CRITICAL REASONING TEST SECTION 15 25 Minutes 16 Questions

1.A company is considering changing its policy concerning daily working hours. Currently, this company requires all employees to arrive at work at 8 a.m. The proposed policy would permit each employee to decide when to arrive—from as early as 6 a.m. to as late as 11 a.m.

The adoption of this policy would be most likely to <u>decrease</u> employees' productivity if the employees' job functions required them to

- (A) work without interruption from other employees
- (B) consult at least once a day with employees from other companies
- (C) submit their work for a supervisor's eventual approval
- (D) interact frequently with each other throughout the entire workday
- (E) undertake projects that take several days to complete
- 2. The amount of time it takes for most of a worker's occupational knowledge and skills to become obsolete has been declining because of the introduction of advanced manufacturing technology (AMT). Given the rate at which AMT is currently being introduced in manufacturing, the average worker's old skills become obsolete and new skills are required within as little as five years.

Which of the following plans, if feasible, would allow a company to prepare most effectively for the rapid obsolescence of skills described above?

- (A) The company will develop a program to offer selected employees the opportunity to receive training six years after they were originally hired.
- (B) The company will increase its investment in AMT every year for a period of at least five years.
- (C) The company will periodically survey its employees to determine how the introduction of AMT has affected them.
- (D) Before the introduction of AMT, the company will institute an educational program to inform its employees of the probable consequences of the introduction of AMT.
- (E) The company will ensure that it can offer its employees any training necessary for meeting their job requirements.

3. Installing scrubbers in smokestacks and switching to cleaner-burning fuel are the two methods available to Northern Power for reducing harmful emissions from its plants. Scrubbers will reduce harmful emissions more than cleaner-burning fuels will. Therefore, by installing scrubbers, Northern Power will be doing the most that can be done to reduce harmful emissions from its plants.

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

- (A) Switching to cleaner-burning fuel will not be more expensive than installing scrubbers.
- (B) Northern Power can choose from among various kinds of scrubbers, some of which are more effective than others.
- (C) Northern Power is not necessarily committed to reducing harmful emissions from its plants.
- (D) Harmful emissions from Northern Power's plants cannot be reduced more by using both methods together than by the installation of scrubbers alone.
- (E) Aside from harmful emissions from the smokestacks of its plants, the activities of Northern Power do not cause significant air pollution.
- 4. Some anthropologists study modern-day societies of foragers in an effort to learn about our ancient ancestors who were also foragers. A flaw in this strategy is that forager societies are extremely varied. Indeed, any forager society with which anthropologists are familiar has had considerable contact with modern nonforager societies.

Which of the following, if true, would most weaken the criticism made above of the anthropologists' strategy?

- (A) All forager societies throughout history have had a number of important features in common that are absent from other types of societies.
- (B) Most ancient forager societies either dissolved or made a transition to another way of life.
- (C) All anthropologists study one kind or another of modern-day society.
- (D) Many anthropologists who study modern-day forager societies do not draw inferences about ancient societies on the basis of their studies.
- (E) Even those modern-day forager societies that have not had significant contact with modern societies are importantly different from ancient forager societies.

5. Mayor: In each of the past five years, the city has cut school funding and each time school officials complained that the cuts would force them to reduce expenditures for essential services. But each time, only expenditures for nonessential services were actually reduced. So school officials can implement further cuts without reducing any expenditures for essential services.

Which of the following, if true, most strongly supports the mayor's conclusion?

- (A) The city's schools have always provided essential services as efficiently as they have provided nonessential services.
- (B) Sufficient funds are currently available to allow the city's schools to provide some nonessential services.
- (C) Price estimates quoted to the city's schools for the provision of nonessential services have not increased substantially since the most recent school funding cut.
- (D) Few influential city administrators support the funding of costly nonessential services in the city's schools.
- (E) The city's school officials rarely exaggerate the potential impact of threatened funding cuts.

6. Advertisement:

For sinus pain, three out of four hospitals give their patients Novex. So when you want the most effective painkiller for sinus pain, Novex is the one to choose.

Which of the following, if true, most seriously undermines the advertisement's argument?

- (A) Some competing brands of painkillers are intended to reduce other kinds of pain in addition to sinus pain.
- (B) Many hospitals that do not usually use Novex will do so for those patients who cannot tolerate the drug the hospitals usually use.
- (C) Many drug manufacturers increase sales of their products to hospitals by selling these products to the hospitals at the lowest price the manufacturers can afford.
- (D) Unlike some competing brands of painkillers, Novex is available from pharmacies without a doctor's prescription.
- (E) In clinical trials Novex has been found more effective than competing brands of painkillers that have been on the market longer than Novex.

7. A report that many apples contain a cancer-causing preservative called Alar apparently had little effect on consumers. Few consumers planned to change their apple-buying habits as a result of the report. Nonetheless, sales of apples in grocery stores fell sharply in March, a month after the report was issued.

Which of the following, if true, best explains the reason for the apparent discrepancy described above?

- (A) In March, many grocers removed apples from their shelves in order to demonstrate concern about their customers' health.
- (B) Because of a growing number of food-safety warnings, consumers in March were indifferent to such warnings.
- (C) The report was delivered on television and also appeared in newspapers.
- (D) The report did not mention that any other fruit contains Alar, although the preservative is used on other fruit.
- (E) Public health officials did not believe that apples posed a health threat because only minute traces of Alar were present in affected apples.
- 8. A new law gives ownership of patents—documents providing exclusive right to make and sell an invention—to universities, not the government, when those patents result from government-sponsored university research. Administrators at Logos University plan to sell any patents they acquire to corporations in order to fund programs to improve undergraduate teaching.

Which of the following, if true, would cast most doubt on the viability of the college administrators' plan described above?

- (A) Profit-making corporations interested in developing products based on patents held by universities are likely to try to serve as exclusive sponsors of ongoing university research projects.
- (B) Corporate sponsors of research in university facilities are entitled to tax credits under new federal tax-code guidelines.
- (C) Research scientists at Logos University have few or no teaching responsibilities and participate little if at all in the undergraduate programs in their field.
- (D) Government-sponsored research conducted at Logos University for the most part duplicates research already completed by several profitmaking corporations.
- (E) Logos University is unlikely to attract corporate sponsorship of its scientific research.

