SECTION I

Time—35 minutes

22 Questions

<u>Directions:</u> 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

Each of five experts—a lawyer, a naturalist, an oceanographer, a physicist, and a statistician—individually gives exactly one presentation at a conference. The five presentations are given consecutively. Each presentation is in exactly one of the four following languages: French, Hindi, Japanese, or Mandarin. Each expert speaks exactly one of the languages. The following conditions must hold:

Exactly two of the presentations are in the same language as each other.

The statistician gives the second presentation in Hindi. The lawyer gives the fourth presentation in either

Mandarin or French.

The oceanographer presents in either French or Japanese; the same is true of the physicist.

The first presentation and the last presentation are in Japanese.

- 1. Which one of the following could be the order in which the experts give their presentations, from first to last?
 - (A) the physicist, the statistician, the lawyer, the naturalist, the oceanographer
 - (B) the physicist, the naturalist, the oceanographer, the lawyer, the statistician
 - (C) the oceanographer, the statistician, the naturalist, the lawyer, the physicist
 - (D) the oceanographer, the statistician, the lawyer, the naturalist, the physicist
- 2. Which one of the following is a complete and accurate list of the experts any one of whom could be one of the two who present in Japanese?
 - (A) the oceanographer, the physicist
 - (B) the naturalist, the oceanographer, the physicist
 - (C) the naturalist, the oceanographer, the statistician
 - (D) the naturalist, the oceanographer, the physicist, the statistician

- 3. If the naturalist presents in French, which one of the following could be true?
 - (A) The oceanographer presents third.
 - (B) The oceanographer presents fifth.
 - (C) The lawyer presents in French.
 - (D) The oceanographer presents in French.
- 4. Which one of the following is a complete and accurate list of the languages any one of which could be the language of the third presentation?
 - (A) French
 - (B) Mandarin
 - (C) French, Hindi
 - (D) French, Mandarin
- 5. Suppose the condition that the statistician gives the second presentation in Hindi is replaced with the condition that the statistician gives either of the presentations given in Japanese. If all the other original conditions remain in effect, which one of the following could be the order, from first to last, in which the experts present?
 - (A) the naturalist, the oceanographer, the physicist, the lawyer, the statistician
 - (B) the oceanographer, the statistician, the naturalist, the lawyer, the physicist
 - (C) the physicist, the oceanographer, the lawyer, the naturalist, the statistician
 - (D) the statistician, the oceanographer, the naturalist, the lawyer, the physicist

Questions 6-10

Shanti interviews exactly five out of a total of seven job applicants—Gopi, Irfan, Lata, Nasser, Oscar, Rohit, and Tarun. She interviews the five one at a time, once each. Interviewing must meet the following conditions:

Lata is interviewed second or third.

Nasser or Tarun is interviewed last.

Gopi, if interviewed, is interviewed first.

Irfan is interviewed immediately after Rohit if both are interviewed.

Oscar is interviewed immediately after Rohit if both are interviewed.

Tarun is interviewed immediately after Nasser if both are interviewed.

- 6. Which one of the following could be a complete and accurate list of the applicants interviewed, listed in the order in which they are interviewed?
 - (A) Gopi, Lata, Irfan, Nasser, Tarun
 - (B) Gopi, Rohit, Oscar, Lata, Tarun
 - (C) Irfan, Gopi, Lata, Oscar, Tarun
 - (D) Oscar, Rohit, Lata, Nasser, Tarun
- 7. Which one of the following is a complete and accurate list of the applicants each of whom must be interviewed?
 - (A) Gopi
 - (B) Lata
 - (C) Gopi, Lata
 - (D) Gopi, Lata, Tarun

- 8. If Irfan is interviewed fourth, then which one of the following must be true?
 - (A) Gopi is interviewed.
 - (B) Oscar is interviewed.
 - (C) Rohit is interviewed.
 - (D) Nasser is interviewed last.
- 9. If Gopi is interviewed first and Oscar is interviewed second, each of the following could be true EXCEPT:
 - (A) Irfan is interviewed fourth.
 - (B) Rohit is interviewed fourth.
 - (C) Nasser is interviewed last.
 - (D) Both Nasser and Tarun are interviewed.
- 10. Suppose the condition that Nasser or Tarun is interviewed last is replaced with the condition that neither Nasser nor Tarun is interviewed last. If all the other initial conditions remain in effect, then which one of the following must be true if Rohit is interviewed last?
 - (A) Exactly one of Irfan and Oscar is interviewed.
 - (B) Exactly one of Nasser and Tarun is interviewed.
 - (C) Irfan is interviewed fourth.
 - (D) Tarun is interviewed fourth.

Questions 11-16

An industrial electrician attaches exactly seven components—designated S, T, V, W, X, Y, and Z—to a circuit board in exactly seven consecutive steps; exactly one component is attached per step. Each component is attached exactly once, and each is attached either by hand or by machine, but not both.

X is the fourth component attached.

Exactly two components are attached by hand at some time before X is attached.

No component is attached by hand before T is attached. W is attached at some time before T.

Y is attached at some time after both Z and S.

The sixth component attached is attached by hand.

- 11. Which one of the following could be an accurate list, in order, of the first three components attached?
 - (A) W, T, S
 - (B) X, Y, Z
 - (C) Y, W, T
 - (D) Y, Z, S
- 12. Which one of the following components must be attached by machine?
 - (A) S
 - (B) W
 - (C) Y
 - (D) Z
- 13. If V is the seventh component attached, each of the following components could be attached by machine EXCEPT:
 - (A) S
 - (B) V
 - (C) X
 - (D) Y

- 14. Which one of the following is a complete and accurate list of the components, any one of which could be the sixth component attached?
 - (A) S, W, Z
 - (B) S, T, Y, Z
 - (C) S, V, Y, Z
 - (D) S, W, Y, Z
- 15. Which one of the following components must be attached by hand?
 - (A) T
 - (B) V
 - (C) X
 - (D) Z
- 16. If S is attached by machine, which one of the following must be true?
 - (A) Z is attached by hand.
 - (B) X is attached by hand.
 - (C) V is attached by hand.
 - (D) Y is the seventh component attached.

Questions 17-22

The Darshan Advertising Agency has exactly seven representatives—Faizal, John, Lekha, Monica, Pooja, Qadir, Shobhit. Its new campaign is presented to exactly one client by one or more of the representatives in accordance with the following conditions:

If Faizal presents, then so do Monica and Pooja.

If John presents, then Qadir does not.

If Qadir does not present, then Pooja does.

If Lekha presents, then either John, Shobhit, or both present.

If both Lekha and Shobhit present, then Monica does not.

- 17. Which one of the following could be a complete and accurate list of the representatives who present?
 - (A) Monica, Shobhit
 - (B) Faizal, Monica, Qadir
 - (C) Faizal, Lekha, Monica, Pooja
 - (D) Monica, Pooja, Qadir, Shobhit
- 18. If Lekha and Qadir both present, then which one of the following could be true?
 - (A) Faizal presents.
 - (B) Monica presents.
 - (C) Exactly two of the seven representatives present.
 - (D) Exactly three of the seven representatives present.
- 19. Which one of the following representatives could be the only representative who presents?
 - (A) Faizal
 - (B) John
 - (C) Qadir
 - (D) Shobhit

- 20. Which one of the following CANNOT be true?
 - (A) Faizal and Qadir both present.
 - (B) John presents but Pooja does not.
 - (C) Neither John nor Qadir presents.
 - (D) Only Monica and Pooja present.
- 21. If exactly two of the representatives present, then which one of the following representatives CANNOT be one of the two who present?
 - (A) Lekha
 - (B) Monica
 - (C) Pooja
 - (D) Qadir
- 22. If Faizal presents, then which one of the following must be true?
 - (A) At least three of the representatives present.
 - (B) At most four of the representatives present.
 - (C) Neither John nor Qadir presents.
 - (D) Exactly one of Lekha or Shobhit presents.

S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.

DO NOT WORK ON ANY OTHER SECTION IN THE TEST.

SECTION II

Time—35 minutes

26 Questions

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

 For the average person who needs a transfusion, blood from a relative is more likely to be infected with hepatitis than is blood from a blood bank. Therefore, the risk of contracting hepatitis from a transfusion is higher for people receiving blood from relatives than for people receiving blood from blood banks.

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

- (A) People receiving blood transfusions often specify that blood from their relatives be used.
- (B) Blood transfusions only rarely result in the recipient being infected with hepatitis.
- (C) Blood taken from a relative is highly likely to match a transfusion recipient's blood type.
- (D) Donors to blood banks are always asked whether they have ever been infected with hepatitis.
- (E) Blood that is to be used in a transfusion is always screened for hepatitis.
- 2. Herons must eat large numbers of fish to survive. Therefore, according to naturalists, when many herons nest near each other in a marsh, large numbers of fish must be available to them. But many herons successfully nest in the Pahargaon marsh, and that marsh has been nearly empty of fish for many years.

Which one of the following, if true, most helps to reconcile the apparent discrepancy described above?

