

## SECTION I

Time—35 minutes

25 Questions

Directions: Each question in this section is based on the reasoning presented in a brief passage. In answering the questions, you should not make assumptions that are by commonsense standards implausible, superfluous, or incompatible with the passage. For some questions, more than one of the choices could conceivably answer the question. However, you are to choose the best answer; that is, choose the response that most accurately and completely answers the question and mark that response on your answer sheet.

1. Researcher: During the rainy season, bonobos (an ape species closely related to chimpanzees) frequently swallow whole the rough-surfaced leaves of the shrub *Manniophyton fulvum*. These leaves are likely ingested because of their medicinal properties, since ingestion of these leaves facilitates the elimination of gastrointestinal worms.

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

- (A) Bonobos rarely swallow whole leaves of any plants other than *M. fulvum*.
- (B) Chimpanzees have also been observed to swallow rough-surfaced leaves whole during the rainy season.
- (C) Of the rough-leaved plants available to bonobos, *M. fulvum* shrubs are the most common.
- (D) The leaves of *M. fulvum* are easier to swallow whole when they are wet.
- (E) The rainy season is the time when bonobos are most likely to be infected with gastrointestinal worms.

2. Policy analyst: Those concerned with safeguarding public health by reducing the risk of traffic fatalities typically focus their efforts on automotive safety measures such as increasing seat belt use, reducing distracted driving, and improving automotive technology. But what would contribute the most to safeguarding public health is a reduction in total miles traveled on our roads. The fact is that traveling by car is itself a major risk factor.

Which one of the following most accurately expresses the overall conclusion drawn in the policy analyst's argument?

- (A) Public health can be safeguarded through reducing traffic fatalities.
- (B) Those concerned with safeguarding public health should focus their efforts on reducing traffic fatalities.
- (C) Increasing seat belt use, reducing distracted driving, and improving automotive technology all safeguard public health.
- (D) A reduction in total miles traveled would contribute more to safeguarding public health than would any automotive safety measure.
- (E) Traveling by car is itself a major risk factor for traffic fatalities.

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3. Letter to the Editor: The arts section of this paper shows a lamentable bias toward movies and against local theatrical productions. Over the last year alone, the paper has published over five times as many movie reviews as reviews of live plays.

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

- (A) Some newspapers do not publish any reviews of live plays.
  - (B) The number of movies released last year was significantly greater than the number of live plays performed locally.
  - (C) The newspaper has five movie critics, but only one theater critic.
  - (D) The newspaper does not have the space in the arts section to publish a review of every movie that is released or every live play that is locally performed.
  - (E) The newspaper published more reviews of live plays in the last year than it did two years ago.
4. Archaeologist: Our university museum possesses several ancient artifacts whose ownership is in dispute. Although the museum has documentation showing that the items were obtained legally, there is an overriding principle that any important ancient artifact belongs by rights to the nation on whose territory it was discovered. Given that an institution is obliged to honor those rights, our museum should return the artifacts.

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

- (A) The university museum should return the ancient artifacts in dispute.
- (B) Any important ancient artifact belongs by rights to the nation on whose territory it was discovered.
- (C) The ancient artifacts whose ownership is in dispute were obtained legally by the university museum.
- (D) The university museum is in possession of several artifacts whose ownership is in dispute.
- (E) There is an overriding principle that any important ancient artifact belongs by rights to the nation on whose territory it was discovered.

5. Many fictional works have characters who are supposedly precognitive—that is, able to accurately perceive future events. But a perception of a future event is accurate only if that event comes to pass. Thus, the plots of these works often show that the characters are not truly precognitive, since some of the future events the characters perceive do not in fact come to pass.

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

- (A) A character is truly precognitive only if all of that character's perceptions of future events are accurate.
  - (B) It is impossible for someone to perceive future events accurately with absolute consistency.
  - (C) The plots of fictional works that portray characters as precognitive often do not specify whether the future events those characters perceive come to pass.
  - (D) When fictional works portray characters as precognitive, those characters' perceptions of future events are generally central to the plots of those works.
  - (E) No work of fiction has portrayed a truly precognitive character.
6. Economist: There have been large declines in employment around the globe, so it's not surprising that the number of workers injured on the job has decreased. What is surprising, however, is that the percentage of workers injured on the job has also decreased.