9. Contrary to earlier predictions, demand for sugarcane has not increased in recent years. Yet, even though prices and production amounts have also been stable during the last three years, sugarcane growers last year increased their profits by more than ten percent over the previous year's level.

Any of the following statements, if true about last year, helps to explain the rise in profits EXCEPT:

- (A) Many countries that are large consumers of sugarcane increased their production of sugarcane-based ethanol, yet their overall consumption of sugarcane decreased.
- (B) Sugarcane growers have saved money on wages by switching from paying laborers an hourly wage to paying them by the amount harvested.
- (C) The price of oil, the major energy source used by sugarcane growers in harvesting their crops, dropped by over twenty percent.
- (D) Many small sugarcane growers joined together to form an association of sugarcane producers and began to buy supplies at low group rates.
- (E) Rainfall in sugarcane-growing regions was higher than it had been during the previous year, allowing the growers to save money on expensive artificial irrigation.
- 10. If the county continues to collect residential trash at current levels, landfills will soon be overflowing and parkland will need to be used in order to create more space. Charging each household a fee for each pound of trash it puts out for collection will induce residents to reduce the amount of trash they create; this charge will therefore protect the remaining county parkland.

Which of the following is an assumption made in drawing the conclusion above?

- (A) Residents will reduce the amount of trash they put out for collection by reducing the number of products they buy.
- (B) The collection fee will not significantly affect the purchasing power of most residents, even if their households do not reduce the amount of trash they put out.
- (C) The collection fee will not induce residents to dump their trash in the parklands illegally.
- (D) The beauty of county parkland is an important issue for most of the county's residents.
- (E) Landfills outside the county's borders could be used as dumping sites for the county's trash.

Questions 11-12 are based on the following. Environmentalist: The commissioner of the Fish and Game Authority would have the public believe that increases in the number of marine fish caught demonstrate that this resource is no longer endangered. This is a specious argument, as unsound as it would be to assert that the ever-increasing rate at which rain forests are being cut down demonstrates a lack of danger to that resource. The real cause of the increased fishcatch is a greater efficiency in using technologies that deplete resources.

- 11. Which of the following strategies is used in the presentation of the environmentalist's position?
 - (A) Questioning the motives of an opponent
 - (B) Showing that an opposing position is selfcontradictory
 - (C) Attacking an argument through the use of an analogy
 - (D) Demonstrating the inaccuracy of certain data
 - (E) Pointing out adverse consequences of a proposal
- 12. The environmentalist's statements, if true, best support which of the following as a conclusion?
 - (A) The use of technology is the reason for the increasing encroachment of people on nature.
 - (B) It is possible to determine how many fish are in the sea in some way other than by catching fish.
 - (C) The proportion of marine fish that are caught is as high as the proportion of rain-forest trees that are cut down each year.
 - (D) Modern technologies waste resources by catching inedible fish.
 - (E) Marine fish continue to be an endangered resource.

13. Biometric access-control systems—those using fingerprints, voiceprints, etc., to regulate admittance to restricted areas—work by degrees of similarity, not by identity. After all, even the same finger will rarely leave exactly identical prints. Such systems can be adjusted to minimize refusals of access to legitimate access-seekers. Such adjustments, however, increase the likelihood of admitting impostors.

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

- (A) If a biometric access-control system were made to work by identity, it would not produce any correct admittance decisions.
- (B) If a biometric access-control system reliable prevents impostors from being admitted, it will sometimes turn away legitimate access-seekers.
- (C) Biometric access-control systems are appropriate only in situations in which admittance of impostors is less of a problem than is mistaken refusal of access.
- (D) Nonbiometric access-control systems—based, for example, on numerical codes—are less likely than biometric ones to admit impostors.
- (E) Anyone choosing an access-control system should base the choice solely on the ratio of false refusals to false admittances.
- 14. Although computers can enhance people's ability to communicate, computer games are a cause of underdeveloped communication skills in children. Afterschool hours spent playing computer games are hours not spent talking with people. Therefore, children who spend all their spare time playing these games have less experience in interpersonal communication than other children have.

The argument depends on which of the following assumptions?

- (A) Passive activities such as watching television and listening to music do not hinder the development of communication skills in children.
- (B) Most children have other opportunities, in addition to after-school hours, in which they can choose whether to play computer games or to interact with other people.
- (C)Children who do not spend all of their afterschool hours playing computer games spend at least some of that time talking with other people.
- (D) Formal instruction contributes little or nothing to children's acquisition of communication skills.
- (E) The mental skills developed through playing computer games do not contribute significantly to children's intellectual development.

15. One variety of partially biodegradable plastic beverage container is manufactured from small bits of plastic bound together by a degradable bonding agent such as cornstarch. Since only the bonding agent degrades, leaving the small bits of plastic, no less plastic refuse per container is produced when such containers are discarded than when comparable nonbiodegradable containers are discarded.

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

- (A) Both partially biodegradable and nonbiodegradable plastic beverage containers can be crushed completely flat by refuse compactors.
- (B) The partially biodegradable plastic beverage containers are made with more plastic than comparable nonbiodegradable ones in order to compensate for the weakening effect of the bounding agents.
- (C) Many consumers are ecology-minded and prefer to buy a product sold in the partially biodegradable plastic beverage containers rather than in nonbiodegradable containers, even if the price is higher.
- (D) The manufacturing process for the partially biodegradable plastic beverage containers results in less plastic waste than the manufacturing process for nonbiodegradable plastic beverage containers.
- (E) Technological problems with recycling currently prevent the reuse as food or beverage containers of the plastic from either type of plastic beverage container.
- 16. Commentator: The theory of trade retaliation states that countries closed out of any of another country's markets should close some of their own markets to the other country in order to pressure the other country to reopen its markets. If every country acted according to this theory, no country would trade with any other.