- (A) Pesticides used on nearby farms have seeped into the waters of the Pahargaon marsh and killed most of the fish.
- (B) The Pahargaon marsh has been growing saltier over the years, killing off much of the vegetation that the fish needed to eat.
- (C) The herons in the Pahargaon marsh have been successfully raising unusually large families, with an average of almost two offspring surviving from each nesting.
- (D) Herons nesting in the Pahargaon marsh normally feed on fish living in nearby marshes.
- (E) The large heron population in the Pahargaon marsh placed so great a strain on the fish population that the number of fish declined dramatically.

3. Journalist: Until recently, doctors enjoyed high status in Canada. Although once admired as altruistic, in the last few decades doctors have fallen in public esteem. While it is acknowledged that doctors are indispensable, they are seen by critics as always wanting higher fees from the provincial governments, and even shielding incompetence in some cases, thereby being more dedicated to self-interest than the public interest.

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

- (A) Doctors in Canada are perceived by critics as being less competent than they used to be.
- (B) Without the public esteem doctors previously enjoyed, fewer Canadians will become doctors.
- (C) Doctors in Canada are perceived by critics as not being sufficiently devoted to the interest of others.
- (D) Nonmedical professionals in Canada are perceived as being altruistic and competent.
- (E) In the past, doctors did not accept, let alone demand, high fees from the provincial governments.

Questions 4-5

Lakshmi: I know that wildflowers are threatened because of the reduced number of suitable spaces where they can grow and that people should generally leave them where they are growing. This large field, however, is full of plants of one wildflower species, and it would be all right for me to take just one plant, since there are so many.

Malini: There will not be many there in the future if many people act on your principle.

- 4. Malini's criticism proceeds by
 - (A) arguing that if a resource can be used on a sustainable basis and not depleted, no harm is done
 - (B) contending that Lakshmi is presupposing that an exception can properly be made for her but not for anyone else
 - (C) pointing out that apparently insignificant individual acts of a certain kind can have a large cumulative effect
 - (D) accusing Lakshmi of improper motives instead of responding to Lakshmi's argument
 - (E) relying on the principle that a selfish act is wrong even when it has no harmful effect
- 5. Which one of the following, if true, is the strongest response Lakshmi can make to counter Malini's criticism?
 - (A) Even if I took a plant from the field, I would not tell others about the field, so that you would be the only person who would know about my action and I would not be advocating my principle to a large number of people.
 - (B) If everyone, as I would, carefully leaves an abundance of mature plants to reseed the field, a few plants can be removed without detriment to the species.
 - (C) If I removed a plant, I would provide it with suitable conditions for life, including nutrients and sunlight in amounts similar to those it has now, so you cannot presume that it would die.
 - (D) Even though the plant is not necessary to me for my survival, neither is it the only plant in the field, and it is possible for the species to survive without it.
 - (E) Not everyone is interested in this type of wildflower, and there are many people who will not wish to go to the trouble of digging up a plant from the field.

 If one has recently been overwhelmed by overstimulation, peaceful rest feels pleasant by contrast. Similarly, recent experience of boredom makes most forms of excitement pleasurable, even dangerous ones. No level of stimulation is intrinsically pleasant or unpleasant.

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

- (A) Danger generally appears more pleasurable than boredom.
- (B) How pleasant a person finds a situation can depend on previous levels of stimulation.
- (C) Boredom can be just as overwhelming as overstimulation.
- (D) A high level of stimulation is never pleasant, but it often precedes pleasant relaxation.
- (E) One cannot experience pleasure without first experiencing boredom.

Questions 7-8

Farah: Health officials know that in East Asia cancer is much less common than it is in North America. And it is widely known that typical East Asian diets include a larger proportion of whole grains than typical North American diets do. So North American health officials are derelict in their duty to protect the public health if they do not encourage North Americans to increase the proportion of whole grains in their diets.

Prasad: Tea contains substances that can help prevent several types of cancer, and tea is consumed much more widely in East Asia than in North America.

- 7. Prasad responds to Farah by
 - (A) attempting to show that the evidence Farah presents is self-contradictory
 - (B) undermining Farah's argument by providing evidence that supports an alternative explanation
 - (C) introducing further evidence that supports Farah's conclusion
 - (D) calling into question the accuracy of Farah's claim concerning the proportions of whole grains consumed in East Asia and North America
 - (E) demonstrating that the beneficial effects that Farah attributes to diet can be counteracted by other factors
- 8. Farah's reasoning is questionable because it
 - (A) confuses a difference in proportion with a difference in absolute amount
 - (B) overlooks the possibility that some people in North America include about the same proportion of whole grains in their diets as is found in typical East Asian diets
 - (C) fails to distinguish between preventing particular cases of a disease and reducing the overall incidence of that disease
 - (D) ignores any differences other than differences in diet that might account for the incidence of cancer in East Asia and North America
 - (E) uses ambiguously the term "typical" in reaching the conclusion

9. Domesticated animals, such as dogs, have come into existence by the breeding of only the individuals of a wild species that are sufficiently tame. For example, if when breeding wolves one breeds only those that display tameness when young, then after a number of generations the offspring will be a species of dog. Therefore, all animals can, in principle, be bred for domesticity.

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

- (A) Domesticated animals cannot be turned into wild species by breeding only those animals that display some wild characteristics.
- (B) In some animal species, wild members mate more frequently than tame members.
- (C) In some animal species, no members ever display tameness.
- (D) In some animal species, tame members are less fertile than wild members.
- (E) In some domesticated animal species, some members are much more tame than other members.
- 10. Anthropologist: It has been claimed that religious prohibitions against eating certain types of food are evidence against the belief that all cultural phenomena have a purely economic explanation. After all, the reasoning goes, only a moral or spiritual motive could persuade people to forgo readily available sources of nutrients. But the species whose consumption is prohibited are usually essential elements of ecosystems containing other species that are used as food. The preservation of the prohibited species thus tends to help preserve the other species. Therefore, such prohibitions do indeed have an economic motivation.

The reasoning in the anthropologist's argument is flawed because the argument

- (A) infers, merely from the claim that a practice has a certain desirable consequence, that this consequence must provide a motivation for the practice
- (B) takes for granted that people could have a reason for adopting a certain policy and nevertheless not realize what that reason is
- (C) infers, merely from the claim that a certain cultural phenomenon has no economic explanation, that the explanation of this phenomenon must be spiritual or moral
- (D) uses the key term "prohibition" in two different senses
- (E) draws a conclusion that simply restates a claim presented in support of that conclusion

11. What defines the offenses of libel, discrimination, and harassment is more the motivation than the act itself. Since finding evidence of motivation in these acts is difficult, judges must often apply relevant laws without specific guiding criteria. Therefore, public trust in judges is essential to public satisfaction with the outcome of trials involving these offenses.

Which one of the following most accurately describes the role played in the argument by the statement that what defines some offenses is more the motivation than the act?

- (A) It is cited as the reason that not all legal proceedings are settled reliably by judges.
- (B) It is specified as a feature of certain offenses that makes determination that an offense has occurred difficult.
- (C) It is cited to counter the view that trials can sometimes be settled without relying on public trust in the rulings made by judges.
- (D) It is offered as evidence that some illegal actions can never be determined to be such.
- (E) It is offered as evidence that a precise specification of the characteristics of certain offenses would increase public satisfaction with judges' rulings.
- 12. In seventeenth-century France, many remunerative government positions in the provinces were sold by the king and then passed from father to son. Historians have concluded that this system was more effective than a purely meritocratic system in ensuring not only that most of the officials were competent, but that they were more sympathetic to the local people than to the king.

Each of the following, if true of seventeenth-century France, helps to support the historians' conclusion EXCEPT:

- (A) To raise revenues, new offices were often created and sold by the king.
- (B) People who assumed government positions were often trained from childhood for the performance of their duties.
- (C) It was difficult for the king to oust a disloyal government official from an inherited office.
- (D) Most government officials had close ties to the people in the provinces in which they held their positions.
- (E) Government officials often received financial gratuities from local merchants.

13. Scientists are more likely to consider their experiments well designed if the results are consistent with their expectations than otherwise. The results of this experiment were inconsistent with the expectations of the scientists who conducted it. Therefore, it is more likely that they consider the experiment poorly designed than that they consider it well designed.

The reasoning in the argument is flawed because the argument ignores the possibility that

- (A) some scientists rarely consider their experiments well designed even when the results are consistent with their expectations
- (B) the results of even those experiments scientists consider poorly designed are usually consistent with their expectations
- (C) scientists sometimes consider their experiments poorly designed for reasons other than the inconsistency of the results with their expectations
- (D) scientists usually consider their experiments well designed even when the results are inconsistent with their expectations
- (E) scientists sometimes consider their experiments poorly designed even when these experiments are well designed

14. Tarang claims not to like Hindi pop music, but that cannot be true, because Tarang's friends Anjali and Lokesh like Hindi pop music. Since Tarang, Anjali, and Lokesh are all teenagers, and most teenagers like the same kind of music that their friends like, Tarang must also like Hindi pop music.

Which one of the following contains flawed reasoning most similar to that in the argument above?

