

SECTION II

Time—35 minutes

24 Questions

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

1. Director of Ace Manufacturing Company: Our management consultant proposes that we reassign staff so that all employees are doing both what they like to do and what they do well. This, she says, will “increase productivity by fully exploiting our available resources.” But Ace Manufacturing has a long-standing commitment not to exploit its workers. Therefore, implementing her recommendations would cause us to violate our own policy.

The director’s argument for rejecting the management consultant’s proposal is most vulnerable to criticism on which one of the following grounds?

- (A) failing to distinguish two distinct senses of a key term
 - (B) attempting to defend an action on the ground that it is frequently carried out
 - (C) defining a term by pointing to an atypical example of something to which the term applies
 - (D) drawing a conclusion that simply restates one of the premises of the argument
 - (E) calling something by a less offensive term than the term that is usually used to name that thing
2. A large number of drivers routinely violate highway speed limits. Since driving at speeds that exceed posted limits is a significant factor in most accidents, installing devices in all cars that prevent those cars from traveling faster than the speed limit would prevent most accidents.

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

- (A) A person need not be a trained mechanic to install the device properly.
- (B) Most accidents are caused by inexperienced drivers.
- (C) A driver seldom needs to exceed the speed limit to avoid an accident when none of the other drivers involved are violating the speed limit.
- (D) Most drivers who exceed the speed limit do so unintentionally.
- (E) Even if the fines for speed-limit violations were increased, the number of such violations would still not be reduced.

3. In a recession, a decrease in consumer spending causes many businesses to lay off workers or even to close. Workers who lose their jobs in a recession usually cannot find new jobs. The result is an increase in the number of people who are jobless. Recovery from a recession is defined by an increase in consumer spending and an expansion of business activity that creates a need for additional workers. But businesspeople generally have little confidence in the economy after a recession and therefore delay hiring additional workers as long as possible.

The statements above, if true, provide most support for which one of the following conclusions?

- (A) Recessions are usually caused by a decrease in businesspeople’s confidence in the economy.
- (B) Governmental intervention is required in order for an economy to recover from a recession.
- (C) Employees of businesses that close during a recession make up the majority of the workers who lose their jobs during that recession.
- (D) Sometimes recovery from a recession does not promptly result in a decrease in the number of people who are jobless.
- (E) Workers who lose their jobs during a recession are likely to get equally good jobs when the economy recovers.

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4. Scientists analyzing air bubbles that had been trapped in Antarctic ice during the Earth's last ice age found that the ice-age atmosphere had contained unusually large amounts of ferrous material and surprisingly small amounts of carbon dioxide. One scientist noted that algae absorb carbon dioxide from the atmosphere. The scientist hypothesized that the ferrous material, which was contained in atmospheric dust, had promoted a great increase in the population of Antarctic algae such as diatoms.

Which one of the following, if true, would most seriously undermine the scientist's hypothesis?

- (A) Diatoms are a microscopic form of algae that has remained largely unchanged since the last ice age.
- (B) Computer models suggest that a large increase in ferrous material today could greatly promote the growth of oceanic algae.
- (C) The dust found in the air bubbles trapped in Antarctic ice contained other minerals in addition to the ferrous material.
- (D) Sediment from the ocean floor near Antarctica reflects no increase, during the last ice age, in the rate at which the shells that diatoms leave when they die accumulated.
- (E) Algae that currently grow in the oceans near Antarctica do not appear to be harmed by even a large increase in exposure to ferrous material.

5. Adults who work outside the home spend, on average, 100 minutes less time each week in preparing dinner than adults who do not work outside the home. But, contrary to expectation, comparisons show that the dinners eaten at home by the two groups of adults do not differ significantly with respect to nutritional value, variety of menus, or number of courses.

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

- (A) The fat content of the dinners eaten at home by adults who do not work outside the home is 25 percent higher than national guidelines recommend.
- (B) Adults who do not work outside the home tend to prepare breakfast more often than adults who work outside the home.
- (C) Adults who work outside the home spend 2 hours less time per day on all household responsibilities, including dinner preparation, than do adults who do not work outside the home.
- (D) Adults who work outside the home eat dinner at home 20 percent less often than do adults who do not work outside the home.
- (E) Adults who work outside the home are less likely to plan dinner menus well in advance than are adults who do not work outside the home.