The commentator's argument relies on which of the following assumptions?

- (A) No country actually acts according to the theory of trade retaliation.
- (B) No country should block any of its markets to foreign trade.
- (C) Trade disputes should be settled by international tribunal.
- (D) For any two countries, at least one has some market closed to the other.
- (E) Countries close their markets to foreigners to protect domestic producers.

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1. The chanterelle, a type of wild mushroom, grows beneath host trees such as the Douglas fir, which provide it with necessary sugars. The underground filaments of chanterelles, which extract the sugars, in turn provide nutrients and water for their hosts. Because of this mutually beneficial relationship, harvesting the chanterelles growing beneath a Douglas fir seriously endangers the tree.

Which of the following, if true, casts the most doubt on the conclusion drawn above?

- (A) The number of wild mushrooms harvested has increased in recent years.
- (B) Chanterelles grow not only beneath Douglas firs but also beneath other host trees.
- (C) Many types of wild mushrooms are found only in forests and cannot easily be grown elsewhere.
- (D) The harvesting of wild mushrooms stimulates future growth of those mushrooms.
- (E) Young Douglas fir seedlings die without the nutrients and water provided by chanterelle filaments.
- 2. The reason much refrigerated food spoils is that it ends up out of sight at the back of the shelf. So why not have round shelves that rotate? Because such rotating shelves would have just the same sort of drawback, since things would fall off the shelves' edges into the rear corners.

Which of the following is presupposed in the argument against introducing rotating shelves?

- (A) Refrigerators would not be made so that their interior space is cylindrical.
- (B) Refrigerators would not be made to have a window in front for easy viewing of their contents without opening the door.
- (C) The problem of spoilage of refrigerated food is not amenable to any solution based on design changes.
- (D) Refrigerators are so well designed that there are bound to be drawbacks to any design change.
- (E) Rotating shelves would be designed to rotate only while the refrigerator door was open.

3. It would cost Rosetown one million dollars to repair all of its roads. In the year after completion of those repairs, however, Rosetown would thereby avoid incurring three million dollars worth of damages, since currently Rosetown pays that amount annually in compensation for damage done to cars each year by its unrepaired roads.

Which of the following, if true, gives the strongest support to the argument above?

- (A) Communities bordering on Rosetown also pay compensation for damage done to cars by their unrepaired roads.
- (B) After any Rosetown road has been repaired, several years will elapse before that road begins to damage cars.
- (C) Rosetown would need to raise additional taxes if it were to spend one million dollars in one year on road repairs.
- (D) The degree of damage caused to Rosetown's roads by harsh weather can vary widely from year to year.
- (E) Trucks cause much of the wear on Rosetown's roads, but owners of cars file almost all of the claims for compensation for damage caused by unrepaired roads.
- 4. Two experimental garden plots were each planted with the same number of tomato plants. Magnesium salts were added to the first plot but not to the second. The first plot produced 20 pounds of tomatoes and the second plot produced 10 pounds. Since nothing else but water was added to either plot, the higher yields in the first plot must have been due to the magnesium salts.

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

- (A) A small amount of the magnesium salts from the first plot leached into the second plot.
- (B) Tomato plants in a third experimental plot, to which a high-nitrogen fertilizer was added, but no magnesium salts, produced 15 pounds of tomatoes.
- (C) Four different types of tomatoes were grown in equal proportions in each of the plots.
- (D) Some weeds that compete with tomatoes cannot tolerate high amounts of magnesium salts in the soil.
- (E) The two experimental plots differed from each other with respect to soil texture and exposure to sunlight.

5. Archaeologists have found wheeled ceramic toys made by the Toltec, twelfth-century inhabitants of what is now Veracruz. Although there is no archaeological evidence that the Toltec used wheels for anything but toys, some anthropologists hypothesize that wheeled utility vehicles were used to carry materials needed for the monumental structures the Toltec produced.

Which of the following, if true, would most help the anthropologists explain the lack of evidence noted above?

- (A) The Toltec sometimes incorporated into their toys representations of utensils or other devices that served some practical purpose.
- (B) Any wheeled utility vehicies used by the Toltec could have been made entirely of wood, and unlike ceramic, wood decays rapidly in the humid climate of Veracruz.
- (C) Carvings in monument walls suggest that the Toltec's wheeled ceramic toys sometimes had ritual uses in addition to being used by both children and adults as decorations and playthings.
- (D) Wheeled utility vehicles were used during the twelfth century in many areas of the world, but during this time wheeled toys were not very common in areas outside Veracruz.
- (E) Some of the wheeled ceramic toys were found near the remains of monumental structures.
- 6. Demographers doing research for an international economics newsletter claim that the average per capita income in the country of Kuptala is substantially lower than that in the country of Bahlton. They also claim, however, that whereas poverty is relatively rare in Kuptala, over half the population of Bahlton lives in extreme poverty. At least one of the demographers' claims must, therefore, be wrong.

The argument above is most vulnerable to which of the following criticisms?

- (A) It rejects an empirical claim about the average per capita incomes in the two countries without making any attempt to discredit that claim by offering additional economic evidence.
- (B) It treats the vague term "poverty" as though it had a precise and universally accepted meaning.
- (C) It overlooks the possibility that the number of people in the two countries who live in poverty could be the same even though the percentages of the two populations that live in poverty differ markedly.
- (D) It fails to show that wealth and poverty have the same social significance in Kuptala as in Bahlton.
- (E) It does not consider the possibility that incomes in Kuptala, unlike those in Bahlton, might all be very close to the country's average per capita income.

7. Normally, increases in the price of a product decrease its sales except when the price increase accompanies an improvement in the product. Wine is unusual, however. Often increases in the price of a particular producer's wine will result in increased sales, even when the wine itself is unchanged.

Which of the following, if true, does most to explain the anomaly described above?