- (A) Most grandparents see each of their grandchildren an average of once a year. Venkat and Chitra are grandparents and did not see any of their grandchildren this year. Therefore, they will probably see all of their grandchildren twice next year.
- (B) Most families that have a dog also have at least one cat. The Chaudary family has a cat, so they probably have a dog as well.
- (C) In most families with children, each child does a different household chore from his or her siblings. There are four children in the Attawala family, so each of the Attawala children probably does a different household chore.
- (D) In most married couples, both spouses wake up at the same time. Padmini wakes up at seven o'clock every morning, so it must be that Padmini's spouse Lamba also wakes up at seven o'clock every morning.
- (E) In most sets of twins, both twins are approximately the same height. Tanya is a head taller than her brother Rahul. Therefore, it is unlikely that Tanya and Rahul are twins.

- 15. Naresh: In the near future we will be able to construct machines capable of conversing as humans do.

 Teaching computers English syntax is not as problematic as once thought, and we are making great strides in discovering what background
 - Ashok: But being able to converse as humans do is not solely about possessing the correct syntax and background knowledge. It also involves the capacity to communicate the often emotional and confused knowledge one has; plainly, no computer will ever be able to do that.

knowledge these machines will require.

Naresh and Ashok most clearly disagree on whether

- (A) computers will become more adept at communicating emotional and confused knowledge
- (B) in the near future humans and machines will be able to converse with one another
- (C) there will ever be a computer capable of conversing as humans do
- (D) syntax and background knowledge are important in teaching computers to converse as humans do
- (E) only humans communicate emotional and confused knowledge

16. In an experiment, Dr. Farouk studied houseplants that had flourished for years. Over a three-day period he spoke to the plants encouragingly. He then transplanted them outside into a garden and stopped talking to them. Although he continued watering and fertilizing the plants, they soon wilted. When they had not recovered after two days, Dr. Farouk became so concerned that he started talking to them every hour; the next day they began to recover.

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

- (A) Talking to plants enhances their health.
- (B) Plants always need at least two days to adjust to transplantation.
- (C) Changes in growing conditions can affect the flourishing of plants.
- (D) Watering plants too much is as hazardous to their well-being as not watering them enough.
- (E) There are many aspects of plant development that cannot be explained by science.
- 17. No democracy should require national identification cards, for such cards are characteristic of totalitarian societies and have served only to track and control civilians.

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

- (A) Every democracy requiring national identification cards becomes increasingly totalitarian as a result.
- (B) National identification cards can serve only to track and control citizens.
- (C) No democracy should track and control its civilians.
- (D) Those who propose national identification cards aim to make society more totalitarian.
- (E) No feature characteristic of totalitarian societies should be adopted by any democracy.

18. One view of scientific revolutions is that they are brought about by new scientific observations; another is that they are scientific versions of popular ideas. If popular ideas lead to revolutionary scientific ideas, then revolutionary scientific ideas should be immediately accepted by the nonscientific public. However, if the driving force in the production of revolutionary scientific ideas is scientific observations, then similarity between those scientific ideas and popular ideas is coincidence. Nearly all revolutionary ideas in science have met with years of rejection from the nonscientific community.

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

- (A) Scientific ideas that resemble popular ideas are revolutionary.
- (B) Popular ideas rarely lead to the development of revolutionary scientific ideas.
- (C) Scientific ideas immediately accepted by the nonscientific community are scientific versions of popular ideas.
- (D) Revolutionary scientific ideas are rarely rejected by the scientific community.
- (E) New observations made in science are always rejected by the nonscientific community.
- 19. Food cooked in iron pots absorbs significant amounts of iron during cooking, and people whose food is cooked in iron pots consume enough iron in this way to satisfy their nutritional requirements for iron. Therefore, there is no need for these people to eat the kinds of foods that naturally contain iron.

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

- (A) Food that has been cooked in iron pots does not absorb any non-nutritive elements from the pots.
- (B) Any essential nutrients other than iron in foods that naturally contain iron can be obtained from other foods.
- (C) People who prefer to use iron pots for cooking food do not use pots made of any other material.
- (D) There are some foods that naturally contain as much iron as can be obtained from any other food that has been cooked in an iron pot.
- (E) The iron absorbed into food from iron pots is less easily digestible than the iron that occurs naturally in some foods.

20. Criminologist: Those who propose a rule mandating a life sentence for any criminal who has multiple convictions for serious crimes argue that it would be a welcome crackdown on career criminals. In reality, however, few repeat offenders are convicted of anything other than minor violations.

The criminologist's statements, if true, most strongly support which one of the following?

- (A) The sentencing of most repeat offenders would be unaffected by the proposed rule if it became law.
- (B) Many first-time offenders are convicted of serious crimes as well as minor violations.
- (C) People who have never been convicted of minor violations are unlikely to become career criminals.
- (D) Most people who have committed serious crimes are not convicted of anything other than minor violations.
- (E) If the proposed sentencing rule became law, it would not actually increase the number of life sentences given.
- 21. If I borrow a generator from a neighbor, then I am morally obligated to return it when my immediate need for it is over. But suppose, instead, I borrow a car, and when I go to return it, the neighbor from whom I borrowed it is very drunk and wants to drive the car; then the obligation to return the car immediately is much less clear. So not all cases of borrowing are equivalent.

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

- (A) Though some cases may seem to be exceptions, the rule that one ought to return to others what one borrowed from them is an exceptionless rule.
- (B) There is an obligation to refrain from acting in a manner that could result in harm to people, and this obligation overrides lesser obligations when they conflict with it.
- (C) When someone that we know is likely to injure someone else, it is not altogether clear whether we have an obligation to intervene.
- (D) Although having borrowed something gives rise, in an ordinary case, to an obligation to return the item promptly, it does not so obviously give rise to such an obligation in every case.
- (E) Though private property has moral significance, its significance is less than that of human life and human health.

22. Political scientist: While voters have a legal right to know what is being done by those whom they elect, there must be limits placed on public access to the detailed workings of the legislative process. Legislators receive little credit for reaching compromises but much criticism for failing to stick to their principles, and thus become less willing to modify their demands so that needed legislation can be passed.

Which one of the following principles, if valid, would most help to justify the political scientist's reasoning?

- (A) Legislation should be written so as to benefit the welfare of all citizens, rather than only a few.
- (B) It is acceptable to restrict some legal rights if doing so makes the political process more efficient.
- (C) Compromise between factions with equally compelling interests can only be effected by unprincipled legislators.
- (D) A legislative process should be designed in a way that minimizes government secrecy.
- (E) Legislators should be given credit for reaching compromises that facilitate the passage of needed legislation.
- 23. Murali: You are wrong to assert that the question of the painting's authenticity is a factual matter. You may believe that the painting is authentic, but this is an opinion and not a fact. Experts disagree about whether or not the painting is authentic.
 - Prakash: Whether a painting is beautiful or not is merely a matter of opinion, but the question of who painted it is not. A painting is either authentic or not. Thus the authenticity of the painting is a factual matter.

Which one of the following most accurately describes the role played in Prakash's argument by the claim that whether a painting is beautiful or not is merely a matter of opinion?

- (A) It is offered as a way of conceding to Murali that the painting may not be authentic.
- (B) It is presented as a refutation of Murali's view that whether the painting is authentic or not is a matter of opinion.
- (C) It is used to clarify what Prakash means by "factual matter," by contrasting it with a matter of opinion.
- (D) It is the position that Prakash's argument needs to refute in order to establish its conclusion.
- (E) It is the conclusion of Prakash's argument.

24. Advertisement: Every time you use your X card to charge any purchase, you accumulate credit with Worldwide Airlines in proportion to the cost of the purchase. This credit can then be used to reduce the cost of your Worldwide Airlines tickets. So with this new program you can now afford purchases you couldn't afford before: the extra money you can save on travel is money you can spend on these purchases!

The advertisement's argument depends on assuming which one of the following?

- (A) Some of the destinations to which you would be likely to travel are serviced by airlines that compete with Worldwide Airlines.
- (B) The balance on purchases you charge with an X card is subject to an interest rate that is below average.
- (C) The purchases you normally make are invariably from businesses that accept the X card.
- (D) You can accumulate an amount of credit with Worldwide Airlines that is at least as great as the value of any of the potential purchases you could not afford before.
- (E) You are likely to travel to at least one of the destinations serviced by Worldwide Airlines.
- 25. Once children begin to read they acquire new vocabulary most naturally as the indirect result of reading difficult, challenging material. The major alternative—direct studying of new vocabulary items—is less natural; most people are not so inclined. From age six to age thirteen, children learn thousands of new words a year, mostly through reading; direct studying accounts for less than one-tenth of all new words learned. So it is bound to be inefficient for young students to learn new vocabulary by direct studying.

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

- (A) Experts disagree on the estimates of how many words children typically learn from age six to age thirteen.
- (B) Children can learn new words from listening to adult conversations and to television.
- (C) Reading difficult material sometimes leaves one confused as to the meaning of certain words.
- (D) Children from age six to age thirteen spend vastly much more time reading than they spend directly studying new vocabulary.
- (E) Adults who habitually read difficult material tend not to learn many new words from doing so.