Each of the following, if true, helps to explain the surprising result mentioned by the economist EXCEPT:

- (A) Overall, people who are employed are working fewer hours each day.
- (B) A decrease in the demand for products has reduced the pressure on workers to meet production quotas and deadlines.
- (C) Some of the most dangerous industries have had especially big declines in employment.
- (D) There has been a general decline in the resources devoted to workplace safety.
- (E) Inexperienced workers have lost their jobs at higher rates than experienced ones.

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7. Editorial: Animated films appropriate for children are those that are innocently whimsical, mischievous perhaps, but not threatening. Since new animated films aimed at adults have dark themes such as poverty and despair, such films cannot be considered appropriate for children.

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

- (A) Films that are whimsical and mischievous are not threatening.
  - (B) Films that are appropriate for adults are seldom appropriate for children.
  - (C) Films that have dark themes are threatening.
  - (D) Children enjoy films only if the films include animation.
  - (E) Children do not attend to some details in films aimed at adults.
8. Monarch butterflies must contend with single-celled parasites that can cause deformities that interfere with their flight. In populations of monarch butterflies that have not migrated, as many as 95 percent are heavily infected by the parasites, while less than 15 percent of those in migrating populations are infected. This shows that migrating allows monarch butterflies to avoid these parasites.

The reasoning in the argument is flawed in that the argument overlooks the possibility that

- (A) monarch butterflies are unable to detect which areas are free from parasites
- (B) long migrations are no better protection from parasites than are short migrations
- (C) populations of monarch butterflies that have not migrated are much larger than migrating populations
- (D) monarch butterflies infected with parasites are typically unable to migrate
- (E) populations of monarch butterflies tend not to migrate if they have stable food sources

9. Legal doctrine: The government cannot appropriate private property without offering fair compensation to the property owner.

Application: If the government institutes a regulation that blocks construction on undeveloped private lots on the shore of Lake Crowell—thereby diminishing their market value—it must offer fair compensation to the owners of that property.

Which one of the following principles, if valid, most justifies the above application of the legal doctrine?

- (A) A government should not implement a regulation on lakeside property that it would not implement on other types of property.
- (B) Governments must balance the rights of private property holders with the rights of those who value undeveloped wilderness environments.
- (C) Regulations that significantly diminish the economic value of a piece of property constitute an appropriation of that property.
- (D) Owners of private property are alone responsible for the economic risks associated with government regulations that affect the use of that property.
- (E) A government can appropriate private property only if it is in response to a compelling public interest.

10. When a bird flies, powerful forces converge on its shoulder joints. The bird's wings must be kept stable during flight, which cannot happen unless something balances these forces. The only structure in birds capable of balancing them is a ligament that connects the wing to the shoulder joint. So that ligament must be \_\_\_\_\_.

Which one of the following most logically completes the argument?

- (A) the only structure that is indispensable to bird flight
- (B) the reason that a bird's wings must be kept stable during flight
- (C) the sole connection between the wing and the shoulder joint
- (D) the source of the powerful forces that converge on the shoulder joint
- (E) the means by which a bird stabilizes its wings during flight

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11. As part of a project to enhance the downtown area, the transit authority plans to build a majestic new subway station on the Longview line. However, the current design of the station does not include a connection to the nearby Waterfront line. Adding a tunnel from the station to the Waterfront line using the current design would make the station much more convenient to commuters but would also put the project over budget. Since the budget cannot be increased, a more modest station should be built so that a tunnel can be included.

Which one of the following principles, if valid, most helps to justify the reasoning in the argument above?

- (A) The transit authority should design a subway station that costs less than the amount budgeted.
- (B) The transit authority should consider all potential additions to the subway station that would make it more convenient to commuters.
- (C) In the enhancement of the downtown area, convenience to commuters should be given priority over majestic design.
- (D) Unless a subway station can be built within budget that is both convenient to commuters and in keeping with the new design, the transit authority should abandon plans to build a station.
- (E) The new subway station should enhance the downtown area more than any other potential project that is similar in cost.

12. A study found that most of the strokes diagnosed by doctors occurred in the left side of patients' brains. This suggests that right-side strokes are more likely than left-side strokes to go undiagnosed since \_\_\_\_\_.