- (A) The retail wine market is characterized by an extremely wide range of competing products.
- (B) Many consumers make decisions about which wines to purchase on the basis of reviews of wine published in books and periodicals.
- (C) Consumers selecting wine in a store often use the price charged as their main guide to the wine's quality.
- (D) Wine retailers and producers can generally increase the sales of a particular wine temporarily by introducing a price discount.
- (E) Consumers who purchase wine regularly generally have strong opinions about which wines they prefer.
- 8. The recent decline in land prices has hurt many institutions that had invested heavily in real estate. Last year, before the decline began, a local college added 2,000 acres to its holdings. The college, however, did not purchase the land but received it as a gift. Therefore the price decline will probably not affect the college.

Which of the following, if true, casts most doubt on the conclusion above?

- (A) The 2,000 acres that the college was given last year are located within the same community as the college itself.
- (B) The college usually receives more contributions of money than of real estate.
- (C) Land prices in the region in which the college is located are currently higher than the national average.
- (D) Last year, the amount that the college allocated to pay for renovations included money it expected to receive by selling some of its land this year.
- (E) Last year, the college paid no property taxes on land occupied by college buildings but instead paid fees to compensate the local government for services provided.

9. Civil trials often involve great complexities that are beyond the capacities of jurors to understand. As a result, jurors' decisions in such trials are frequently incorrect. Justice would therefore be better served if the more complex trials were decided by judges rather than juries.

The argument above depends on which of the following assumptions?

- (A) A majority of civil trials involve complexities that jurors are not capable of understanding.
- (B) The judges who would decide complex civil trials would be better able to understand the complexities of those trials than jurors are.
- (C) The judges who would preside over civil trials would disallow the most complex sorts of evidence from being introduced into those trials.
- (D) Jurors' decisions are frequently incorrect even in those civil trials that do not involve great complexities.
- (E) The sole reason in favor of having juries decide civil trials is the supposition that their decisions will almost always be correct.
- 10. Some species of dolphins find their prey by echolocation; they emit clicking sounds and listen for echoes returning from distant objects in the water. Marine biologists have speculated that those same clicking sounds might have a second function: particularly loud clicks might be used by the dolphins to stun their prey at close range through sensory overload.

Which of the following, if discovered to be true, would cast the most serious doubt on the correctness of the speculation described above?

- (A) Dolphins that use echolocation to locate distant prey also emit frequent clicks at intermediate distances as they close in on their prey.
- (B) The usefulness of echolocation as a means of locating prey depends on the clicking sounds being of a type that the prey is incapable of perceiving, regardless of volume.
- (C) If dolphins stun their prey, the effect is bound to be so temporary that stunning from far away, even if possible, would be ineffective.
- (D) Echolocation appears to give dolphins that use it information about the richness of a source of food as well as about its direction.
- (E) The more distant a dolphin's prey, the louder the echolocation clicks must be if they are to reveal the prey's presence to the hunting dolphin.

11. Advertisement:

The world's best coffee beans come from Colombia. The more Colombian beans in a blend of coffee, the better the blend, and no company purchases more Colombian beans than Kreemo Coffee. Inc. So it only stands to reason that if you buy a can of Kreemo's coffee, you're buying the best blended coffee available today.

The reasoning of the argument in the advertisement is flawed because it overlooks the possibility that

- (A) the equipment used by Kreemo to blend and package its coffee is no different from that used by most other coffee producers
- (B) not all of Kreemo's competitors use Colombian coffee beans in the blends of coffee they sell
- (C) Kreemo sells more coffee than does any other company
- (D) Kreemo's coffee is the most expensive blended coffee available today
- (E) the best unblended coffee is better than the best blended coffee
- 12. The only purpose for which a particular type of tape is needed is to hold certain surgical wounds closed for ten days—the maximum time such wounds need tape. Newtape is a new brand of this type of tape. Newtape's salespeople claim that Newtape will improve healing because Newtape adheres twice as long as the currently used tape does.

Which of the following statements, if true, would most seriously call into question the claim made by Newtape's salespeople?

- (A) Most surgical wounds take about ten days to heal.
- (B) Most surgical tape is purchased by hospitals and clinics rather than by individual surgeons.
- (C) The currently used tape's adhesiveness is more than sufficient to hold wounds closed for ten days.
- (D) Neither Newtape nor the currently used tape adheres well to skin that has not been cleaned.
- (E) Newtape's adhesion to skin that has been coated with a special chemical preparation is only half as good as the currently used tape's adhesion to such coated skin.

13. A severe drought can actually lessen the total amount of government aid that United States farmers receive as a group. The government pays farmers the amount, if any, by which the market price at which crops are actually sold falls short of a preset target price per bushel for the crops. The drought of 1983, for example, caused farm-program payments to drop by \$10 billion.

Given the information above, which of the following, if true, best explains why the drought of 1983 resulted in a reduction in farm-program payments?

- (A) Prior to the drought of 1983, the government raised the target price for crops in order to aid farmers in reducing their debt loads.
- (B) Due to the drought of 1983, United States farmers exported less food in 1983 than in the preceding year.
- (C) Due to the drought of 1983, United States farmers had smaller harvests and thus received a higher market price for the 1983 crop than for the larger crop of the preceding year.
- (D) Due to the drought of 1983, United States farmers planned to plant smaller crops in 1984 than they had in 1983.
- (E) Despite the drought of 1983, retail prices for food did not increase significantly between 1982 and 1983.
- 14. In order to increase revenues, an airport plans to change the parking fees it charges at its hourly parking lots. Rather than charging \$2.00 for the first two-hour period, or part thereof, and \$1.00 for each hour thereafter, the airport will charge \$4.00 for the first four-hour period, or part thereof, and \$1.00 for each hour thereafter.

Which of the following is a consideration that, if true, suggests that the plan will be successful in increasing revenues?

- (A) Very few people who park their cars at the hourly parking lot at the airport leave their cars for more than two hours at a time.
- (B) Over the past several years, the cost to the airport of operating its hourly parking facilities has been greater than the revenues it has received from them.
- (C) People who leave their cars at the airport while on a trip generally park their cars in lots that charge by the day rather than by the hour.
- (D) A significant portion of the money spent to operate the airport parking lot is spent to maintain the facilities rather than to pay the salaries of the personnel who collect the parking fees.
- (E) The hourly parking lots at the airport have recently been expanded and are therefore rarely filled to capacity.