26. Some music theorists argue that music can arouse pity in the listener. But since pity can be felt only when there is someone or something to be pitied, and since nothing but the music is available to be the object of the listener's pity, if anything is pitiable, then it is the music itself. But it makes no sense to say that a piece of music is pitiable; so music cannot arouse pity in the listener.

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

- (A) Some people claim that the quality of one's life can be estimated by summing all the positive aspects of one's life and subtracting all the negative aspects. This implies that it is possible to place a numerical value on such things as health and emotional well-being; but trying to put a numerical value on such things is nonsense. Thus, the quality of a life cannot be measured in this way.
- (B) Astronomers use color photography to measure the temperatures of stars. Using color photography implies that the object photographed has color. But it makes no sense to speak of the color of stars because stars are clouds of gas. Therefore, color photographs of stars must represent something other than the color of the stars.
- (C) Some statisticians predict future events by observing past events; this requires extrapolating from the past. Though it is impossible to make completely accurate predictions through extrapolation, many predictions can be made with at least a reasonable degree of confidence. Therefore, these statisticians are justified in making predictions about the future.
- (D) People often worry about whether science and religion are compatible with one another. This question assumes that science and religion deal with the same questions. But many people believe that science and religion do not deal with the same questions, even if superficially they seem to. Therefore, it is possible for many people to believe in both science and religion.
- (E) Some science writers imagine what life would be like if humans could inhabit distant planets. Inhabiting these planets, they claim, is an inevitable consequence of current research. But it is absurd to think that humans will actually live on other planets. Therefore, it must be wrong to claim that this follows inevitably from current research.

S T O P







Time—35 minutes

26 Questions

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

The late 1950s and early 1960s were a time of profound growth for the civil rights movement in the United States. Although racial segregation in the public schools had been outlawed in 1954, the ruling applied

- (5) only to this one category of discriminatory practice in U.S. society. But it furthered within the African-American community the anticipation of broader changes. It was in this climate that the student sit-in demonstrations of the early 1960s were born. The
- (10) technique of the sit-in was simple—African Americans occupying "whites only" seats in racially segregated establishments—but this new type of student activism galvanized established civil rights organizations, brought about the creation of new ones, and generated
- (15) support for the civil rights movement among many new segments of the populace.

Initiated by four students of the North Carolina Agricultural and Technical College, the first sit-in occurred at a lunch counter in February 1960. Sit-ins

- (20) then spread rapidly through the southern U.S., involving over 70,000 participants by August 1961. The sit-ins provided an important model for nonviolent protest and showed students that they could affect the political process. The influence of
- (25) these demonstrations on the determination of the student activists was particularly visible in two events: the formation of the Student Nonviolent Coordinating Committee, and the birth of a second form of sit-ins called Freedom Rides.
- (30) The formation of the Student Nonviolent
 Coordinating Committee followed the first sit-in by
 just a few months and not only solidified student
 involvement in the civil rights movement but also
 placed students in leadership roles for the first time. It
- (35) operated independently of other civil rights organizations and relied on strong local leadership, helping to transform student involvement from participation in small-scale protests into a sustained effort to challenge discrimination throughout the U.S.
- (40) But the development that marked the clearest turning point for the civil rights movement was the Freedom Rides. The goal of the rides, which were organized in 1961 by the already well-established Congress of Racial Equality, was to challenge segregation through
- (45) the occupation of "whites only" seats on interstate buses and in facilities at the various terminals at which the buses stopped. Because the rides inspired violent reprisals in some regions, the U.S. government began using force to protect the safety of

- (50) the Freedom Riders; this was the first government action taken explicitly in support of the cause of desegregation outside the public schools. The Freedom Rides thus helped take the civil rights movement to a new level by underscoring to the U.S.
- (55) government, and to U.S. society generally, the harsh realities of the segregation system, and by providing, for students and their elders alike, examples of the methods they might use to achieve a more equal society.
- 1. According to the passage, the outlawing of segregation in the U.S. public schools in 1954 had which one of the following consequences?
 - (A) It led directly to the formation of the Student Nonviolent Coordinating Committee.
 - (B) It served to encourage African Americans to expect similar changes in other parts of society.
 - (C) It provided a useful example of a method students might use to achieve a more equal society.
 - (D) It galvanized established U.S. civil rights organizations and led immediately to the creation of new ones.
- 2. The third paragraph provides information to help answer each of the following questions EXCEPT:
 - (A) How did the Student Nonviolent Coordinating Committee change the scale of student civil rights protest in the U.S.?
 - (B) How did the actions of the Student Nonviolent Coordinating Committee affect the development of the Freedom Rides?
 - (C) What events led the U.S. government to take action to protect participants in the Freedom Rides?
 - (D) What is the significance of the U.S. government's protection of participants in the Freedom Rides?



- 3. Which one of the following most completely and accurately describes the organization of the passage?
 - (A) The historical backdrop of a protest technique is presented; the technique is described and some of its consequences are listed; two alternative methods of applying the technique are spelled out and the consequences of each are discussed in turn; the historical impact of the technique is assessed.
 - (B) A historical movement is identified and some of its consequences are listed; a brief history of the movement is given; two groups within the movement are mentioned and the roles of the two groups in the movement are contrasted; the historical impact of the movement in general is discussed.
 - (C) A historical movement is identified and its impact is described in detail; the influence of the movement on each of two groups is briefly mentioned; the long-range historical consequences of the movement in general are discussed.
 - (D) The historical backdrop of a protest technique is presented; the technique and its ramifications are described; the technique's early use is briefly detailed; two outgrowths of these events are mentioned; each outgrowth and its impact is discussed in turn.
- 4. Based on the passage, which one of the following can be most reasonably inferred about the Freedom Rides?
 - (A) They were primarily a spontaneous phenomenon.
 - (B) They were directed against the U.S. government.
 - (C) They were based on a different philosophy than the original sit-in demonstrations.
 - (D) They were modeled on the original sit-in demonstrations.





- 5. The basic principle underlying the student sit-ins and the activities of the organizations and individuals they inspired is best expressed by which one of the following statements?
 - (A) Injustice is best fought by seeking the intervention of the national government.
 - (B) Injustice is best fought by publicly refusing to acquiesce to unjust institutions or practices.
 - (C) Injustice is best fought by educating oppressors to the pain they are causing their victims.
 - (D) Injustice is best fought by providing a model of just behavior for others to emulate.
- 6. Which one of the following statements most accurately expresses the author's view in the passage regarding the Freedom Rides?
 - (A) By exposing the harsh realities of the segregation system, the Freedom Rides induced the U.S. government to address segregation.
 - (B) The Freedom Rides were the final contribution of student activists in their effort to defeat the segregation system.
 - (C) Because the Freedom Rides provoked violent reprisals against demonstrators, they reversed earlier progress in the cause of desegregation.
 - (D) The Freedom Rides transformed a series of uncoordinated local student protests into a movement with national scope.
- 7. Based on the passage, each of the following hypothetical activities is an example of the type of work that could reasonably be expected to be done by the Student Nonviolent Coordinating Committee EXCEPT:
 - (A) coordination of a student march originating at a number of U.S. college campuses and converging on the national capital
 - (B) maintenance of a national network of U.S. student activists interested in discrimination issues
 - (C) training of student leaders from around the U.S. in tactics to defeat discrimination that could be used in their local areas
 - (D) having its leaders attend a national conference of U.S. civil rights organizations in order to obtain approval of a plan for student activism

3>



3

- Criminal law has recently seen the emergence of a school of thought that challenges long-held assumptions about how to regulate evidence-gathering procedures—procedures that are subject to
- (5) constitutional safeguards in both the United States and Canada. The philosophy of this school is based on the simple notion that a criminal trial is a search for truth, which is best served by placing all relevant evidence before a jury. This may sound axiomatic to
- (10) nonlawyers, but the issue of what evidence a jury should see is often a matter of dispute among legal scholars. Traditionally, appraisals of judges' philosophical inclinations regarding the admissibility of evidence in criminal cases tend to one of two
- (15) extremes: pro-prosecution or pro-defense. This crude dichotomy has one set of judges who care a lot about ensuring that criminals are punished and little about the civil liberties that the police may violate in the process, while those on the opposite extreme, it is said, would
- (20) reverse the convictions of even obviously guilty defendants when small technicalities of police procedures are not observed.

Adherents of the so-called "truth school" claim that neither of these positions is just, because neither insists on the primacy of determining the facts of the case.

