater with a new, pilotless, gas water heater that is rated as highly efficient, Jairam's gas bills increased.

Each of the following, if true, contributes to an explanation of the increase mentioned above EXCEPT:

- (A) The new water heater uses a smaller percentage of the gas used by Jairam's household than did the old one.
- (B) Shortly after the new water heater was installed, Jairam's uncle came to live with him, doubling the size of the household.
- (C) After having done his laundry at a laundromat, Jairam bought and started using a gas dryer when he replaced his water heater.
- (D) Jairam's utility company raised the rates for gas consumption following installation of the new water heater.

3. Champa: The artist Marc Quinn has displayed, behind a glass plate, biologically replicated fragments of Sir John Sulston's DNA, calling it a "conceptual portrait" of Sulston. But to be a portrait, something must bear a recognizable resemblance to its subject.

Anil: I disagree. Quinn's conceptual portrait is a maximally realistic portrait, for it holds actual instructions according to which Sulston was created.

The dialogue provides most support for the claim that Champa and Anil disagree over whether the object described by Quinn as a conceptual portrait of Sir John Sulston

- (A) should be considered to be art
- (B) should be considered to be Quinn's work
- (C) bears a recognizable resemblance to Sulston
- (D) is actually a portrait of Sulston

GO ON TO THE NEXT PAGE.

4. Many corporations have begun decorating their halls with motivational posters in hopes of boosting their employees' motivation to work productively. However, almost all employees at these corporations are already motivated to work productively. So these corporations' use of motivational posters is unlikely to achieve its intended purpose.

The reasoning in the argument is most vulnerable to criticism on the grounds that the argument

- (A) fails to consider whether corporations that do not currently use motivational posters would increase their employees' motivation to work productively if they began using the posters
- (B) takes for granted that, with respect to their employees' motivation to work productively, corporations that decorate their halls with motivational posters are representative of corporations in general
- (C) fails to consider that even if motivational posters do not have one particular beneficial effect for corporations, they may have similar effects that are equally beneficial
- (D) fails to consider that even if employees are already motivated to work productively, motivational posters may increase that motivation
5. Ahmed: An early entomologist observed ants carrying particles to neighboring ant colonies and inferred that the ants were bringing food to their neighbors. Further research, however, revealed that the ants were emptying their own colony's dumping site. Thus, the early entomologist was wrong.

Ahmed's conclusion follows logically if which one of the following is assumed?

- (A) Ant societies do not interact in all the same ways that human societies interact.
- (B) There is only weak evidence for the view that ants have the capacity to make use of objects as gifts.
- (C) Ant dumping sites do not contain particles that could be used as food.
- (D) The ants to whom the particles were brought never carried the particles into their own colonies.

6. Jaya, who owns a car dealership, has donated cars to driver education programs at area schools for over five years. She found the statistics on car accidents to be disturbing, and she wanted to do something to encourage better driving in young drivers. Some members of the community have shown their support for this action by purchasing cars from Jaya's dealership.

Which one of the following propositions is best illustrated by the passage?

- (A) The only way to reduce traffic accidents is through driver education programs.
- (B) Altruistic actions sometimes have positive consequences for those who perform them.
- (C) Young drivers are the group most likely to benefit from driver education programs.
- (D) It is usually in one's best interest to perform actions that benefit others.
7. Amar: One can live a life of moderation by never deviating from the middle course. But then one loses the joy of spontaneity and misses the opportunities that come to those who are occasionally willing to take great chances, or to go too far.

Madhuri: But one who, in the interests of moderation, never risks going too far is actually failing to live a life of moderation: one must be moderate even in one's moderation.

Amar and Madhuri disagree over

- (A) whether it is desirable for people occasionally to take great chances in life
- (B) what a life of moderation requires of a person
- (C) whether it is possible for a person to embrace other virtues along with moderation
- (D) how often a person ought to deviate from the middle course in life

GO ON TO THE NEXT PAGE.

8. Advertisement: Fabric-Soft leaves clothes soft and fluffy, and its fresh scent is a delight. We conducted a test using over 100 consumers to prove Fabric-Soft is best. Each consumer was given one towel washed with Fabric-Soft and one towel washed without it. Ninety-nine percent of the consumers preferred the Fabric-Soft towel. So Fabric-Soft is the most effective fabric softener available.

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

- (A) any of the consumers tested are allergic to fabric softeners
 - (B) Fabric-Soft is more or less harmful to the environment than other fabric softeners
 - (C) the consumers tested had the opportunity to evaluate fabric softeners other than Fabric-Soft
 - (D) the consumers tested find the benefits of using fabric softeners worth the expense
9. Naturalist: The recent claims that the Tasmanian tiger is not extinct are false. The Tasmanian tiger's natural habitat was taken over by sheep farming decades ago, resulting in the animal's systematic elimination from the area. Since then naturalists working in the region have discovered no hard evidence of its survival, such as carcasses or tracks. In spite of alleged sightings of the animal, the Tasmanian tiger no longer exists.