15. In the course of her researches, a historian recently found two documents mentioning the same person, Erich Schnitzler. One, dated May 3, 1739, is a record of Schnitzler's arrest for peddling without a license. The second, undated, is a statement by Schnitzler asserting that he has been peddling off and on for 20 years.

The facts above best support which of the following conclusions?

- (A) Schnitzler started peddling around 1719.
- (B) Schnitzler was arrested repeatedly for peddling.
- (C) The undated document was written before 1765.
- (D) The arrest record was written after the undated document.
- (E) The arrest record provides better evidence that Schnitzler peddled than does the undated document.
- 16. The recent upheaval in the office-equipment retail business, in which many small firms have gone out of business, has been attributed to the advent of office equipment "superstores" whose high sales volume keeps their prices low. This analysis is flawed, however, since even today the superstores control a very small share of the retail market.

Which of the following, if true, would most weaken the argument that the analysis is flawed?

- (A) Most of the larger customers for office equipment purchase under contract directly from manufacturers and thus do not participate in the retail market.
- (B) The superstores' heavy advertising of their low prices has forced prices down throughout the retail market for office supplies.
- (C) Some of the superstores that only recently opened have themselves gone out of business.
- (D) Most of the office equipment superstores are owned by large retailing chains that also own stores selling other types of goods.
- (E) The growing importance of computers in most offices has changed the kind of office equipment retailers must stock.

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1. A report on acid rain concluded, "Most forests in Canada are not being damaged by acid rain." Critics of the report insist the conclusion be changed to, "Most forests in Canada do not show visible symptoms of damage by acid rain, such as abnormal loss of leaves, slower rates of growth, or higher mortality."

Which of the following, if true, provides the best logical justification for the critics' insistence that the report's conclusion be changed?

- (A) Some forests in Canada are being damaged by acid rain.
- (B) Acid rain could be causing damage for which symptoms have not yet become visible.
- (C) The report does not compare acid rain damage to Canadian forests with acid rain damage to forests in other countries.
- (D) All forests in Canada have received acid rain during the past fifteen years.
- (E) The severity of damage by acid rain differs from forest to forest.
- 2. In the past most airline companies minimized aircraft weight to minimize fuel costs. The safest airline seats were heavy, and airlines equipped their planes with few of these seats. This year the seat that has sold best to airlines has been the safest one—a clear indication that airlines are assigning a higher priority to safe seating than to minimizing fuel costs.

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

- (A) Last year's best-selling airline seat was not the safest airline seat on the market.
- (B) No airline company has announced that it would be making safe seating a higher priority this year.
- (C) The price of fuel was higher this year than it had been in most of the years when the safest airline seats sold poorly.
- (D) Because of increases in the cost of materials, all airline seats were more expensive to manufacture this year than in any previous year.
- (E) Because of technological innovations, the safest airline seat on the market this year weighed less than most other airline seats on the market.

3. A computer equipped with signature-recognition software, which restricts access to a computer to those people whose signatures are on file, identifies a person's signature by analyzing not only the form of the signature but also such characteristics as pen pressure and signing speed. Even the most adept forgers cannot duplicate all of the characteristics the program analyzes.

Which of the following can be logically concluded from the passage above?

- (A) The time it takes to record and analyze a signature makes the software impractical for everyday use.
- (B) Computers equipped with the software will soon be installed in most banks.
- (C) Nobody can gain access to a computer equipped with the software solely by virtue of skill at forging signatures.
- (D) Signature-recognition software has taken many years to develop and perfect.
- (E) In many cases even authorized users are denied legitimate access to computers equipped with the software.
- 4. Division manager: I want to replace the Microton computers in my division with Vitech computers. General manager: Why?

Division manager: It costs 28 percent less to train new staff on the Vitech.

General manager: But that is not a good enough reason. We can simply hire only people who already know how to use the Microton computer.

Which of the following, if true, most seriously undermines the general manager's objection to the replacement of Microton computers with Vitechs?

- (A) Currently all employees in the company are required to attend workshops on how to use Microton computers in new applications.
- (B) Once employees learn how to use a computer, they tend to change employers more readily than before.
- (C) Experienced users of Microton computers command much higher salaries than do prospective employees who have no experience in the use of computers.
- (D) The average productivity of employees in the general manager's company is below the average productivity of the employees of its competitors.
- (E) The high costs of replacement parts make Vitech computers more expensive to maintain than Microton computers.

5. An airplane engine manufacturer developed a new engine model with safety features lacking in the earlier model, which was still being manufactured. During the first year that both were sold, the earlier model far outsold the new model; the manufacturer thus concluded that safety was not the customers' primary consideration.

Which of the following, if true, would most seriously weaken the manufacturer's conclusion?

- (A) Both private plane owners and commercial airlines buy engines from this airplane engine manufacturer.
- (B) Many customers consider earlier engine models better safety risks than new engine models, since more is usually known about the safety of the earlier models.
- (C) Many customers of this airplane engine manufacturer also bought airplane engines from manufacturers who did not provide additional safety features in their newer models.
- (D) The newer engine model can be used in all planes in which the earlier engine model can be used.
- (E) There was no significant difference in price between the newer engine model and the earlier engine model.
- 6. Between 1975 and 1985, nursing-home occupancy rates averaged 87 percent of capacity, while admission rates remained constant, at an average of 95 admissions per 1,000 beds per year. Between 1985 and 1988, however, occupancy rates rose to an average of 92 percent of capacity, while admission rates declined to 81 per 1,000 beds per year.

If the statements above are true, which of the following conclusions can be most properly drawn?

- (A) The average length of time nursing-home residents stayed in nursing homes increased between 1985 and 1988.
- (B) The proportion of older people living in nursing homes was greater in 1988 than in 1975.
- (C) Nursing home admission rates tend to decline whenever occupancy rates rise.
- (D) Nursing homes built prior to 1985 generally had fewer beds than did nursing homes built between 1985 and 1988.
- (E) The more beds a nursing home has, the higher its occupancy rate is likely to be.