The conclusion of the argument is strongly supported if which one of the following completes the passage?

- (A) patients who have strokes typically also have other health problems
- (B) it is very likely that just as many strokes occur in the right side of the brain as in the left side
- (C) doctors vary greatly in the accuracy of their diagnoses of strokes
- (D) the symptoms of right-side strokes tend to be different than the symptoms of left-side strokes
- (E) other studies have suggested that a large number of minor strokes go undiagnosed

13. When so many oysters died off the coast of Britain that some native species were threatened with extinction, the fact that the water temperature had recently risen was at first thought to be the cause. Later, however, the cause was determined to be the chemical tributyl tin (TBT), used to keep barnacles off the hulls of boats. Legislation that banned TBT has nearly eliminated that chemical from British waters, yet the populations of the endangered oyster species have not grown.

Which one of the following, if true, most helps to explain the failure of the native oyster populations to recover?

- (A) The increase in water temperature has slowed in the years since the legislation was passed.
- (B) Native oysters rely on different sources of food than do the barnacles that live on the hulls of boats.
- (C) TBT also killed imported varieties of oysters that flourish at the expense of native oysters now that the waters are warmer.
- (D) Other chemicals that are used to remove barnacles from the hulls of boats seem to have little effect on the oyster populations.
- (E) TBT is more deadly to oysters in colder waters than in warmer waters.

14. Pratt: Almost all cases of rabies in humans come from being bitten by a rabid animal, and bats do carry rabies. But there is little justification for health warnings that urge the removal of any bats residing in buildings where people work or live. Bats are shy animals that rarely bite, and the overwhelming majority of bats do not have rabies.

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

- (A) A rabid bat is much more likely to infect another bat than to infect any other type of animal.
- (B) Rabid bats are less mobile than other bats but are much more aggressive.
- (C) Most animals that carry rabies are animals of species that, under normal conditions, very rarely bite people.
- (D) The bat species with the highest incidence of rabies do not live in buildings.
- (E) People are more likely to be aware of having been bitten by a bat if they were bitten by the bat inside a building.

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15. It has been said that understanding a person completely leads one to forgive that person entirely. If so, then it follows that complete self-forgiveness is beyond our reach, for complete self-understanding, however desirable, is unattainable.

A flaw in the reasoning in the argument above is that this argument

- (A) treats the failure to satisfy a condition that brings about a particular outcome as if satisfying that condition is the only way to realize the outcome
- (B) confuses something that is necessary for an action to occur with something that necessarily results from that action
- (C) takes for granted that something that has merely been said to be true is, in fact, true
- (D) ignores the possibility that a state of affairs is desirable even if it cannot be attained
- (E) uses the difficulty of attaining a state of affairs as a reason for not attempting to attain it

16. A popular complaint about abstract expressionist paintings—that “a child could paint that”—holds that their stylistic similarities to young children’s paintings show that they are no more aesthetically pleasing than those inexpert works. But most participants in a psychological study, when shown pairs of paintings consisting of an abstract expressionist painting and a preschooler’s painting, consistently rated the abstract expressionist painting as aesthetically better, refuting this complaint and thereby establishing that abstract expressionist paintings are aesthetically pleasing.

The argument depends on assuming which one of the following?

- (A) People are better at judging the aesthetic value of a painting when they compare it with another painting.
- (B) Most of the preschoolers’ paintings used in the study were not aesthetically displeasing.
- (C) Each painting shown to the participants had a label that accurately indicated whether it was an abstract expressionist painting or a preschooler’s painting.
- (D) Participants who did not consistently rate the abstract expressionist paintings as aesthetically better nonetheless rated them better more often than not.
- (E) There were few stylistic similarities between the abstract expressionist paintings that participants were shown and the preschoolers’ paintings with which they were paired.

17. Xavier: The new fast-food place on 10th Street is out of business already. I’m not surprised. It had no indoor seating, and few people want to sit outside and breathe exhaust fumes while they eat.

Miranda: The bank should have realized that with all the fast-food places on 10th Street, one lacking indoor seating was likely to fail. So it was irresponsible of them to lend the money for it.