6. Legislator: Your agency is responsible for regulating an industry shaken by severe scandals. You were given funds to hire 500 investigators to examine the scandals, but you hired no more than 400. I am forced to conclude that you purposely limited hiring in an attempt to prevent the full extent of the scandals from being revealed.

Regulator: We tried to hire the 500 investigators but the starting salaries for these positions had been frozen so low by the legislature that it was impossible to attract enough qualified applicants.

The regulator responds to the legislator's criticism by

- (A) shifting the blame for the scandals to the legislature
 - (B) providing information that challenges the conclusion drawn by the legislator
 - (C) claiming that compliance with the legislature's mandate would have been an insufficient response
 - (D) rephrasing the legislator's conclusion in terms more favorable to the regulator
 - (E) showing that the legislator's statements are self-contradictory
7. A commonly accepted myth is that left-handed people are more prone to cause accidents than are right-handed people. But this is, in fact, just a myth, as is indicated by the fact that more household accidents are caused by right-handed people than are caused by left-handed people.

The reasoning is flawed because the argument

- (A) makes a distinction where there is no real difference between the things distinguished
- (B) takes no account of the relative frequency of left-handed people in the population as a whole
- (C) uses the word "accidents" in two different senses
- (D) ignores the possibility that some household accidents are caused by more than one person
- (E) gives wholly irrelevant evidence and simply disparages an opposing position by calling it a "myth"

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Questions 8–9

Ornithologist: The curvature of the claws of modern tree-dwelling birds enables them to perch in trees. The claws of *Archeopteryx*, the earliest known birdlike creature, show similar curvature that must have enabled the creature to perch on tree limbs. Therefore, *Archeopteryx* was probably a tree-dwelling creature.

Paleontologist: No, the ability to perch in trees is not good evidence that *Archeopteryx* was a tree-dwelling bird. Chickens also spend time perched in trees, yet chickens are primarily ground-dwelling.

8. In responding to the ornithologist's hypothesis that *Archeopteryx* was tree-dwelling, the paleontologist
- (A) questions the qualifications of the ornithologist to evaluate the evidence
 - (B) denies the truth of the claims the ornithologist makes in support of the hypothesis
 - (C) uses a parallel case to illustrate a weakness in the ornithologist's argument
 - (D) shows that the hypothesis contradicts one of the pieces of evidence used to support it
 - (E) provides additional evidence to support the ornithologist's argument
9. Which one of the following is an assumption on which the ornithologist's reasoning depends?
- (A) Modern tree-dwelling birds are the direct descendants of *Archeopteryx*.
 - (B) *Archeopteryx* made use of the curvature of its claws.
 - (C) There have never been tree-dwelling birds without curved claws.
 - (D) *Archeopteryx* was in fact the earliest birdlike creature.
 - (E) The curvature of the claws is the only available evidence for the claim that *Archeopteryx* was tree-dwelling.

10. There are rumors that the Premier will reshuffle the cabinet this week. However, every previous reshuffle that the Premier has made was preceded by meetings between the Premier and senior cabinet members. No such meetings have occurred or are planned. Therefore the rumors are most likely false.

Which one of the following most accurately expresses a principle of reasoning employed by the argument?

- (A) When a conclusion follows logically from a set of premises, the probability that the conclusion is true cannot be any less than the probability that the premises are all true.
- (B) A hypothesis is undermined when a state of affairs does not obtain that would be expected to obtain if the hypothesis were true.
- (C) It is possible for a hypothesis to be false even though it is supported by all the available data.
- (D) Even if in the past a phenomenon was caused by particular circumstances, it is erroneous to assume that the phenomenon will recur only under the circumstances in which it previously occurred.
- (E) If two statements are known to be inconsistent with each other and if one of the statements is known to be false, it cannot be deduced from these known facts that the other statement is true.