The judicial system's preferred remedy for improper

- evidence gathering is to exclude (i.e., rule that juries may not hear) any evidence gathered in violation of the defendant's right not to be subjected to unreasonable search and seizure. Truth school adherents, while they
- make it clear that they do not condone improper evidence gathering, hold that juries should be able to hear all reliable evidence against a defendant in order to draw their own conclusions and reach the most (35) informed—thus presumably the fairest and most
- appropriate—verdict. Furthermore, truth school adherents believe that the best way to address improper evidence gathering is not to exclude the evidence but to provide defendants with separate legal recourse if they believe that the police have infringed upon their rights.
 - Critics of the truth school state that while it claims to be evenhanded because of its interest in truth, truth school recommendations tend to favor police over defendants. These critics believe that implementing the
- truth school's ideas would create a climate that would allow police to gather evidence in any way as long as it helps obtain a conviction. Truth school adherents respond by saying that a major problem with exclusion is that, because it keeps incriminating evidence from
- (50) juries, it tends almost by definition to favor not defendants in general, but mainly the guilty. They claim that implementing their ideas would ultimately better protect the rights of defendants both guilty and innocent, arguing that if defendants were able to bring
- (55) legal charges against the police for improper evidence gathering, incidents of improper evidence gathering would eventually decrease.

- Which one of the following titles most accurately expresses the main idea of the passage?
- (A) "How Names Deceive: Misleading Claims of the So-Called 'Truth School'"
- (B) "Piling It On: Truth School Adherents Search for More Evidence against Offenders"
- (C) "How to Fix Failing Legal Systems: The Truth School to the Rescue"
- (D) "Excluding Exclusion: The Truth School's
 Alternative Approach to Improperly Gathered
 Evidence"
- 9. The passage states that critics of the truth school believe which one of the following?
 - (A) Although the truth school would grant defendants the right to legal action against police for improperly gathering evidence, the chances of winning such cases would be very small.
 - (B) Police would be free to gather evidence against a defendant in any manner they chose if the truth school's ideas were implemented.
 - (C) The truth school's notion that a criminal trial is a search for truth has no relevant meaning without a clear definition of what truth is in legal contexts.
 - (D) Some evidence gathered in violation of a defendant's legal protection against unreasonable search and seizure should nonetheless be presented to the jury.







- 10. Based on the passage, the author's attitude toward the truth school can most accurately be described as
 - (A) satisfied that the truth school has as its goal fair verdicts in court cases
 - (B) critical of the truth school's tendency to favor any and all evidence in court cases
 - (C) approving of the truth school's philosophy but not its proposed methods
 - (D) wary of the truth school's disregard for citizens' basic legal rights
- 11. Which one of the following, if true, would most weaken the truth school adherents' claim in the last sentence of the passage?
 - (A) The number of innocent defendants who have been convicted and guilty defendants who have been acquitted in court cases cannot be determined definitively.
 - (B) Few convicted defendants would be in a position to take advantage of an opportunity to bring charges against the police.
 - (C) Even if a jury sees all evidence gathered in any fashion against a guilty defendant, it will not necessarily convict the defendant.
 - (D) Under the current judicial system, the number of guilty defendants who are acquitted is much greater than the number of innocent defendants who are convicted.

- 12. The passage provides information that answers which one of the following questions?
 - (A) Do truth school adherents believe that journalists often pose a threat to a defendant's right not to be subject to unreasonable search and seizure?
 - (B) Does the author endorse the proposal that defendants be allowed to pursue legal recourse against improper evidence gathering?
 - (C) Do critics believe that implementation of the truth school's ideas will unfairly advantage police?
 - (D) Do truth school adherents believe that their ideas are likely to be accepted by judges?
- 13. According to the passage, the truth school holds that the right not to be subject to unreasonable search and seizure can be protected if defendants are granted the right to
 - (A) have the jury prevented from seeing evidence that would lead to an unjust conviction
 - (B) have the jury prevented from seeing any evidence improperly gathered by the police
 - (C) expose for legal action improper procedures used by authorities to gather evidence
 - (D) receive a new trial if evidence used in the case has been gathered improperly by the police

3>

3

- Very early in our education we are made familiar with the distinction between verse and prose. The conviction gradually forces itself on us that when we mean what we say we write prose, and that verse is an
- (5) ingenious but fundamentally perverse way of distorting ordinary prose statements. The conviction does not come to us from school so much as from our accumulated experience of observing prose and verse in action, and embedded in it is the assumption that
- (10) prose is the language of ordinary speech. But this is not the case. In the history of literature we notice that developed techniques of verse normally precede, sometimes by centuries, developed techniques of prose.
- Prose is the expression or imitation of directed thinking or controlled description in words, and its unit is the sentence. It does not follow that all prose is descriptive or thoughtful, much less logical, but only that prose imitates, in its rhythm and structure, the verbal expression of a rational mind. Prose, therefore,
- (20) is not ordinary speech, but ordinary speech on its best behavior, aware of an audience and with its relation to that audience prepared beforehand. It is the habitual language of fully articulate people who have mastered its difficult idiom. Nonetheless, when they speak, even
- (25) they will avoid stilted speech or "talking like a book"; their speech rhythm shows the influence of something that is not prose. If we are lost in a strange town and ask someone for directions, even the most articulate person will not respond in prose. We get instead a
- (30) speech rhythm that is prolix and repetitive, and in which the verbal unit is no more a prose sentence than it is a poetic stanza.

Ordinary speech is concerned mainly with putting into words what is loosely called the stream of

- (35) consciousness: the daydreaming, remembering, worrying, associating, brooding, and mooning that continually flow through the mind and which we often speak of as thought. This ordinary speech is mainly concerned with self-expression. Whether from
- (40) immaturity, preoccupation, or the absence of a hearer, it is imperfectly aware of an audience. Full awareness of an audience makes speech rhetorical, and rhetoric means a conventionalized rhythm. The irregular rhythm of ordinary speech may be conventionalized in
- (45) two ways. One way is to impose a pattern of recurrence on it; the other is to impose the logical and semantic pattern of the sentence. We have verse when the arrangement of words is dominated by recurrent rhythm and sound, prose when it is dominated by the
- (50) syntactical relation of subject and predicate. Of the two, verse is much the simpler and more primitive type, which accounts for its being historically earlier than prose.

- 14. Which one of the following most accurately states the main idea of the passage?
 - (A) While prose is considered more similar to ordinary speech than verse, it is instead verse that is more similar because it evolved from ordinary speech earlier and has the same irregular rhythm.
 - (B) While verse is simpler and more primitive than prose, verse is more similar to ordinary speech in that both are primarily concerned with selfexpression.
 - (C) While verse is considered a distortion of prose, both are methods for conventionalizing the irregular rhythms of ordinary speech, with prose being the more sophisticated and thus more recent technique.
 - (D) While prose is considered more literal than verse, verse imposes a rhythmic and sonic pattern on ordinary speech that is absent from prose.
- 15. The passage provides an answer to each of the following questions EXCEPT:
 - (A) What is the relationship of prose to thought?
 - (B) What is the relationship of verse to ordinary speech?
 - (C) What is the basic unit of prose?
 - (D) What is the basic unit of ordinary speech?







- 16. The author uses the example of receiving directions in a strange town primarily to illustrate the point that prose is
 - (A) imitative of the stream of consciousness
 - (B) an efficient means of communicating information
 - (C) not the language of ordinary speech
 - (D) neither logical nor thoughtful
- 17. The passage suggests that ordinary speech is probably less effective than prose at
 - (A) expressing empathy
 - (B) mounting persuasive arguments
 - (C) articulating childhood memories
 - (D) imitating the movement of everyday thought
- 18. The reasoning employed in which one of the following situations is most analogous to the author's reasoning in explaining the fact that prose developed later than verse?
 - (A) Geologists investigating the ages of two natural rock formations found in different parts of the world argue that one of the formations is the more recent of the two because it is closer to the surface of the earth.
 - (B) Biographers attempting to date two works by an ancient author argue that one work is the more recent of the two because it describes the solution to a problem raised in the other work.
 - (C) Musicologists attempting to identify the later of two versions of a composer's symphony argue that one is the more recent of the two because the paper it is written on has deteriorated to a significantly lesser extent.
 - (D) Archaeologists attempting to date two tools found in different parts of the world argue that one of the tools is the more recent of the two because it is the more sophisticated of the two.

- 19. Which one of the following characteristics does the author use to distinguish ordinary speech on the one hand from both verse and prose on the other?
 - (A) rhythm
 - (B) syntax
 - (C) logic
 - (D) meaning
- 20. The primary purpose of the last paragraph is to
 - (A) analyze the irregular rhythm pattern of ordinary speech
 - (B) explain how both verse and prose conventionalize ordinary speech
 - (C) criticize the conviction that prose and verse are genuinely different
 - (D) introduce the various elements of the stream of consciousness
- 21. The author's primary goal in the passage is most likely to
 - (A) call into question the distinction between verse and prose
 - (B) explain why prose is the language of ordinary speech
 - (C) argue that the development of prose precedes that of verse
 - (D) correct the prevailing view of the relationship between prose and verse

3>

- One often hears from representatives of the scientific community that the claims of so-called pseudoscience are irrational. For example, scientists wonder at the popular acceptance of astrology, which
- (5) posits a causal relationship between planets and human lives that can be analyzed using an arcane system combining mathematics with astronomy. It is not my intention here either to support or to challenge the claims of astrology. Rather, my interest is to
- (10) investigate the character of the claim that astrology is irrational. Presumably practitioners of "rational" science have some quality in mind that they find lacking when they examine astrology but not when they examine, for example, physics, biology, or
- (15) astronomy. But what does it mean to say that a discipline is or is not rational?