7. Firms adopting "profit-related-pay" (PRP) contracts pay wages at levels that vary with the firm's profits. In the metalworking industry last year, firms with PRP contracts in place showed productivity per worker on average 13 percent higher than that of their competitors who used more traditional contracts.

If, on the basis of the evidence above, it is argued that PRP contracts increase worker productivity, which of the following, if true, would most seriously weaken that argument?

- (A) Results similar to those cited for the metalworking industry have been found in other industries where PRP contracts are used.
- (B) Under PRP contracts costs other than labor costs, such as plant, machinery, and energy, make up an increased proportion of the total cost of each unit of output.
- (C) Because introducing PRP contracts greatly changes individual workers' relationships to the firm, negotiating the introduction of PRP contracts in complex and time consuming.
- (D) Many firms in the metalworking industry have modernized production equipment in the last five years, and most of these introduced PRP contracts at the same time.
- (E) In firms in the metalworking industry where PRP contracts are in place, the average take-home pay is 15 percent higher than it is in those firms where workers have more traditional contracts.
- 8. Crops can be traded on the futures market before they are harvested. If a poor corn harvest is predicted, prices of corn futures rise; if a bountiful corn harvest is predicted, prices of corn futures fall. This morning meteorologists are predicting much-needed rain for the corn-growing region starting tomorrow. Therefore, since adequate moisture is essential for the current crop's survival, prices of corn futures will fall sharply today.

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

- (A) Corn that does not receive adequate moisture during its critical pollination stage will not produce a bountiful harvest.
- (B) Futures prices for corn have been fluctuating more dramatically this season than last season.
- (C) The rain that meteorologists predicted for tomorrow is expected to extend well beyond the corn-growing region.
- (D) Agriculture experts announced today that a disease that has devastated some of the corn crop will spread widely before the end of the growing season.
- (E) Most people who trade in corn futures rarely take physical possession of the corn they trade.

9. A discount retailer of basic household necessities employs thousands of people and pays most of them at the minimum wage rate. Yet following a federally mandated increase of the minimum wage rate that increased the retailer's operating costs considerably, the retailer's profits increased markedly.

Which of the following, if true, most helps to resolve the apparent paradox?

- (A) Over half of the retailer's operating costs consist of payroll expenditures; yet only a small percentage of those expenditures go to pay management salaries.
- (B) The retailer's customer base is made up primarily of people who earn, or who depend on the earnings of others who earn, the minimum wage.
- (C) The retailer's operating costs, other than wages, increased substantially after the increase in the minimum wage rate went into effect.
- (D) When the increase in the minimum wage rate went into effect, the retailer also raised the wage rate for employees who had been earning just above minimum wage.
- (E) The majority of the retailer's employees work as cashiers, and most cashiers are paid the minimum wage.
- 10. The cotton farms of Country Q became so productive that the market could not absorb all that they produced. Consequently, cotton prices fell. The government tried to boost cotton prices by offering farmers who took 25 percent of their cotton acreage out of production direct support payments up to a specified maximum per farm.

The government's program, if successful, will not be a net burden on the budget. Which of the following, if true, is the best basis for an explanation of how this could be so?

- (A) Depressed cotton prices meant operating losses for cotton farms, and the government lost revenue from taxes on farm profits.
- (B) Cotton production in several counties other than Q declined slightly the year that the support-payment program went into effect in Q.
- (C) The first year that the support-payment program was in effect, cotton acreage in Q was 5% below its level in the base year for the program.
- (D) The specified maximum per farm meant that for very large cotton farms the support payments were less per acre for those acres that were withdrawn from production than they were for smaller farms.
- (E) Farmers who wished to qualify for support payments could not use the cotton acreage that was withdrawn from production to grow any other crop.

11. United States hospitals have traditionally relied primarily on revenues from paying patients to offset losses from unreimbursed care. Almost all paying patients now rely on governmental or private health insurance to pay hospital bills. Recently, insurers have been strictly limiting what they pay hospitals for the care of insured patients to amounts at or below actual costs.

Which of the following conclusions is best supported by the information above?

- (A) Although the advance of technology has made expensive medical procedures available to the wealthy, such procedures are out of the reach of low-income patients.
- (B) If hospitals do not find ways to raising additional income for unreimbursed care, they must either deny some of that care of suffer losses if they give it.
- (C) Some patients have incomes too high for eligibility for governmental health insurance but are unable to afford private insurance for hospital care.
- (D) If the hospitals reduce their costs in providing care, insurance companies will maintain the current level of reimbursement, thereby providing more funds for unreimbursed care.
- (E) Even though philanthropic donations have traditionally provided some support for the hospitals, such donations are at present declining.
- 12. Generally scientists enter their field with the goal of doing important new research and accept as their colleagues those with similar motivation. Therefore, when any scientist wins renown as an expounder of science to general audiences, most other scientists conclude that this popularizer should no longer be regarded as a true colleague.

The explanation offered above for the low esteem in which scientific popularizers are held by research scientists assumes that

- (A) serious scientific research is not a solitary activity, but relies on active cooperation among a group of colleagues
- (B) research scientists tend not to regard as colleagues those scientists whose renown they envy
- (C) a scientist can become a famous popularizer without having completed any important research
- (D) research scientists believe that those who are well known as popularizers of science are not motivated to do important new research
- (E) no important new research can be accessible to or accurately assessed by those who are not themselves scientists

13. Mouth cancer is a danger for people who rarely brush their teeth. In order to achieve early detection of mouth cancer in these individuals, a town's public health officials sent a pamphlet to all town residents, describing how to perform weekly self-examinations of the mouth for lumps.

Which of the following, if true, is the best criticism of the pamphlet as a method of achieving the public health officials' goal?