It can be inferred from the dialogue that Xavier and Miranda agree that

- (A) few people want to sit outside while they eat
  - (B) banks should not finance restaurants lacking indoor seating
  - (C) if the new fast-food place had indoor seating, it probably would have been successful
  - (D) a fast-food place on 10th Street is likely to fail if it has any outdoor seating
  - (E) the new fast-food place on 10th Street was a risky venture
18. In an island nature preserve, Common Eider nests are found in roughly equal numbers in highly concealing woody vegetation, wooden boxes, and open grasslands that do not conceal nests. Some Common Eiders lay their eggs in nests established by other Common Eiders, probably in order to locate them in an area that is maximally safe from predation. Although one would expect the nests concealed in woody vegetation to be most commonly selected by other females for laying their eggs, the female Common Eiders that lay their eggs in other birds’ nests most commonly select established nests in wooden boxes.
- Which one of the following, if true, would most help to explain why, in this nature preserve, Common Eiders that lay their eggs in other birds’ nests most commonly select established nests in wooden boxes?
- (A) Some Common Eiders that lay their eggs in nests established by other Common Eiders have been observed, in subsequent years, building nests of their own in the nature preserve.
  - (B) Established nests concealed in woody vegetation are difficult for Common Eiders to detect.
  - (C) Defensive behavior by nest builders can sometimes deter intruding Common Eiders.
  - (D) Virtually all of the island nature preserve consists of habitats that have been, at some point in the past, altered by humans.
  - (E) Foxes and other natural predators of the Common Eider are not uncommon in the island nature preserve.

19. Researcher: In an experiment, 500 families were given a medical self-help book, and 500 similar families were not. Over the next year, the average number of visits to doctors dropped by 20 percent for the families who had been given the book but remained unchanged for the other families. Since improved family health leads to fewer visits to doctors, the experiment indicates that having a medical self-help book in the home improves family health.

The reasoning in the researcher's argument is questionable in that

- (A) it is possible that the families in the experiment who were not given a medical self-help book acquired medical self-help books on their own
- (B) the families in the experiment could have gained access to medical self-help information outside of books
- (C) a state of affairs could causally contribute to two or more different effects
- (D) two different states of affairs could each causally contribute to the same effect even though neither causally contributes to the other
- (E) certain states of affairs that lead families to visit the doctor less frequently could also make them more likely to have a medical self-help book in the home

20. Politician: Our government's Ministry of the Environment issues scientific assessments of the ecological impacts of industrial activities. However, these assessments are often inaccurate due to political pressures on the ministry. The government is now forming a Ministry of Health. Since the Ministry of Health will also be subject to political pressures in relation to health issues, it should not issue scientific assessments that relate to health issues.

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

- (A) If there was no need for scientific assessments of a set of issues before a government ministry responsible for those issues was formed, then those assessments are still unnecessary after the formation of the ministry.
- (B) Scientific assessments should not be issued by government ministries unless they have very strong reason to believe that those assessments are accurate.
- (C) Individuals and organizations should not exercise political pressure on government ministries that issue scientific assessments.
- (D) A government ministry should issue scientific assessments of certain issues if that ministry can successfully resist political pressures to modify the contents of those assessments.
- (E) The government ministry in charge of issuing assessments relating to health issues should firmly resist any political pressures regarding those assessments.

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21. Farmer: Farming with artificial fertilizers, though more damaging to the environment than organic farming, allows more food to be grown on the same amount of land. If all farmers were to practice organic farming, they would be unable to produce enough food for Earth's growing population. Hence, if enough food is to be produced, the currently popular practice of organic farming must not spread any further.

The reasoning in the farmer's argument is most vulnerable to criticism on which one of the following grounds?

- (A) It takes for granted that farming with artificial fertilizers is only slightly more damaging to the environment than organic farming is.
- (B) It overlooks the possibility that even if the practice of organic farming continues to spread, many farmers will choose not to adopt it.
- (C) It fails to consider the possibility that, at some points in human history, enough food was produced to feed Earth's population without the use of artificial fertilizers.
- (D) It overlooks the possibility that a consequence that would surely follow if all farmers adopted the practice of organic farming would still ensue even if not all of them did.
- (E) It takes for granted that damage to the environment due to the continued use of artificial fertilizers would not be detrimental to human health.