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

- (A) Sheep farming drove the last Tasmanian tigers to starvation by chasing them from their natural habitat.
- (B) Some scavengers in Tasmania are capable of destroying tiger carcasses without a trace.
- (C) Every naturalist working in the Tasmanian tiger's natural habitat has looked systematically for evidence of the tiger's survival.
- (D) The Tasmanian tiger did not move and adapt to a different region in response to the loss of habitat.

10. Advertisers have learned that people are more easily encouraged to develop positive attitudes about things toward which they originally have neutral or even negative attitudes if those things are linked, with pictorial help rather than exclusively through prose, to things about which they already have positive attitudes. Therefore, advertisers are likely to _____.

Which one of the following most logically completes the argument?

- (A) use little if any written prose in their advertisements
 - (B) try to encourage people to develop positive attitudes about products that can be better represented pictorially than in prose
 - (C) create advertisements containing pictures of things most members of the target audience like
 - (D) highlight the desirable features of the advertised product by contrasting them pictorially with undesirable features of a competing product
11. Feathers recently taken from seabirds stuffed and preserved in the 1880s have been found to contain only half as much mercury as feathers recently taken from living birds of the same species. Since mercury that accumulates in a seabird's feathers as the feathers grow is derived from fish eaten by the bird, these results indicate that mercury levels in saltwater fish are higher now than they were 100 years ago.

The argument depends on assuming that

- (A) the proportion of a seabird's diet consisting of fish was not as high, on average, in the 1880s as it is today
- (B) the amount of mercury in a saltwater fish depends on the amount of pollution in the ocean habitat of the fish
- (C) mercury derived from fish is essential for the normal growth of a seabird's feathers
- (D) the process used to preserve birds in the 1880s did not substantially decrease the amount of mercury in the birds' feathers

GO ON TO THE NEXT PAGE.

12. Novel X and Novel Y are both semiautobiographical novels and contain many very similar themes and situations, which might lead one to suspect plagiarism on the part of one of the authors. However, it is more likely that the similarity of themes and situations in the two novels is merely coincidental, since both authors are from very similar backgrounds and have led similar lives.

Which one of the following most accurately expresses the conclusion drawn in the argument?

- (A) Novel X and Novel Y are both semiautobiographical novels, and the two novels contain many very similar themes and situations.
- (B) The fact that Novel X and Novel Y are both semiautobiographical novels and contain many very similar themes and situations might lead one to suspect plagiarism on the part of one of the authors.
- (C) The author of Novel X and the author of Novel Y are from very similar backgrounds and have led very similar lives.
- (D) It is less likely that one of the authors of Novel X or Novel Y is guilty of plagiarism than that the similarity of themes and situations in the two novels is merely coincidental.

13. Therapist: Cognitive psychotherapy focuses on changing a patient's conscious beliefs. Thus, cognitive psychotherapy is likely to be more effective at helping patients overcome psychological problems than are forms of psychotherapy that focus on changing unconscious beliefs and desires, since only conscious beliefs are under the patient's direct conscious control.

Which one of the following, if true, would most strengthen the therapist's argument?

- (A) Psychological problems are frequently caused by unconscious beliefs that could be changed with the aid of psychotherapy.
- (B) It is difficult for any form of psychotherapy to be effective without focusing on mental states that are under the patient's direct conscious control.
- (C) Cognitive psychotherapy is the only form of psychotherapy that focuses primarily on changing the patient's conscious beliefs.
- (D) No form of psychotherapy that focuses on changing the patient's unconscious beliefs and desires can be effective unless it also helps change beliefs that are under the patient's direct conscious control.

GO ON TO THE NEXT PAGE.

14. Commentator: In academic scholarship, sources are always cited, and methodology and theoretical assumptions are set out, so as to allow critical study, replication, and expansion of scholarship. In open-source software, the code in which the program is written can be viewed and modified by individual users for their purposes without getting permission from the producer or paying a fee. In contrast, the code of proprietary software is kept secret, and modifications can be made only by the producer, for a fee. This shows that open-source software better matches the values embodied in academic scholarship, and since scholarship is central to the mission of universities, universities should use only open-source software.

The commentator's reasoning most closely conforms to which one of the following principles?

- (A) Whatever software tools are most advanced and can achieve the goals of academic scholarship are the ones that should alone be used in universities.
- (B) Universities should use the type of software technology that is least expensive, as long as that type of software technology is adequate for the purposes of academic scholarship.
- (C) Universities should choose the type of software technology that best matches the values embodied in the activities that are central to the mission of universities.
- (D) The form of software technology that best matches the values embodied in the activities that are central to the mission of universities is the form of software technology that is most efficient for universities to use.

15. A consumer magazine surveyed people who had sought a psychologist's help with a personal problem. Of those responding who had received treatment for 6 months or less, 20 percent claimed that treatment "made things a lot better." Of those responding who had received longer treatment, 36 percent claimed that treatment "made things a lot better." Therefore, psychological treatment lasting more than 6 months is more effective than shorter-term treatment.