There are some in the scientific community for whom this question will sound silly. It is simply obvious to them that astrology is not rational; the idea

- (20) that the position of the planets at the time of a person's birth can influence that person's character or future, they would argue, is on the face of it absurd. There is certainly an intuitive plausibility to this attitude. But I wish to suggest that this intuitive approach is precisely
- (25) the wrong one to take when investigating the rationality of disciplines such as astrology, for it amounts only to a bald appeal to common sense. If such appeals could be relied on to determine the boundaries of rationality, then not only such abstract
- (30) disciplines as quantum physics but the very contention that the world is round would fail to fall within those boundaries.

Some will suggest that what accounts for the irrationality of astrology is not that it seems to go

- (35) against common sense but that the theory on which it is based offers no apparatus to demonstrate how the connection between heavenly bodies and human lives is supposed to work. All that is asserted is that such a connection exists. But even this suggestion will not
- (40) work as a way of dismissing astrology. For, in chemistry no less than astrology, there are inexplicable connections that remain unaccounted for: What is the mechanism, for example, by which a positive particle attracts a negative one? One can say that there is a
 (45) "force" between them, but saying this is only another.
- (45) "force" between them, but saying this is only another way of asserting that one attracts the other.

 Ultimately, there is no way to determine a priori

whether something is or is not rational. Neither commonsense beliefs nor explicable connections play a role in the rationality of a discipline. Instead, rationality depends entirely upon empirical data. Because the scientific community has labeled disciplines such as astrology irrational, it has failed to examine the relevant data. Until it does, scientists must

acknowledge that the judgments they pass on so-called pseudoscience reflect little more than their personal

prejudices.

- 22. Which one of the following most completely and accurately summarizes the content of the passage?

 (A) Scientists have unjustly dismissed estreless.
 - (A) Scientists have unjustly dismissed astrology as irrational because their use of the criteria of inherent plausibility and explicable causal connections blinds them to the validity of the discipline that is apparent from a careful examination of the relevant empirical data.
 - (B) Scientists often judge disciplines such as astrology by the criteria of inherent plausibility and explicable causal connections, which leads them to improperly dismiss these disciplines as irrational instead of examining the empirical data relevant to the disciplines' claims.
 - (C) Scientists are wrong to apply to astrology the criteria of inherent plausibility and explicable causal connections because these qualities are also lacking from many so-called rational disciplines whose claims the scientists do not call into question.
 - (D) Scientists should make the claim that a discipline is irrational in the absence of empirical data only if they have first applied to it the criteria of inherent plausibility and explicable causal connections and found it lacking in both qualities.





- 23. Which one of the following most accurately describes the organization of the passage?
 - (A) The author investigates the legitimacy of disciplines such as astrology; identifies two features of rational science that are lacking in disciplines such as astrology; argues that these features are essential to a rational discipline and that astrology should thus be considered irrational.
 - (B) The author investigates the criteria used to determine the rationality of disciplines such as astrology; considers two of these criteria and then rejects them both; introduces an alternate criterion and argues that this criterion demonstrates the rationality of astrology.
 - (C) The author investigates the criteria used to determine the rationality of disciplines such as astrology; proposes two characteristics that a rational discipline is required to have; argues that astrology fails to possess these features and should thus be considered irrational.
 - (D) The author investigates the criteria used to determine the rationality of disciplines such as astrology; considers two of these criteria and then rejects them both; identifies and endorses an alternate criterion; then uses this criterion to criticize those who label astrology irrational.
- 24. In the third paragraph of the passage, the author addresses which one of the following proposed explanations of the claim that astrology is irrational?
 - (A) Astrology does not explicate the causal claims it makes about the physical world.
 - (B) Astrology makes causal claims about the physical world that cannot be tested empirically.
 - (C) Astrology makes causal claims about the physical world that are demonstrably false.
 - (D) Astrology fails to conform to commonsense notions about causality in the physical world.

- 25. Based on the passage, the author would be likely to agree with all of the following statements EXCEPT:
 - (A) Commonsense beliefs play no role in determining the rationality of a discipline.
 - (B) The rationality of a discipline can sometimes be determined without reference to empirical evidence.
 - (C) So-called pseudosciences should not be dismissed without first subjecting these disciplines to empirical testing.
 - (D) Some of the claims of quantum physics appear contrary to common sense.
- 26. Based on the passage, which one of the following studies would the author believe is most relevant in evaluating the rationality of astrology?
 - (A) a psychological analysis of scientists to determine why they are prejudiced against astrology
 - (B) a written test to determine the mathematical and astronomical expertise of people who believe in astrology
 - (C) a test of people's ability to make predictions about the future on the basis of their dreams
 - (D) an examination of the character and life history of persons born at exactly the same time

S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.

DO NOT WORK ON ANY OTHER SECTION IN THE TEST.

SECTION IV

Time—35 minutes

26 Questions

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

 Most psychologists believe that perception is unchanging throughout adulthood. However, the ability to detect the various flavors of wine, and to perceive the complex way in which those flavors are balanced, develops only with much exposure to the taste of wine as an adult. For this reason, inexperienced wine drinkers are often disappointed when they taste a great wine—they are unable to perceive the wine the way an expert can.

The argument challenges the claim that perception is unchanging throughout adulthood by

- (A) showing that nothing can remain unchanged throughout adulthood
- (B) presenting evidence that many experts disagree with the claim
- (C) presenting a specific instance that is not correctly described by the claim
- (D) showing how the claim is disproven by other general claims about perception
- (E) offering a principle that conflicts with the claim
- 2. Currently, warm-blooded pets are allowed to enter the country only if they have a certificate showing that they have been vaccinated against rabies. This policy is flawed because vaccinations sometimes fail to take effect. If the vaccination is successful, the animal has a high level of rabies antibodies in its blood. Therefore, a more effective means of preventing pets with rabies from entering the country would be to administer blood tests and refuse entry to any pets whose blood did not contain a high level of rabies antibodies.

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

- (A) Under the proposed policy, some pets that have not been infected with rabies might be prevented from entering the country.
- (B) There is no way to distinguish between high antibody levels caused by active infection and high levels caused by successful immunization.
- (C) Under existing policies, some species of animals are quarantined and observed for symptoms of rabies before a decision is made to allow them into the country.
- (D) A significantly larger percentage of rabies vaccinations than of vaccinations against other animal diseases fail to produce immunity.
- (E) The proposed policy would be ineffective in preventing wild animals infected with rabies from entering the country.

- 3. A recent study has found that, surprisingly, the risk of serious injuries to workers is higher in industries that are monitored by government safety inspectors than in industries that are not so monitored.
 - Which one of the following, if true, most helps to explain the surprising finding described above?
 - (A) Government safety inspectors not only monitor but also train employees of the inspected firms to follow safe practices.
 - (B) Government safety inspectors do not have the authority to enforce safety regulations.
 - (C) Only those industries with an inherently high risk of on-the-job injury are monitored by government safety inspectors.
 - (D) Workers behave especially cautiously when they believe their performance is being monitored by government safety inspectors.
 - (E) Some of the industries that are monitored by government safety inspectors have much lower rates of injuries than do other industries that are also so monitored.

4. Some thinkers hold that whatever brings pleasure to people is good, and vice versa, and that whatever brings pain is evil, and vice versa. This, however, is obviously untenable. The concepts of good and evil are contradictory, whereas those of pleasure and pain are not. Clearly it is possible to be in a state of pleasure and pain at once.

The argument challenges a claim that two pairs of concepts are equivalent by claiming that

- (A) "good" does not apply to any of the same things that "pleasure" does
- (B) "evil" does not apply to any of the same things that "pain" does
- (C) it is merely accidental that "pleasure" and "pain" are applied in the same way as "good" and "evil" are applied
- (D) "pleasure" and "pain" possess a property not possessed by any other possible pair of concepts
- (E) "good" and "evil" do not bear the same relationship to one another that "pleasure" and "pain" do to one another
- 5. A study of 8,000 randomly chosen adults in a European country found that 75 percent of those who consumed alcohol an average of twice or more per week over a sixmonth period suffered at least one cold during that period. We can tentatively conclude from this that consuming alcohol tends to increase one's susceptibility to colds.

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

- (A) Eighty percent of those in the study who consumed alcohol three times or more per week suffered colds over the six-month period.
- (B) Seventy-five percent of those in the study who never consumed alcohol suffered at least one cold over the six-month period.
- (C) Fifty percent of those in the study who consumed alcohol an average of once per week suffered colds over the six-month period.
- (D) Less than 75 percent of those in the study who suffered colds over the six-month period consumed alcohol an average of once per week or more.
- (E) Sixty percent of those in the study who did not suffer any colds over the six-month period consumed alcohol once per week or more.

6. Researchers wanted to know if secondhand tobacco smoke is a significant factor in contracting lung diseases. They conducted a study comparing the health of a group of nonsmoking spouses of smokers with that of a group of nonsmoking spouses of nonsmokers. It was discovered that the spouses of smokers were significantly more susceptible to lung diseases than were the spouses of nonsmokers. The researchers concluded that secondhand tobacco smoke is indeed a factor in the development of lung diseases.