22. Although severing a motor nerve kills part of the nerve, it can regenerate, growing about 1 millimeter per day from the point of damage toward the muscle the nerve controlled. So, for example, a severed motor nerve that controlled a hand muscle requires a much longer time to regenerate if that nerve is severed at the shoulder rather than at the wrist. Furthermore, the growing cells require the original nerve sheath to guide them to the area that has lost function, but that sheath begins to disintegrate after about three months unless there is living nerve tissue within it.

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

- (A) Doubling the speed at which new nerve cells grow will double the likelihood that a severed motor nerve will reach the muscle it had controlled.
- (B) It is sometimes possible, once a nerve sheath has begun to disintegrate, to reverse or slow the process of disintegration.
- (C) If a severed motor nerve does not regenerate successfully within three months after being severed, functioning cannot be restored to the muscle that the nerve had controlled.
- (D) If living nerve tissue could be implanted and sustained within the original sheath of a severed motor nerve, the likelihood that the nerve will regenerate would increase in some cases.
- (E) Without surgical intervention, a muscle that has lost function because of a severed motor nerve is unlikely to regain that function.

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23. Male boto dolphins often carry objects such as weeds or sticks. Researchers first thought this was play behavior, but it is more likely to be a mating display. If it were play rather than a mating display, we would expect females and juveniles to engage in the behavior, but only adult males do.

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

- (A) If there is a lot of traffic today, then Phyllis will probably be late to the meeting. But I expect light traffic today. So in all likelihood Phyllis will arrive on time.
  - (B) I expect the arborist to determine that this tree is diseased. If the arborist finds that the tree is diseased, then the tree will definitely be cut down. So it is likely that the tree will be cut down.
  - (C) If the weather forecast called for heavy snow, then I would have expected Roy to cancel his trip to his mountain cabin. Indeed, Roy did cancel the trip. So it is likely that the forecast called for heavy snow.
  - (D) If construction of that building were on schedule, then I would expect the foundation to have been completed already. But work on the foundation has just started, so construction is probably behind schedule.
  - (E) If Tamika makes a big sale today, I would expect her to celebrate tonight. So, since Tamika will probably make a big sale today, she will probably celebrate tonight.
24. Andy Warhol's *Brillo Boxes* is a stack of boxes that are visually indistinguishable from the product packaging of an actual brand of scouring pads. Warhol's *Brillo Boxes* is considered a work of art, while an identical stack of ordinary boxes would not be considered a work of art. Therefore, it is not true that appearance alone entirely determines whether or not something is considered a work of art.

The argument proceeds by

- (A) highlighting the differences between things that are believed to have a certain property and things that actually have that property
- (B) demonstrating that an opposing argument relies on an ambiguity
- (C) suggesting that two things that are indistinguishable from each other must be the same type of thing
- (D) questioning the assumptions underlying a particular theory
- (E) showing that something that would be impossible if a particular thesis were correct is actually true

25. Stallworth claims that she supported the proposal to build a new community center. If Henning also supported that proposal, it would have received government approval. Since the proposal did not gain government approval, Henning must have failed to back it, despite his claims to the contrary.

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

- (A) According to the TV news, the traffic accident occurred on Aylmer Street. But if the accident occurred on Aylmer Street, Morgan could not have witnessed it from his kitchen window. Thus, the newspaper report was mistaken in its claim that Morgan witnessed the accident from his kitchen window.
- (B) According to the city government, 15 percent of city residents are behind on their property taxes. But according to a private institute, property taxes in the city are far higher than the national average for cities of that size. Thus it is the city government that is to blame for the high percentage of residents who are behind on their taxes.
- (C) According to Kapoor, the hazardous-waste disposal site does not pose an imminent danger to the community. But according to Galindo, the disposal site is located on an unsuitable tract of land. Thus, if Galindo is correct, Kapoor's assessment is in error.
- (D) According to Harris's political rivals, she consistently favors the interests of property developers. A good mayor must be willing to stand up to the city's powerful interests, including property developers. Harris is thus a poor choice for mayor.
- (E) According to the latest government figures, the regional unemployment rate declined in the last six months. But the region lost thousands of manufacturing jobs in that period. The government's unemployment figures must therefore be inaccurate.

**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.