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

- (A) Of the respondents who had received treatment for longer than 6 months, 10 percent said that treatment made things worse.
- (B) Patients who had received treatment for longer than 6 months were more likely to respond to the survey than were those who had received treatment for a shorter time.
- (C) Patients who feel they are doing well in treatment tend to remain in treatment, while those who are doing poorly tend to quit earlier.
- (D) Patients who were dissatisfied with their treatment were more likely to feel a need to express their feelings about it and thus to return the survey.

16. Philosopher: Nations are not literally persons; they have no thoughts or feelings, and, literally speaking, they perform no actions. Thus they have no moral rights or responsibilities. But no nation can survive unless many of its citizens attribute such rights and responsibilities to it, for nothing else could prompt people to make the sacrifices national citizenship demands. Obviously, then, a nation _____.

Which one of the following most logically completes the philosopher's argument?

- (A) cannot continue to exist unless something other than the false belief that the nation has moral rights motivates its citizens to make sacrifices
- (B) cannot survive unless many of its citizens have some beliefs that are literally false
- (C) can never be a target of moral praise or blame
- (D) is not worth the sacrifices that its citizens make on its behalf

GO ON TO THE NEXT PAGE.

17. When exercising the muscles in one's back, it is important, in order to maintain a healthy back, to exercise the muscles on opposite sides of the spine equally. After all, balanced muscle development is needed to maintain a healthy back, since the muscles on opposite sides of the spine must pull equally in opposing directions to keep the back in proper alignment and protect the spine.

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

- (A) Muscles on opposite sides of the spine that are equally well developed will be enough to keep the back in proper alignment.
- (B) Exercising the muscles on opposite sides of the spine unequally tends to lead to unbalanced muscle development.
- (C) Provided that one exercises the muscles on opposite sides of the spine equally, one will have a generally healthy back.
- (D) If the muscles on opposite sides of the spine are exercised unequally, one's back will be irreparably damaged.

18. Editorialist: In all cultures, it is almost universally accepted that one has a moral duty to prevent members of one's family from being harmed. Thus, few would deny that if a person is known by the person's parents to be falsely accused of a crime, it would be morally right for the parents to hide the accused from the police. Hence, it is also likely to be widely accepted that it is sometimes morally right to obstruct the police in their work.

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

- (A) utilizes a single type of example for the purpose of justifying a broad generalization
- (B) fails to consider the possibility that other moral principles would be widely recognized as overriding any obligation to protect a family member from harm
- (C) presumes, without providing justification, that allowing the police to arrest an innocent person assists rather than obstructs justice
- (D) takes for granted that there is no moral obligation to obey the law

19. Editor: Many candidates say that if elected they will reduce governmental intrusion into voters' lives. But voters actually elect politicians who instead promise that the government will provide assistance to solve their most pressing problems. Governmental assistance, however, costs money, and money can come only from taxes, which can be considered a form of governmental intrusion. Thus, governmental intrusion into the lives of voters will rarely be substantially reduced over time in a democracy.

Which one of the following, if true, would most strengthen the editor's argument?

- (A) Politicians who win their elections usually keep their campaign promises.
- (B) Politicians never promise what they really intend to do once in office.
- (C) The most common problems people have are financial problems.
- (D) Governmental intrusion into the lives of voters is no more burdensome in nondemocratic countries than it is in democracies.

GO ON TO THE NEXT PAGE.

20. We should accept the proposal to demolish the old train station, because the local historical society, which vehemently opposes this, is dominated by people who have no commitment to long-term economic well-being. Preserving old buildings creates an impediment to new development, which is critical to economic health.

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

- (A) Our country should attempt to safeguard works of art that it deems to possess national cultural significance. These works might not be recognized as such by all taxpayers, or even all critics. Nevertheless, our country ought to expend whatever money is needed to procure all such works as they become available.
- (B) Documents of importance to local heritage should be properly preserved and archived for the sake of future generations. For, if even one of these documents is damaged or lost, the integrity of the historical record as a whole will be damaged.
- (C) You should have your hair cut no more than once a month. After all, beauticians suggest that their customers have their hair cut twice a month, and they do this as a way of generating more business for themselves.
- (D) The committee should endorse the plan to postpone construction of the new expressway. Many residents of the neighborhoods that would be affected are fervently opposed to that construction, and the committee is obligated to avoid alienating those residents.

21. Ethicist: On average, animals raised on grain must be fed sixteen pounds of grain to produce one pound of meat. A pound of meat is more nutritious for humans than a pound of grain, but sixteen pounds of grain could feed many more people than could a pound of meat. With grain yields leveling off, large areas of farmland going out of production each year, and the population rapidly expanding, we must accept the fact that consumption of meat will soon be morally unacceptable.

Which one of the following, if true, would most weaken the ethicist's argument?

- (A) Even though it has been established that a vegetarian diet can be healthy, many people prefer to eat meat and are willing to pay for it.
- (B) Often, cattle or sheep can be raised to maturity on grass from pastureland that is unsuitable for any other kind of farming.
- (C) If a grain diet is supplemented with protein derived from non-animal sources, it can have nutritional value equivalent to that of a diet containing meat.
- (D) Although prime farmland near metropolitan areas is being lost rapidly to suburban development, we could reverse this trend by choosing to live in areas that are already urban.