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Questions 11–12

Carl: Researchers who perform operations on animals for experimental purposes are legally required to complete detailed pain protocols indicating whether the animals will be at risk of pain and, if so, what steps will be taken to minimize or alleviate it. Yet when human beings undergo operations, such protocols are never required. If lawmakers were as concerned about human beings as they seem to be about animals, there would be pain protocols for human beings too.

Debbie: But consider this: a person for whom a doctor wants to schedule surgery can simply be told what pain to expect and can then decide whether or not to undergo the operation. So you see, pain protocols are unnecessary for human beings.

11. Debbie attempts to counter Carl's argument by
- (A) showing that one of the claims on which Carl bases his conclusion is inaccurate
 - (B) pointing out a relevant difference to undermine an analogy on which Carl bases his conclusion
 - (C) claiming that Carl's argument should be rejected because it is based on an appeal to sentimentality rather than on reasoned principles
 - (D) drawing an analogy that illustrates a major flaw in Carl's argument
 - (E) offering a specific example to demonstrate that Carl's argument is based on a claim that can be neither confirmed nor disproved
12. Which one of the following, if true, most seriously weakens the argument made by Debbie in response to Carl's argument?
- (A) Not all operations that are performed on human beings are painful.
 - (B) Some experimentation that is now done on animals need not be done at all.
 - (C) Preparing pain protocols is not a time-consuming or costly procedure.
 - (D) Some surgical operations performed on infants are painful.
 - (E) Unalleviated pain after an operation tends to delay the healing process.

13. A company with long-outstanding bills owed by its customers can assign those bills to a collection agency that pays the company a fraction of their amount and then tries to collect payment from the customers. Since these agencies pay companies only 15 percent of the total amount of the outstanding bills, a company interested in reducing losses from long-outstanding bills would be well advised to pursue its debtors on its own.

The argument depends on the assumption that

- (A) a company that pursues its debtors on its own typically collects more than 15 percent of the total amount of the long-outstanding bills that it is owed
- (B) the cost to a company of pursuing its debtors on its own for payment of long-outstanding bills does not exceed 15 percent of the total amount of those bills
- (C) collection agencies that are assigned bills for collection by companies are unsuccessful in collecting, on average, only 15 percent of the total amount of those bills
- (D) at least 15 percent of the customers that owe money to companies eventually pay their bills whether or not those bills are assigned to a collection agency
- (E) unless most of the customers of a company pay their bills, that company in the long run will not be profitable

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14. Herbalist: Many of my customers find that their physical coordination improves after drinking juice containing certain herbs. A few doctors assert that the herbs are potentially harmful, but doctors are always trying to maintain a monopoly over medical therapies. So there is no reason not to try my herb juice.

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

- (A) attempts to force acceptance of a claim by inducing fear of the consequences of rejecting that claim
 - (B) bases a conclusion on claims that are inconsistent with each other
 - (C) rejects a claim by attacking the proponents of the claim rather than addressing the claim itself
 - (D) relies on evidence presented in terms that presuppose the truth of the claim for which the evidence is offered
 - (E) mistakes the observation that one thing happens after another for proof that the second thing is the result of the first
15. Because of the lucrative but illegal trade in rhinoceros horns, a certain rhinoceros species has been hunted nearly to extinction. Therefore an effective way to ensure the survival of that species would be to periodically trim off the horns of all rhinoceroses, thereby eliminating the motivation for poaching.

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

- (A) Most poachers who are discouraged from hunting rhinoceroses are not likely to hunt other animals for their horns.
- (B) At least some rhinoceroses whose horns are periodically trimmed off will be able to attract mates.
- (C) Poachers hunt at least some immature rhinoceroses whose horns have not yet started to develop.
- (D) The demand for rhinoceros horns will remain constant even if the supply decreases after the periodic trimming-off of the rhinoceros horns has begun.
- (E) Rhinoceroses whose horns have been trimmed off are unable to defend themselves against predators.

16. Motorcoach driver: Professional drivers spend much more time driving, on average, than do other people and hence are more competent drivers than are other, less experienced drivers. Therefore, the speed limit on major highways should not be reduced, because that action would have the undesirable effect of forcing some people who are now both law-abiding and competent drivers to break the law.