Which one of the following, if true, most calls into question the researchers' conclusion?

- (A) Significantly more of the spouses of smokers were raised by smokers than were the spouses of nonsmokers.
- (B) Spouses of nonsmokers are significantly less likely to engage in exercises that promote cardiovascular fitness than are spouses of smokers.
- (C) The members of the group of spouses of smokers were on average several months younger than the members of the group of spouses of nonsmokers.
- (D) The spouses of nonsmokers are no more likely to be former smokers than are the spouses of smokers.
- (E) The group of spouses of smokers was selected from a heavily industrialized urban area, while the group of spouses of nonsmokers was chosen from a rural area.

7. Spokesperson: The claim by the minister of education that teachers' attitudes are causing a decline in student performance is belied by events at any meeting of our Teachers Association. The workshops at these meetings are filled with teachers struggling to find new ways to teach their students. No one, not even a very unsympathetic observer, could detect any negative attitudes toward students.

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

- (A) The argument focuses on the opponent rather than on the opponent's argument.
- (B) The argument takes for granted that the minister of education would be an unsympathetic observer.
- (C) The argument takes for granted that only when teachers' attitudes toward students are negative will those attitudes cause a decline in student performance.
- (D) The argument draws a conclusion that simply restates a claim presented in support of that conclusion.
- (E) The argument presumes, without providing justification, that teachers' attitudes toward students cannot have any effect on student performance.
- 8. Essayist: Human history is filled with the longing for eternal youth and immortality. Yet aging and death are normal and inevitable, indeed even desirable. Just imagine the ethical, social, and economic consequences that would result if it ever became possible to prevent them.

The claim that human history is filled with the longing for eternal youth and immortality figures in the essayist's argument in which one of the following ways?

- (A) It introduces the subject of the argument, but plays no logical role in establishing the main conclusion.
- (B) It is one of the conclusions of the argument, though it is not the main conclusion.
- (C) It is a claim that the argument as a whole is directed toward discrediting.
- (D) It sets out a problem to which the argument as a whole maintains there is no satisfactory response.
- (E) It is a premise that is required in order to establish the main conclusion.

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c basket has be

9. A certain type of prehistoric basket has been found in only two locations, one on private property and the other on a protected archaeological site. An electron microscope was used to examine one such basket. Unless an artifact has been thoroughly cleaned, an electron microscope will detect on the artifact minerals characteristic of the soil of the site where the artifact was excavated. Yet no minerals characteristic of the soil of the protected site were detected on the basket, although the basket was still encrusted with soil from the site from which it had been excavated.

The information in the passage, if correct, most strongly supports which one of the following?

- (A) The basket was excavated on private property.
- (B) The basket was excavated on the protected site.
- (C) The basket was too encrusted with soil to be examined accurately.
- (D) No minerals characteristic of the soil of the private site were detected on the basket.
- (E) Some minerals characteristic of the soil of the protected site are also contained in the soil of the private site.

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10. While studies indicate that university professors spend much of their time engaged in personal research not clearly related to teaching, it is unlikely that additional financial compensation for, say, a larger course load or longer office hours would be the most effective of various possible means of shifting the focus of their activities; this would be the best means only if their motivation to educate were no more than a mechanical response to the prospect of more money, which surely is not the case.

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

- (A) Most professors now feel an obligation to educate that is at least somewhat unrelated to their desire for money.
- (B) Increased financial compensation would be a somewhat effective way to motivate professors to focus their activities on teaching.
- (C) The research conducted by most professors should be clearly related to their teaching activities.
- (D) Effective incentives to encourage larger course loads or longer office hours would shift the focus of professors toward teaching.
- (E) Monetary incentives would probably be less effective than some other ways that professors might be induced to focus more on teaching activities.
- 11. The governmental archives of a country recently freed from dictatorship contain no material incriminating the country's most notorious dictator in certain crimes that political observers believed him to have instigated. In fact, the archives contain documents implicating others in these crimes. Therefore, even though this dictator was probably guilty of many other crimes, the political observers' belief that he was also guilty of these crimes is almost certainly wrong.

The argument is most vulnerable to criticism on the grounds that it

- (A) presumes, without providing justification, that rulers should not be held responsible for unjust actions carried out by their subordinates
- (B) fails to justify its presumption about the reliability of the archives as a source of information regarding the dictator's criminal involvement
- (C) fails to take into account that there might be other documents exonerating those persons that the archives did implicate
- (D) fails to consider the possibility that dictators cannot commit their crimes without the help of many other people
- (E) fails to consider the possibility that the political observers might have wished to make the dictator appear worse than he really was

12. Praveen excels at volleyball. Anyone who plays volleyball daily excels at volleyball. Thus, Praveen plays volleyball daily.

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

- (A) D'Souza sings every day. Anyone who sings every day is a good singer. Thus, D'Souza is a good singer.
- (B) D'Souza is a jogger. Anyone who dances is not a jogger. Thus, D'Souza is not a dancer.
- (C) Anyone who hikes exercises. D'Souza does not exercise. Thus, D'Souza does not hike.
- (D) Anyone who is a superb gourmet cooks often. D'Souza cooks often. Thus, D'Souza is a superb gourmet.
- (E) D'Souza is a sculptor. Anyone who is not a sculptor is a painter. Thus, D'Souza is not a painter.
- 13. Tabloid magazines that report alien landings and celebrity sightings may be considered plebeian, but the public evidently prefers them to weekly newsmagazines that report more conventional news. A comparison of newsstand revenues shows far higher sales volumes for tabloids than for weekly newsmagazines.

The argument is most vulnerable to criticism on the grounds that it fails to consider whether

- (A) the news is any less conventional in tabloid magazines than in weekly newsmagazines
- (B) more newsmagazines than tabloid magazines are sold by subscription
- (C) any magazine ever reports conventional news about celebrities
- (D) tabloid magazines ever derive news stories from conventional sources
- (E) some tabloid magazines are purchased by people who also purchase other magazines



14. A naturally occurring deposit of radioactive material similar in composition to the dangerous waste produced by applications of nuclear technology has been found deep within the Earth's crust. No ill effects have been traced to this naturally occurring deposit. Since engineers have now developed a way to store manufactured nuclear waste as deeply within the Earth's crust as the recently found natural radioactive deposit, the safe disposal of nuclear waste can now be initiated.

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

- (A) The total amount of dangerous waste produced annually has been declining in recent years.
- (B) It cannot currently be determined what the geological conditions are under which the naturally occurring radioactive deposit has apparently been safely contained.
- (C) It is now economically feasible to drill into the Earth's crust to the depth at which the naturally occurring deposit of radioactive material was found.
- (D) Continued production of nuclear waste at the current rate will eventually outstrip available capacity for safe storage.
- (E) Not one of the current methods used to dispose of nuclear waste has proved to be completely safe.
- 15. Archaeologist: The allegation that members of the excavation team recovered artifacts outside the authorized site is unfounded. Archaeologists, unlike most treasure hunters, excavate artifacts to publish the results of their findings. But material recovered illegally could not be used in a publication without the illegal act being discovered. So it would be of no use to an archaeologist.

The archaeologist's reasoning is most vulnerable to criticism because it

- (A) ignores the possibility that not all members of the excavation team were archaeologists
- (B) fails to consider that not all treasure hunters act
- (C) presumes without providing adequate justification that most treasure hunters excavate artifacts to sell them
- (D) assumes without providing warrant that any use of illegally recovered material is itself illegal
- (E) illicitly infers, from the fact that most members of the team are not treasure hunters, that they are all archaeologists



16. The vast majority of first-year engineering students at Bighorn University are registered in Physics 121. Simone is registered in Physics 121; thus it seems likely

Which one of the following statements, if assumed, enables the conclusion above to be properly drawn?

that she is a first-year engineering student.

- (A) Every engineering student at Bighorn University must pass Physics 121 or an equivalent in order to meet degree requirements.
- (B) The number of first-year engineering students at Bighorn University is slightly larger than the total number of students registered in Physics 121.
- (C) The engineering program at Bighorn University is highly structured and leaves its students few opportunities to take nonscience elective courses.
- (D) There are twice as many Bighorn University students registered in Physics 121 as there are in the first year of the engineering program.
- (E) Some engineering students at Bighorn University take Physics 121 in their second year, but none take it in later years.
- 17. Moral integrity in business is of the highest concern, for businesses that lose their integrity cannot survive. By definition, a business that has lost its integrity is no longer integrated; hence businesses that lose their integrity literally disintegrate.

The argument's reasoning is flawed because the argument

- (A) takes for granted that the survival of businesses is the only important ethical concern
- (B) confuses a cause of integrity with an effect of integrity
- (C) contains a key term that shifts in meaning from one sense to another
- (D) overlooks the possibility that integrity is not a public-relations or management goal of some businesses
- (E) takes for granted that a condition required for the conclusion to be true necessarily makes the conclusion true

18. Some studies show that students are more creative after being given monetary rewards for their academic performance, but other studies show that students are less creative after receiving monetary rewards. Therefore, to avoid the risk of discouraging students' creativity, monetary rewards should not be given to them for academic performance.