GO ON TO THE NEXT PAGE.

22. If the price it pays for coffee beans continues to increase, the Coffee Shoppe will have to increase its prices. In that case, either the Coffee Shoppe will begin selling noncoffee products or its coffee sales will decrease. But selling noncoffee products will decrease the Coffee Shoppe's overall profitability. Moreover, the Coffee Shoppe can avoid a decrease in overall profitability only if its coffee sales do not decrease.

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

- (A) If the Coffee Shoppe's overall profitability decreases, the price it pays for coffee beans will have continued to increase.
- (B) If the Coffee Shoppe's overall profitability decreases, either it will have begun selling noncoffee products or its coffee sales will have decreased.
- (C) The Coffee Shoppe's overall profitability will decrease if the price it pays for coffee beans continues to increase.
- (D) The price it pays for coffee beans cannot decrease without the Coffee Shoppe's overall profitability also decreasing.
23. Political candidates' speeches are loaded with promises and with expressions of good intention, but one must not forget that the politicians' purpose in giving these speeches is to get themselves elected. Clearly, then, these speeches are selfishly motivated and the promises made in them are unreliable.

Which one of the following most accurately describes a flaw in the argument above?

- (A) The argument presumes, without providing justification, that if a person's promise is not selfishly motivated then that promise is reliable.
- (B) The argument presumes, without providing justification, that promises made for selfish reasons are never kept.
- (C) The argument confuses the effect of an action with its cause.
- (D) The argument overlooks the fact that a promise need not be unreliable just because the person who made it had an ulterior motive for doing so.

24. Sociologist: Romantics who claim that people are not born evil but may be made evil by the imperfect institutions that they form cannot be right, for they misunderstand the causal relationship between people and their institutions. After all, institutions are merely collections of people.

Which one of the following principles, if valid, would most help to justify the sociologist's argument?

- (A) People acting together in institutions can do more good or evil than can people acting individually.
- (B) Institutions formed by people are inevitably imperfect.
- (C) People should not be overly optimistic in their view of individual human beings.
- (D) The whole does not determine the properties of the things that compose it.
25. Some anthropologists argue that the human species could not have survived prehistoric times if the species had not evolved the ability to cope with diverse natural environments. However, there is considerable evidence that *Australopithecus afarensis*, a prehistoric species related to early humans, also thrived in a diverse array of environments, but became extinct. Hence, the anthropologists' claim is false.

The reasoning in the argument is most vulnerable to criticism on the grounds that the argument

- (A) confuses a condition's being required for a given result to occur in one case with the condition's being sufficient for such a result to occur in a similar case
- (B) takes for granted that if one species had a characteristic that happened to enable it to survive certain conditions, at least one related extinct species must have had the same characteristic
- (C) generalizes, from the fact that one species with a certain characteristic survived certain conditions, that all related species with the same characteristic must have survived exactly the same conditions
- (D) fails to consider the possibility that *Australopithecus afarensis* had one or more characteristics that lessened its chances of surviving prehistoric times

SECTION IV

Time—35 minutes

27 Questions

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

(5) For decades, there has been a deep rift between poetry and fiction in the United States, especially in academic settings; graduate writing programs in universities, for example, train students as poets or as writers of fiction, but almost never as both. Both poets and writers of fiction have tended to support this separation, in large part because the current conventional wisdom holds that poetry should be elliptical and lyrical, reflecting inner states and processes of thought or feeling, whereas character and narrative events are the stock-in-trade of fiction.

(10) Certainly it is true that poetry and fiction are distinct genres, but why have specialized education and literary territoriality resulted from this distinction? The answer lies perhaps in a widespread attitude in U.S. culture, which often casts a suspicious eye on the generalist. Those with knowledge and expertise in multiple areas risk charges of dilettantism, as if ability in one field is diluted or compromised by accomplishment in another.

(20) Fortunately, there are signs that the bias against writers who cross generic boundaries is diminishing; several recent writers are known and respected for their work in both genres. One important example of this trend is Rita Dove, an African American writer highly acclaimed for both her poetry and her fiction. A few years ago, speaking at a conference entitled “Poets Who Write Fiction,” Dove expressed gentle incredulity about the habit of segregating the genres.

(25) She had grown up reading and loving both fiction and poetry, she said, unaware of any purported danger lurking in attempts to mix the two. She also studied for some time in Germany, where, she observes, “Poets write plays, novelists compose libretti, playwrights write novels—they would not understand our restrictiveness.”

(30) It makes little sense, Dove believes, to persist in the restrictive approach to poetry and fiction prevalent in the U.S., because each genre shares in the nature of the other. Indeed, her poetry offers example after example of what can only be properly regarded as lyric narrative. Her use of language in these poems is undeniably lyrical—that is, it evokes emotion and inner states without requiring the reader to organize ideas or events in a particular linear structure. Yet this lyric expression simultaneously presents the elements of a plot in such a way that the reader is led repeatedly to take account of clusters of narrative details within the lyric flow. Thus while the language is lyrical, it often comes to constitute, cumulatively, a work of narrative fiction. Similarly, many passages in her fiction, though undeniably prose, achieve the status of

(55) lyric narrative through the use of poetic rhythms and elliptical expression. In short, Dove bridges the gap between poetry and fiction not only by writing in both genres, but also by fusing the two genres within individual works.