- (A) Many dental diseases produce symptoms that cannot be detected in a weekly self-examination.
- (B) Once mouth cancer has been detected, the effectiveness of treatment can vary from person to person.
- (C) The pamphlet was sent to all town residents, including those individuals who brush their teeth regularly.
- (D) Mouth cancer is much more common in adults than in children.
- (E) People who rarely brush their teeth are unlikely to perform a weekly examination of their mouth.
- 14. Technological improvements and reduced equipment costs have made converting solar energy directly into electricity far more cost-efficient in the last decade. However, the threshold of economic viability for solar power (that is, the price per barrel to which oil would have to rise in order for new solar power plants to be more economical than new oil-fired power plants) is unchanged at thirty-five dollars.

Which of the following, if true, does most to help explain why the increased cost-efficiency of solar power has not decreased its threshold of economic viability?

- (A) The cost of oil has fallen dramatically.
- (B) The reduction in the cost of solar-power equipment has occurred despite increased raw material costs for that equipment.
- (C) Technological changes have increased the efficiency of oil-fired power plants.
- (D) Most electricity is generated by coal-fired or nuclear, rather than oil-fired, power plants.
- (E) When the price of oil increases, reserves of oil not previously worth exploiting become economically viable.

15. Start-up companies financed by venture capitalist have a much lower failure rate than companies financed by other means. Source of financing, therefore, must be a more important causative factor in the success of a start-up company than are such factors as the personal characteristics of the entrepreneur, the quality of strategic planning, or the management structure of the company.

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

- (A) Venture capitalists tend to be more responsive than other sources of financing to changes in a start-up company's financial needs.
- (B) The strategic planning of a start-up company is a less important factor in the long-term success of the company than are the personal characteristics of the entrepreneur.
- (C) More than half of all new companies fall within five years.
- (D) The management structures of start-up companies are generally less formal than the management structures of ongoing businesses.
- (E) Venture capitalists base their decisions to fund start-up companies on such factors as the characteristics of the entrepreneur and quality of strategic planning of the company.
- 16. The proportion of women among students enrolled in higher education programs has increased over the past decades. This is partly shown by the fact that in 1959, only 11 percent of the women between twenty and twenty-one were enrolled in college, while in 1981, 30 percent of the women between twenty and twenty-one were enrolled in college.

To evaluate the argument above, it would be most useful to compare 1959 and 1981 with regard to which of the following characteristics?

- (A) The percentage of women between twenty and twenty-one who were not enrolled in college
- (B) The percentage of women between twenty and twenty-five who graduated from college
- (C) The percentage of women who, after attending college, entered highly paid professions
- (D) The percentage of men between twenty and twenty-one who were enrolled in college
- (E) The percentage of men who graduated from high school

CRITICAL REASONING TEST SECTION 18 25 Minutes 16 Questions

1. Since a rhinoceros that has no horn is worthless to poachers, the Wildlife Protection Committee plans to protect selected rhinoceroses from being killed by poachers by cutting off the rhinos' horns.

The Wildlife Protection Committee's plan assumes that

- (A) poachers do not kill rhinos that are worthless to them
- (B) hornless rhinos pose less of a threat to humans, including poachers, than do rhinos that have horns
- (C) rhinos are the only animals poachers kill for their horns
- (D) hornless rhinos can successfully defend their young against nonhuman predators
- (E) imposing more stringent penalties on poachers will not decrease the number of rhinos killed by poachers
- 2. Crimes are mainly committed by the young, and for this reason merely increasing the number of police officers or expenditures on police services has little effect on reducing the crime rate. In fact, the only factor associated with a crime-rate drop is a decrease in the number of people in the community aged fourteen to thirty.

The findings above can best serve as part of an argument against

- (A) the likelihood that any law enforcement program will be effective in reducing the crime rate within a short time
- (B) increasing prison terms for young people found guilty of crimes
- (C) introducing compulsory military conscription for people aged seventeen to nineteen
- (D) raising the age at which students are permitted to leave school
- (E) a community's plan to increase the number of recreational and educational activities in which young adults can participate

3. A 20 percent decline in lobster catches in Maine waters since 1980 can be justifiably blamed on legislation passed in 1972 to protect harbor seals. Maine's population of harbor seals is now double the level existing before protection was initiated, and these seals are known to eat both fish and lobsters.

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

- (A) Harbor seals usually eat more fish than lobsters, but the seals are natural predators of both.
- (B) Although harbor seals are skillful predators of lobsters, they rarely finish eating their catch.
- (C) Harbor seals attract tourists to Maine's coastal areas, thus revitalizing the local economy.
- (D) Authors of the 1972 legislation protecting harbor seals were convinced that an increase in that animal's numbers would not have a measurably negative impact on the lobster catch.
- (E) The record lobster harvests of the late 1970's removed large numbers of mature lobsters from the reproductive stock.
- 4. Politician: Fewer people are entering the labor market now than previously. If the economy grows, the demand for motivated and educated people will far outstrip the supply. Some companies have already started to respond to this labor-market situation by finding better ways to keep their current employees. Their concern is a sure indicator that the economy is growing.

Which of the following is the best criticism of the politician's reasoning?

- (A) The fact that companies are making prudent preparations for a possible future development does not mean that this development is already taking place.
- (B) The fact that some companies now try harder to keep their employees does not mean that they used to be indifferent to employee morale.
- (C) The fact that demand will outstrip supply does not mean that there will be no supply at all.
- (D) The fact that the number of new entrants into the labor market is declining does not mean that the number of new entrants is lower than it has ever been.
- (E) The fact that current employees have become more valuable to some companies does not mean that those employees will do their jobs better than they used to.

5. Under current federal law, employers are allowed to offer their employees free parking spaces as a tax-free benefit, but they can offer employees only up to \$180 per year as a tax-free benefit for using mass transit. The government could significantly increase mass transit ridership by raising the limit of this benefit to meet commuters' transportation costs.