Police officer: All drivers can drive within the legal speed limit if they wish, so it is not true to say that reducing the speed limit would be the cause of such illegal behavior.

The point at issue between the motorcoach driver and the police officer is whether

- (A) it would be desirable to reduce the speed limit on major highways
- (B) professional drivers will drive within the legal speed limit if that limit is reduced
- (C) reducing the speed limit on major highways would cause some professional drivers to break the law
- (D) professional drivers are more competent drivers than are other, less experienced drivers
- (E) all drivers wish to drive within the speed limit

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17. People cannot devote themselves to the study of natural processes unless they have leisure, and people have leisure when resources are plentiful, not when resources are scarce. Although some anthropologists claim that agriculture, the cultivation of crops, actually began under conditions of drought and hunger, the early societies that domesticated plants must first have discovered how the plants they cultivated reproduced themselves and grew to maturity. These complex discoveries were the result of the active study of natural processes.

The argument is structured to lead to the conclusion that

- (A) whenever a society has plentiful resources, some members of that society devote themselves to the study of natural processes
 - (B) plants cannot be cultivated by someone lacking theoretical knowledge of the principles of plant generation and growth
 - (C) agriculture first began in societies that at some time in their history had plentiful resources
 - (D) early agricultural societies knew more about the natural sciences than did early nonagricultural societies
 - (E) early societies could have discovered by accident how the plants they cultivated reproduced and grew
18. In the past decade, a decreasing percentage of money spent on treating disease X went to pay for standard methods of treatment, which are known to be effective though they are expensive and painful. An increasing percentage is being spent on nonstandard treatments, which cause little discomfort. Unfortunately, the nonstandard treatments have proved to be ineffective. Obviously, less money is being spent now on effective treatments of disease X than was spent ten years ago.

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

- (A) Varieties of disease X requiring expensive special treatment have become less common during the past decade.
- (B) Nonstandard methods of treating disease X are more expensive now than they were a decade ago.
- (C) Of total medical expenditures, the percentage that is due to treatment of disease X increased during the past decade.
- (D) Most of the money spent on treating disease X during the last decade went to pay for nonstandard treatments.
- (E) The total amount of money spent on treating disease X slowly declined during the past decade.

19. When an ordinary piece of steel is put under pressure, the steel compresses; that is, its volume slightly decreases. Glass, however, is a fluid, so rather than compressing, it flows when put under pressure; its volume remains unchanged. Any portion of a sheet of glass that is under sustained pressure will very slowly flow to areas under less pressure. Therefore, if a single, extremely heavy object is placed in the middle of a horizontal sheet of glass of uniform thickness and if the glass is able to support the weight without cracking, then the sheet of glass will eventually ____ .

Which one of the following most logically completes the argument?

- (A) become larger in size yet still be of uniform thickness
- (B) flow toward the point at which the pressure of the object is greatest
- (C) compress, although not as much as a piece of steel would
- (D) divide into exactly two pieces that are equal in neither size nor shape to the original piece of glass
- (E) be thinner in the portion of the glass that is under the pressure of the object than in those portions of the glass that are not under that pressure

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20. Anyone who insists that music videos are an art form should also agree that television gave rise to an art form, since television gave rise to music videos.

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

- (A) Anyone who claims that all vegetables are nutritious should also agree that some vegetables are harmful if eaten in large quantities.
 - (B) Anyone who holds that avocados are a fruit should also hold that pound cake is lower in fat than some fruit, since pound cake is lower in fat than avocados.
 - (C) Anyone who dislikes tomatoes should also agree that some people do like tomatoes, if that person agrees that no taste is universal.
 - (D) A person who eats a variety of vegetables is probably well nourished, since most people who eat a variety of vegetables generally eat well-balanced meals.
 - (E) A person who claims to prefer fruit to vegetables should also prefer cake to bread, since fruit is sweeter than vegetables and cake is sweeter than bread.
21. Medieval Arabs had manuscripts of many ancient Greek texts, which were translated into Arabic when there was a demand for them. Medieval Arab philosophers were very interested in Aristotle's *Poetics*, an interest that evidently was not shared by medieval Arab poets, because a poet interested in the *Poetics* would certainly have wanted to read Homer, to whose epics Aristotle frequently refers. But Homer was not translated into Arabic until modern times.