1. Which one of the following most accurately expresses the main point of the passage?
 - (A) Rita Dove’s work has been widely acclaimed primarily because of the lyrical elements she has introduced into her fiction.
 - (B) Rita Dove’s lyric narratives present clusters of narrative detail in order to create a cumulative narrative without requiring the reader to interpret it in a linear manner.
 - (C) Rita Dove’s successful blending of poetry and fiction exemplifies the recent trend away from the rigid separation of the two genres that has long been prevalent in the U.S.
 - (D) Unlike many of her U.S. contemporaries, Rita Dove writes without relying on the traditional techniques associated with poetry and fiction.
2. Which one of the following is most analogous to the literary achievements that the author attributes to Dove?
 - (A) A chef combines nontraditional cooking methods and traditional ingredients from disparate world cuisines to devise new recipes.
 - (B) A professor of film studies becomes a film director and succeeds, partly due to a wealth of theoretical knowledge of filmmaking.
 - (C) An actor who is also a theatrical director teams up with a public health agency to use street theater to inform the public about health matters.
 - (D) A choreographer defies convention and choreographs dances that combine elements of both ballet and jazz dance.

GO ON TO THE NEXT PAGE.

3. According to the passage, in the U.S. there is a widely held view that
- (A) poetry should not involve characters or narratives
 - (B) unlike the writing of poetry, the writing of fiction is rarely an academically serious endeavor
 - (C) graduate writing programs focus on poetry to the exclusion of fiction
 - (D) fiction is most aesthetically effective when it incorporates lyrical elements
4. The author's attitude toward the deep rift between poetry and fiction in the U.S. can be most accurately described as one of
- (A) perplexity as to what could have led to the development of such a rift
 - (B) disapproval of attitudes and presuppositions underlying the rift
 - (C) ambivalence toward the effect the rift has had on U.S. literature
 - (D) pessimism regarding the possibility that the rift can be overcome
5. In the passage the author conjectures that a cause of the deep rift between fiction and poetry in the United States may be that
- (A) poets and fiction writers each tend to see their craft as superior to the others' craft
 - (B) the methods used in training graduate students in poetry are different from those used in training graduate students in other literary fields
 - (C) publishers often pressure writers to concentrate on what they do best
 - (D) a suspicion of generalism deters writers from dividing their energies between the two genres
6. In the context of the passage, the author's primary purpose in mentioning Dove's experience in Germany (lines 32–36) is to
- (A) suggest that the habit of treating poetry and fiction as nonoverlapping domains is characteristic of English-speaking societies but not others
 - (B) point to an experience that reinforced Dove's conviction that poetry and fiction should not be rigidly separated
 - (C) indicate that Dove's strengths as a writer derive in large part from the international character of her academic background
 - (D) present an illuminating biographical detail about Dove in an effort to enhance the human interest appeal of the passage
7. It can be inferred from the passage that the author would be most likely to believe which one of the following?
- (A) Each of Dove's works can be classified as either primarily poetry or primarily fiction, even though it may contain elements of both.
 - (B) The aesthetic value of lyric narrative resides in its representation of a sequence of events, rather than in its ability to evoke inner states.
 - (C) The way in which Dove blends genres in her writing is without precedent in U.S. writing.
 - (D) Narrative that uses lyrical language is generally aesthetically superior to pure lyric poetry.
8. If this passage had been excerpted from a longer text, which one of the following predictions about the near future of U.S. literature would be most likely to appear in that text?
- (A) The number of writers who write both poetry and fiction will probably continue to grow.
 - (B) Because of the increased interest in mixed genres, the small market for pure lyric poetry will likely shrink even further.
 - (C) Narrative poetry will probably come to be regarded as a sub-genre of fiction.
 - (D) There will probably be a rise in specialization among writers in university writing programs.

GO ON TO THE NEXT PAGE.

The two passages discuss recent scientific research on music. They are adapted from two different papers presented at a scholarly conference.

Passage A

Did music and human language originate separately or together? Both systems use intonation and rhythm to communicate emotions. Both can be produced vocally or with tools, and people can produce

(5) both music and language silently to themselves.

Brain imaging studies suggest that music and language are part of one large, vastly complicated, neurological system for processing sound. In fact, fewer differences than similarities exist between the neurological processing of the two. One could think of the two activities as different radio programs that can be broadcast over the same hardware. One noteworthy difference, though, is that, generally speaking, people are better at language than music. In music, anyone can listen easily enough, but most people do not perform well, and in many cultures composition is left to specialists. In language, by contrast, nearly everyone actively performs and composes.

(10) Given their shared neurological basis, it appears that music and language evolved together as brain size increased over the course of hominid evolution. But the primacy of language over music that we can observe today suggests that language, not music, was the primary function natural selection operated on.

(15) Music, it would seem, had little adaptive value of its own, and most likely developed on the coattails of language.