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

- (A) Studies are producing contrary results about the level of exercise that is optimal for maintaining fitness. Therefore, it is better to concentrate on diet as a means of maintaining fitness.
- (B) If Donna's supervisor learns that Donna is applying for another job, then the supervisor might offer Donna incentives to stay in her current position. However, the supervisor might react negatively to the news. Because of this possibility, Donna should keep her plans from her supervisor.
- (C) If the current model of the most popular lowpriced car is redesigned to make it more powerful, then its price will be raised. A higher price for this model may lead to decreased sales. Therefore, this model should not be redesigned.
- (D) Raising the fare on the city's transit system will not raise more revenue, because the ridership will decrease. Decreased ridership will also increase the traffic congestion and pollution in the city. Therefore, the fare should not be raised.
- (E) Life will be much more convenient for Javier if he buys a new car, but he will save a lot of money if he buys no car. Therefore, to have more convenience and save some money, Javier should buy a used car.

- 19. Hari: An awkward social situation develops when two people exchange gifts and the gift given by the first is obviously more valuable than that given by the second. Yet whenever two people exchange gifts of equal value, the gift givers soon realize that they would have done as well to keep their gifts, not give them away. Gift exchange, therefore, invariably results in either social awkwardness or else a useless transfer of commodities.
 - Mili: But that is not true of my experience. For example, an old childhood friend and I recently exchanged presents that I am sure were vastly different in price. Yet since we gave one another gifts each of which expressed the giver's taste, we both considered the exchange highly appropriate.

Mili's judgment concerning the appropriateness of her gift exchange is most in accordance with which one of the following principles?

- (A) Every gift accepted incurs an obligation on the part of the recipient to reciprocate with a gift of equal value at a later date.
- (B) Only people who largely agree in matters of taste should exchange gifts.
- (C) The chief consideration when selecting a gift is that the gift reflect the giver.
- (D) Except in the most perfunctory gift-giving situations, people should consider the needs of the recipient when selecting a gift.
- (E) Since it is the emotion behind the gift that is its value, any object whatsoever can be an appropriate gift.



20. Generally, of any two animal species, the species whose ratio of brain mass to body mass is greater will be the more intelligent. However, it has been established that many great mathematicians have brains considerably smaller, relative to their bodies, than the average human. This indicates that while the ratio of brain mass to body mass is a reliable indication of intelligence across species, this is not so within species.

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

- (A) The ratio of brain mass to body mass is the most reliable indicator of intelligence across animal species.
- (B) There are no salient physiological differences between members within a species that reliably indicate which member is the more intelligent.
- (C) There are some great mathematicians with a relatively low ratio of brain mass to body mass who are more intelligent than the average human.
- (D) The ratio of brain mass to body mass in humans is in no way correlated with mathematical ability.
- (E) The ratio of brain mass to body mass within animal species tends not to vary greatly.

Questions 21-22

Some psychologists claim that empathic responses are forms of moral behavior. Having observed that young children who witness another's distress respond by expressing sadness and offering help, these psychologists believe that moral behavior begins early in life. A second group of psychologists claims that empathic response is not, by itself, moral behavior and that in order to count as moral, behavior must be based on a clear understanding of moral principles and a certain degree of moral reasoning skill. On the basis of children's unsophisticated verbal responses to hypothetical moral dilemmas, these psychologists conclude that children lack the degree of moral reasoning skill necessary for their behavior, however compassionate, to be considered moral.

- 21. Which one of the following is consistent with the claims of the first group of psychologists and inconsistent with the claims of the second group of psychologists?
 - (A) Cats and dogs, which are incapable of moral reasoning but capable of empathic responses, are capable of moral behavior.
 - (B) People with strong empathic responses are more likely to be skilled in moral reasoning than are people with weaker empathic responses.
 - (C) People with strong empathic responses are less likely to be skilled in moral reasoning than people with weaker empathic responses.
 - (D) Moral principles are difficult to learn.
 - (E) The morality of an action should be judged on the basis of the intention behind it rather than on the basis of its consequences.
- 22. Which one of the following, if true, most seriously undermines the conclusion drawn by the second group of psychologists?
 - (A) The children studied by the second group of psychologists displayed a slightly higher level of moral reasoning when they were well rested than when they were tired.
 - (B) Adults who respond to hypothetical moral dilemmas display a much higher level of moral reasoning than do children who responded to the same hypothetical moral dilemmas.
 - (C) The children studied by the second group of psychologists displayed a slightly higher level of moral reasoning in response to hypothetical dilemmas involving adults than in response to hypothetical dilemmas involving children.
 - (D) In actual situations involving moral dilemmas, children display a much higher level of moral reasoning than did the children who, in the study by the second group of psychologists, responded only to hypothetical dilemmas.
 - (E) Some adults who respond to hypothetical moral dilemmas reason at about the same level as children who respond to the same hypothetical moral dilemmas.

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23. Newspaper report: The government's health department is unable to explain the recent finding that over time a 10 percent increase in the price of cigarettes caused a 5 percent reduction in the number of smokers. This is a surprising finding because cigarettes are known to be highly addictive and numerous studies have demonstrated that an increase in the price of cigarettes almost never causes people to quit smoking.

Which one of the following, if true, most helps to explain the finding that the increase in the price of cigarettes reduced the number of smokers?

- (A) The 10 percent price increase followed a recent 15 percent price increase.
- (B) The extent to which cigarettes are addictive depends on the brain physiology unique to the human species.
- (C) Previous price increases have also, over time, caused a reduction in the number of smokers.
- (D) As cigarette prices rise, smokers tend to smoke less and switch to less expensive brands of cigarettes.
- (E) As cigarette prices rise, the annual number of deaths of smokers surpasses the annual number of new smokers.
- 24. Only if Mallika knew where Jayesh's car was parked could she have stolen it from the parking garage. But Jayesh claims he did not tell her where his car was parked. If he is telling the truth, she would not have known unless she had been watching as his car was parked. But she was not watching. So either Jayesh told Mallika where his car was parked or someone besides Mallika stole the car from the parking garage.

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

- (A) If Jayesh told Mallika where his car was parked, Mallika did not steal his car.
- (B) If Jayesh told Mallika where his car was parked, she could have stolen it from the parking garage.
- (C) Jayesh could not have told anyone other than Mallika where his car was parked.
- (D) Someone other than Mallika was watching as Jayesh's car was parked.
- (E) Someone stole Jayesh's car from the parking garage.

25. The important parts of any university professor's job include not only classroom teaching but also research, publication, and lectures to colleagues and the public. This is why university professors who are good classroom teachers but have not engaged in any other scholarly activities are usually denied tenure.

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

- (A) University professors who have not failed to perform important parts of their jobs are not usually denied tenure.
- (B) Some university professors have been denied tenure even though they have done an important part of their jobs well.
- (C) University professors who do not engage in other scholarly activities are usually good classroom teachers.
- (D) University professors who have engaged in research, publication, and lectures to colleagues and the public are usually granted tenure.
- (E) Classroom teaching is the least important part of a university professor's job.
- 26. Historian: A democracy's citizens must know some history if the democracy is to meet its challenges. However, popular historical awareness is inevitably distorted, for most people learn history through popular narratives that sustain readers' interest by implying that a few famous heroes and notorious villains have shaped all of history.

The historian's argument depends on assuming which one of the following?

- (A) Historical awareness is distorted by the view that there have been only a few famous heroes or notorious villains.
- (B) History cast in the narrative format inevitably distorts historical reality.
- (C) Most historical narratives sustain interest by implying that a few famous heroes and notorious villains have shaped all of history.
- (D) Only narratives written for a purpose other than sustaining readers' interest can convey an undistorted awareness of history.
- (E) The implication that a few famous heroes and notorious villains have shaped all of history distorts history.

S T O P

IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.

DO NOT WORK ON ANY OTHER SECTION IN THE TEST.

SECTION I

1. 2. 3. 4. 5. 6. 7.	С В В D D А В	8. 9. 10. 11. 12. 13. 14.	A B D A B C	15. 16. 17. 18. 19. 20. 21.	A A D D C B A	22.	Α
			SECTION II				
1. 2. 3. 4. 5. 6. 7.	E D C C B B	8. 9. 10. 11. 12. 13. 14.	D C A B A D	15. 16. 17. 18. 19. 20. 21.	C C E B B D	22. 23. 24. 25. 26.	B C E D A
			SECTION III				
1. 2. 3. 4. 5. 6. 7.	B B D D B A D	8. 9. 10. 11. 12. 13. 14.	D B A B C C	15. 16. 17. 18. 19. 20. 21.	D C B D A B	22. 23. 24. 25. 26.	B D A B D
SECTION IV							
1. 2. 3. 4. 5. 6. 7.	C B C E B E	8. 9. 10. 11. 12. 13. 14.	A A E B D B	15. 16. 17. 18. 19. 20. 21.	A B C B C C	22. 23. 24. 25. 26.	D E E B E