Which one of the following, if true, most strongly supports the argument above?

- (A) A number of medieval Arab translators possessed manuscripts of the Homeric epics in their original Greek.
- (B) Medieval Arabic story cycles, such as the *Arabian Nights*, are in some ways similar to parts of the Homeric epics.
- (C) In addition to translating from Greek, medieval Arab translators produced Arabic editions of many works originally written in Indian languages and in Persian.
- (D) Aristotle's *Poetics* has frequently been cited and commented on by modern Arab poets.
- (E) Aristotle's *Poetics* is largely concerned with drama, and dramatic works were written and performed by medieval Arabs.

22. Congenial guests and a plentiful supply of good things to eat and drink will ensure a successful dinner party. Since Sylvia has prepared more than enough to eat and drink and her guests are all congenial people, her dinner party is certain to be a success.

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

- (A) The right ingredients, properly combined and baked in a reliable oven will always produce a well-baked cake. Since Emily has properly combined the right ingredients, her cake is certain to come out well if she bakes it in a reliable oven.
- (B) If corn is baked with its husks on, the resulting dish will always be moist and sweet. Since George wishes to ensure that the corn he plans to serve is moist, he will be certain both to bake it and to leave its husks on.
- (C) Making pie dough using ice water and thoroughly chilling the dough before rolling it out will ensure a flaky crust. Andrew thoroughly chilled his pie dough before rolling it out, so, since he used ice water in making it, his pie is certain to have a flaky crust.
- (D) If soup is made with a well-seasoned meat stock and fresh ingredients, it will always be welcome at dinner. Since to his meat stock Arnold added only very fresh ingredients, the resulting soup is certain to be welcome at dinner.
- (E) Fresh greens, carefully washed and served with a light dressing, always produce a refreshing salad. Since Tisha has developed an exceptionally light dressing but never washes her fresh greens, no salad she serves will be a refreshing one.

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23. A museum director, in order to finance expensive new acquisitions, discreetly sold some paintings by major artists. All of them were paintings that the director privately considered inferior. Critics roundly condemned the sale, charging that the museum had lost first-rate pieces, thereby violating its duty as a trustee of art for future generations. A few months after being sold by the museum, those paintings were resold, in an otherwise stagnant art market, at two to three times the price paid to the museum. Clearly, these prices settle the issue, since they demonstrate the correctness of the critics' evaluation.

The reasoning in the argument is vulnerable to the criticism that the argument does which one of the following?

- (A) It concludes that a certain opinion is correct on the grounds that it is held by more people than hold the opposing view.
- (B) It rejects the judgment of the experts in an area in which there is no better guide to the truth than expert judgment.
- (C) It rejects a proven means of accomplishing an objective without offering any alternative means of accomplishing that objective.
- (D) It bases a firm conclusion about a state of affairs in the present on somewhat speculative claims about a future state of affairs.
- (E) It bases its conclusion on facts that could, in the given situation, have resulted from causes other than those presupposed by the argument.

24. The United States ranks far behind countries such as Sweden and Canada when it comes to workplace safety. In all three countries, joint labor-management committees that oversee workplace safety conditions have been very successful in reducing occupational injuries. In the United States, such committees are found only in the few companies that have voluntarily established them. However, in Sweden and several Canadian provinces, joint safety committees are required by law and exist in all medium-sized and large workplaces.

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

- (A) The establishment of joint safety committees in all medium-sized and large workplaces in the United States would result in a reduction of occupational injuries.
- (B) A joint safety committee that is required by law is more effective at reducing occupational injuries than is a joint safety committee that is voluntarily established.
- (C) Workplace safety in Sweden and Canada was superior to that in the United States even prior to the passage of laws requiring joint safety committees in all medium-sized and large workplaces.
- (D) Joint safety committees had been voluntarily established in most medium-sized and large workplaces in Sweden and several Canadian provinces prior to the passage of laws requiring such committees.
- (E) The United States would surpass Sweden and Canada in workplace safety if joint safety committees were required in all medium-sized and large workplaces in the United States.

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.