Passage B

Darwin claimed that since “neither the enjoyment nor the capacity of producing musical notes are faculties of the least [practical] use to man...they must be ranked amongst the most mysterious with which he is endowed.” I suggest that the enjoyment of and the capacity to produce musical notes are faculties of indispensable use to mothers and their infants and that it is in the emotional bonds created by the interaction of mother and child that we can discover the evolutionary origins of human music.

(30) Even excluding lullabies, which parents sing to infants, human mothers and infants under six months of age engage in ritualized, sequential behaviors, involving vocal, facial, and bodily interactions. Using face-to-face mother-infant interactions filmed at 24 frames per second, researchers have shown that mothers and infants jointly construct mutually

(35) improvised interactions in which each partner tracks the actions of the other. Such episodes last from one-half second to three seconds and are composed of musical elements—variations in pitch, rhythm, timbre, volume, and tempo.

(40) What evolutionary advantage would such behavior have? In the course of hominid evolution, brain size increased rapidly. Contemporaneously, the increase in bipedality caused the birth canal to narrow. This resulted in hominid infants being born ever-more

(55) prematurely, leaving them much more helpless at birth. This helplessness necessitated longer, better maternal care. Under such conditions, the emotional bonds created in the premusical mother-infant interactions we observe in *Homo sapiens* today—behavior whose neurological basis essentially constitutes the capacity to make and enjoy music—would have conferred considerable evolutionary advantage.

(60) 9. Both passages were written primarily in order to answer which one of the following questions?

- (A) What evolutionary advantage did larger brain size confer on early hominids?
- (B) Why do human mothers and infants engage in bonding behavior that is composed of musical elements?
- (C) What are the evolutionary origins of the human ability to make music?
- (D) Do the human abilities to make music and to use language depend on the same neurological systems?

10. Each of the two passages mentions the relation of music to

- (A) bonding between humans
- (B) human emotion
- (C) neurological research
- (D) the increasing helplessness of hominid infants

GO ON TO THE NEXT PAGE.

11. It can be inferred that the authors of the two passages would be most likely to disagree over whether
- (A) the increase in hominid brain size necessitated earlier births
 - (B) fewer differences than similarities exist between the neurological processing of music and human language
 - (C) brain size increased rapidly over the course of human evolution
 - (D) the capacity to produce music has great adaptive value to humans
12. The authors would be most likely to agree on the answer to which one of the following questions regarding musical capacity in humans?
- (A) Does it manifest itself in some form in early infancy?
 - (B) Does it affect the strength of mother-infant bonds?
 - (C) Is it at least partly a result of evolutionary increases in brain size?
 - (D) Did its evolution spur the development of new neurological systems?
13. Which one of the following principles underlies the arguments in both passages?
- (A) Investigations of the evolutionary origins of human behaviors must take into account the behavior of nonhuman animals.
 - (B) All human capacities can be explained in terms of the evolutionary advantages they offer.
 - (C) The fact that a single neurological system underlies two different capacities is evidence that those capacities evolved concurrently.
 - (D) The behavior of modern-day humans can provide legitimate evidence concerning the evolutionary origins of human abilities.
14. Which one of the following most accurately characterizes a relationship between the two passages?
- (A) Passage A and passage B use different evidence to draw divergent conclusions.
 - (B) Passage A poses the question that passage B attempts to answer.
 - (C) Passage A proposes a hypothesis that passage B attempts to substantiate with new evidence.
 - (D) Passage A expresses a stronger commitment to its hypothesis than does passage B.

GO ON TO THE NEXT PAGE.

The World Wide Web, a network of electronically produced and interconnected (or “linked”) sites, called pages, that are accessible via personal computer, raises legal issues about the rights of owners of intellectual property, notably those who create documents for inclusion on Web pages. Some of these owners of intellectual property claim that unless copyright law is strengthened, intellectual property on the Web will not be protected from copyright infringement. Web users, however, claim that if their ability to access information on Web pages is reduced, the Web cannot live up to its potential as an open, interactive medium of communication.

The debate arises from the Web’s ability to link one document to another. Links between sites are analogous to the inclusion in a printed text of references to other works, but with one difference: the cited document is instantly retrievable by a user who activates the link. This immediate accessibility creates a problem, since current copyright laws give owners of intellectual property the right to sue a distributor of unauthorized copies of their material even if that distributor did not personally make the copies. If person A, the author of a document, puts the document on a Web page, and person B, the creator of another Web page, creates a link to A’s document, is B committing copyright infringement?

To answer this question, it must first be determined who controls distribution of a document on the Web. When A places a document on a Web page, this is comparable to recording an outgoing message on one’s telephone answering machine for others to hear. When B creates a link to A’s document, this is akin to B’s giving out A’s telephone number, thereby allowing third parties to hear the outgoing message for themselves. Anyone who calls can listen to the message; that is its purpose. While B’s link may indeed facilitate access to A’s document, the crucial point is that A, simply by placing that document on the Web, is thereby offering it for distribution. Therefore, even if B leads others to the document, it is A who actually controls access to it. Hence creating a link to a document is not the same as making or distributing a copy of that document. Moreover, techniques are already available by which A can restrict access to a document. For example, A may require a password to gain entry to A’s Web page, just as a telephone owner can request an unlisted number and disclose it only to selected parties. Such a solution would compromise the openness of the Web somewhat, but not as much as the threat of copyright infringement litigation. Changing copyright law to benefit owners of intellectual property is thus ill-advised because it would impede the development of the Web as a public forum dedicated to the free exchange of ideas.

15. Which one of the following most accurately expresses the main point of the passage?
- (A) Since distribution of a document placed on a Web page is controlled by the author of that page rather than by the person who creates a link to the page, creating such a link should not be considered copyright infringement.
 - (B) Changes in copyright law in response to the development of Web pages and links are ill-advised unless such changes amplify rather than restrict the free exchange of ideas necessary in a democracy.
 - (C) People who are concerned about the access others may have to the Web documents they create can easily prevent such access without inhibiting the rights of others to exchange ideas freely.
 - (D) Problems concerning intellectual property rights created by new forms of electronic media are not insuperably difficult to resolve if one applies basic commonsense principles to these problems.
16. Which one of the following is closest in meaning to the term “strengthened” as that term is used in line 8 of the passage?
- (A) made more restrictive
 - (B) made uniform worldwide
 - (C) made to impose harsher penalties
 - (D) dutifully enforced

GO ON TO THE NEXT PAGE.

17. With which one of the following claims about documents placed on Web pages would the author be most likely to agree?
- (A) Such documents cannot receive adequate protection unless current copyright laws are strengthened.
 - (B) Such documents cannot fully contribute to the Web's free exchange of ideas unless their authors allow them to be freely accessed by those who wish to do so.
 - (C) The nearly instantaneous access afforded by the Web makes it impossible in practice to limit access to such documents.
 - (D) Such documents can be protected from copyright infringement with the least damage to the public interest only by altering existing legal codes.
18. Based on the passage, the relationship between strengthening current copyright laws and relying on passwords to restrict access to a Web document is most analogous to the relationship between
- (A) allowing everyone use of a public facility and restricting its use to members of the community
 - (B) outlawing the use of a drug and outlawing its sale
 - (C) prohibiting a sport and relying on participants to employ proper safety gear
 - (D) passing a new law and enforcing that law
19. The passage most strongly implies which one of the following?
- (A) There are no creators of links to Web pages who are also owners of intellectual property on Web pages.
 - (B) The person who controls access to a Web page document should be considered the distributor of that document.
 - (C) Rights of privacy should not be extended to owners of intellectual property placed on the Web.
 - (D) Those who create links to Web pages have primary control over who reads the documents on those pages.
20. According to the passage, which one of the following features of outgoing messages left on telephone answering machines is most relevant to the debate concerning copyright infringement?
- (A) Such messages are carried by an electronic medium of communication.
 - (B) Such messages are not legally protected against unauthorized distribution.
 - (C) Transmission of such messages is virtually instantaneous.
 - (D) Such messages have purposely been made available to anyone who calls that telephone number.
21. The author's discussion of telephone answering machines serves primarily to
- (A) compare and contrast the legal problems created by two different sorts of electronic media
 - (B) provide an analogy to illustrate the positions taken by each of the two sides in the copyright debate
 - (C) show that the legal problems produced by new communication technology are not themselves new
 - (D) illustrate the basic principle the author believes should help determine the outcome of the copyright debate
22. According to the passage, present copyright laws
- (A) allow completely unrestricted use of any document placed by its author on a Web page
 - (B) allow those who establish links to a document on a Web page to control its distribution to others
 - (C) prohibit anyone but the author of a document from making a profit from the document's distribution
 - (D) allow the author of a document to sue anyone who distributes the document without permission

GO ON TO THE NEXT PAGE.

- In tracing the changing face of the Irish landscape, scholars have traditionally relied primarily on evidence from historical documents. However, such documentary sources provide a fragmentary record at best. Reliable accounts are very scarce for many parts of Ireland prior to the seventeenth century, and many of the relevant documents from the sixteenth and seventeenth centuries focus selectively on matters relating to military or commercial interests.
- (5)
- (10) Studies of fossilized pollen grains preserved in peats and lake muds provide an additional means of investigating vegetative landscape change. Details of changes in vegetation resulting from both human activities and natural events are reflected in the kinds and quantities of minute pollen grains that become trapped in sediments. Analysis of samples can identify which kinds of plants produced the preserved pollen grains and when they were deposited, and in many cases the findings can serve to supplement or correct the documentary record.
- (15)
- (20) For example, analyses of samples from Long Lough in County Down have revealed significant patterns of cereal-grain pollen beginning by about 400 A.D. The substantial clay content of the soil in this part of Down makes cultivation by primitive tools difficult. Historians thought that such soils were not tilled to any significant extent until the introduction of the moldboard plough to Ireland in the seventh century A.D. Because cereal cultivation would have required tilling of the soil, the pollen evidence indicates that these soils must indeed have been successfully tilled before the introduction of the new plough.
- (25)
- (30) Another example concerns flax cultivation in County Down, one of the great linen-producing areas of Ireland during the eighteenth century. Some aspects of linen production in Down are well documented, but the documentary record tells little about the cultivation of flax, the plant from which linen is made, in that area. The record of eighteenth-century linen production in Down, together with the knowledge that flax cultivation had been established in Ireland centuries before that time, led some historians to surmise that this plant was being cultivated in Down before the eighteenth century. But pollen analyses indicate that this is not the case; flax pollen was found only in deposits laid down since the eighteenth century.
- (35)
- (40) It must be stressed, though, that there are limits to the ability of the pollen record to reflect the vegetative history of the landscape. For example, pollen analyses cannot identify the species, but only the genus or family, of some plants. Among these is madder, a cultivated dye plant of historical importance in Ireland. Madder belongs to a plant family that also comprises various native weeds, including goosegrass. If madder pollen were present in a deposit it would be indistinguishable from that of uncultivated native species.
- (45)
- (50)
- (55)
23. Which one of the following most accurately expresses the main point of the passage?
- (A) Analysis of fossilized pollen is a useful means of supplementing and in some cases correcting other sources of information regarding changes in the Irish landscape.
- (B) Analyses of historical documents, together with pollen evidence, have led to the revision of some previously accepted hypotheses regarding changes in the Irish landscape.
- (C) Analysis of fossilized pollen has proven to be a valuable tool in the identification of ancient plant species.
- (D) Analysis of fossilized pollen has provided new evidence that the cultivation of such crops as cereal grains, flax, and madder had a significant impact on the landscape of Ireland.
24. The passage indicates that pollen analyses have provided evidence against which one of the following views?
- (A) The moldboard plough was introduced into Ireland in the seventh century.
- (B) In certain parts of County Down, cereal grains were not cultivated to any significant extent before the seventh century.
- (C) In certain parts of Ireland, cereal grains have been cultivated continuously since the introduction of the moldboard plough.
- (D) Cereal grain cultivation requires successful tilling of the soil.
25. The phrase “documentary record” (lines 20 and 37) primarily refers to
- (A) documented results of analyses of fossilized pollen
- (B) the kinds and quantities of fossilized pollen grains preserved in peats and lake muds
- (C) written and pictorial descriptions by current historians of the events and landscapes of past centuries
- (D) government and commercial records, maps, and similar documents produced in the past that recorded conditions and events of that time

GO ON TO THE NEXT PAGE.

26. The passage indicates that prior to the use of pollen analysis in the study of the history of the Irish landscape, at least some historians believed which one of the following?
- (A) The Irish landscape had experienced significant flooding during the seventeenth century.
 - (B) Cereal grain was not cultivated anywhere in Ireland until at least the seventh century.
 - (C) The beginning of flax cultivation in County Down may well have occurred before the eighteenth century.
 - (D) Madder was not used as a dye plant in Ireland until after the eighteenth century.
27. Which one of the following most accurately describes the relationship between the second paragraph and the final paragraph?
- (A) The second paragraph proposes a hypothesis for which the final paragraph offers a supporting example.
 - (B) The final paragraph describes a problem that must be solved before the method advocated in the second paragraph can be considered viable.
 - (C) The final paragraph qualifies the claim made in the second paragraph.
 - (D) The second paragraph describes a view against which the author intends to argue, and the final paragraph states the author's argument against that view.

ANSWER KEY

SECTION I

- | | | | |
|------|-------|-------|-------|
| 1. A | 8. D | 15. A | 22. B |
| 2. C | 9. C | 16. A | 23. A |
| 3. C | 10. D | 17. D | |
| 4. B | 11. A | 18. B | |
| 5. D | 12. A | 19. D | |
| 6. C | 13. D | 20. C | |
| 7. A | 14. B | 21. D | |

SECTION II

- | | | | |
|------|-------|-------|-------|
| 1. B | 8. A | 15. D | 22. D |
| 2. B | 9. E | 16. D | 23. C |
| 3. D | 10. B | 17. B | 24. A |
| 4. A | 11. C | 18. B | 25. C |
| 5. B | 12. A | 19. A | |
| 6. B | 13. C | 20. E | |
| 7. D | 14. E | 21. A | |

SECTION III

- | | | | |
|------|-------|-------|-------|
| 1. C | 8. C | 15. C | 22. C |
| 2. A | 9. D | 16. B | 23. D |
| 3. D | 10. C | 17. B | 24. D |
| 4. D | 11. D | 18. B | 25. A |
| 5. C | 12. D | 19. A | |
| 6. B | 13. B | 20. C | |
| 7. B | 14. C | 21. B | |

SECTION IV

- | | | | |
|------|-------|-------|-------|
| 1. C | 8. A | 15. A | 22. D |
| 2. D | 9. C | 16. A | 23. A |
| 3. A | 10. B | 17. B | 24. B |
| 4. B | 11. D | 18. C | 25. D |
| 5. D | 12. C | 19. B | 26. C |
| 6. B | 13. D | 20. D | 27. C |
| 7. A | 14. A | 21. D | |