The proposal above to increase mass transit ridership assumes that

- (A) current mass transit systems are subject to unexpected route closings and delays
- (B) using mass transit creates less air pollution per person than using a private automobile
- (C) the parking spaces offered by employers as taxfree benefits can be worth as much as \$2,500 per year
- (D) many employees are deterred by financial considerations from using mass transit to commute to their places of employment
- (E) because of traffic congestion on major commuter routes, it is often faster to travel to one's place of employment by means of mass transit than by private automobile
- 6. Which of the following best completes the passage below?
- "Government" does not exist as an independent entity defining policy. Instead there exists a group of democratically elected pragmatists sensitive to the electorate, who establish policies that will result in their own reelection. Therefore, if public policy is hostile to, say, environmental concerns, it is not because of governmental perversity but because elected officials believe that—
 - (A) environmentalists would be extremely difficult to satisfy with any policy, however environmentally sound
 - (B) environmental concerns are being accommodated as well as public funds permit
- (C) the public is overly anxious about environmental deterioration
- (D) the majority of voters vote for certain politicians because of those politicians' idiosyncratic positions on policy issues
- (E) the majority of voters do not strongly wish for a different policy

7. Fresh potatoes generally cost about \$2 for a 10-pound bag, whereas dehydrated instant potatoes cost, on average, about \$3 per pound. It can be concluded that some consumers will pay 15 times as much for convenience, since sales of this convenience food continue to rise.

Which of the following, if true, indicates that there is a major flaw in the argument above?

- (A) Fresh potatoes bought in convenient 2-pound bags are about \$1 a bag, or 2 1/2 times more expensive than fresh potatoes bought in 10-pound bags.
- (B) Since fresh potatoes are 80 percent water, one pound of dehydrated potatoes is the equivalent of 5 pounds of fresh potatoes.
- (C) Peeled potatoes in cans are also more expensive than the less convenient fresh potatoes.
- (D) Retail prices of dehydrated potatoes have declined by 20 percent since 1960 to the current level of about \$3 a pound.
- (E) As a consequence of labor and processing costs, all convenience foods cost more than the basic foods from which they are derived.
- 8. Consumers in California seeking personal loans have fewer banks to turn to than do consumers elsewhere in the United States. This shortage of competition among banks explains why interest rates on personal loans in California are higher than in any other region of the United States.

Which of the following, if true, most substantially weakens the conclusion above?

- (A) Because of the comparatively high wages they must pay to attract qualified workers. California banks charge depositors more than banks elsewhere do for many of the services they offer.
- (B) Personal loans are riskier than other types of loans, such as home mortgage loans, that banks make.
- (C) Since bank deposits in California are covered by the same type of insurance that guarantees bank deposits in other parts of the United States, they are no less secure than deposits elsewhere.
- (D) The proportion of consumers who default on their personal loans is lower in California than in any other region of the United States.
- (E) Interest rates paid by California banks to depositors are lower than those paid by banks in other parts of the United States because in California there is less competition to attract depositors.

9. Technically a given category of insurance policy is underpriced if, over time, claims against it plus expenses associated with it exceed total income from premiums. But premium income can be invested and will then yield returns of its own. Therefore, an underpriced policy does not represent a net loss in every case.

The argument above is based on which of the following assumptions?

- (A) No insurance policies are deliberately underpriced in order to attract customers to the insurance company offering such policies.
- (B) A policy that represents a net loss to the insurance company is not an underpriced policy in every case.
- (C) There are policies for which the level of claims per year can be predicted with great accuracy before premiums are set.
- (D) The income earned by investing premium income is the most important determinant of an insurance company's profits.
- (E) The claims against at least some underpriced policies do not require paying out all of the premium income from those policies as soon as it is earned.
- 10. Purebred cows native to Mongolia produce, on average, 400 liters of milk per year; if Mongolian cattle are crossbred with European breeds, the crossbred cows can produce, on average, 2,700 liters per year. An international agency plans to increase the profitability of Mongolia's dairy sector by encouraging widespread crossbreeding of native Mongolian cattle with European breeds.

Which of the following, if true, casts the most serious doubt on the viability of the agency's plan?

- (A) Not all European breeds of cattle can be successfully bred with native Mongolian cattle.
- (B) Many young Mongolians now regard cattle raising as a low-status occupation because it is less lucrative than other endeavors open to them.
- (C) Mongolia's terrain is suitable for grazing native herds but not for growing the fodder needed to keep crossbred animals healthy.
- (D) Cowhide and leather products, not milk, make up the bulk of Mongolia's animal product exports to Europe.
- (E) Many European breeds of cattle attain average milk production levels exceeding 2,700 liters.

11. Any combination of overwork and stress inevitably leads of insomnia. Managers at HiCorp, Inc., all suffer from stress. A majority of the managers—despite their doctors' warnings—work well over 60 hours per week, whereas the other managers work no more than the normal 40 hours per week. HiCorp gives regular bonuses only to employees who work more than 40 hours per week.

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

- (A) Managers at HiCorp work under conditions that are more stressful than the conditions under which managers at most other companies work.
- (B) Most of the employee bonuses given by HiCorp are given to managers.
- (C) At HiCorp, insomnia is more widespread among managers than among any other group of employees.
- (D) No manager at HiCorp who works only 40 hours per week suffers from overwork.
- (E) Most of the managers at HiCorp who receive regular bonuses have insomnia.
- 12. Holiday receipts—the total sales recorded in the fourth quarter of the year—determine the economic success or failure of many retail businesses. Camco, a retailer selling just one camera model, is an excellent example. Camco's holiday receipts, on average, account for a third of its yearly total receipts and about half of its yearly profits.

If the statements above are true, which of the following must also be true about Camco on the basis of them?

- (A) Its fixed expenses per camera sold are higher during the fourth quarter than for any of the other three quarters.
- (B) It makes more profit during the first and third quarters combined than during the fourth quarter.
- (C) Its per-camera retail price is lower, on average, during the fourth quarter than during any one of the first three quarters.
- (D) It makes less profit, on average, for a given dollar amount of sales during the first three quarters combined than during the fourth quarter.
- (E) The per-camera price it pays to wholesalers is higher, on average, during the fourth quarter than during any of the other three quarters.

13. Canadians now increasingly engage in "out-shopping," which is shopping across the national border, where prices are lower. Prices are lower outside of Canada in large part because the goods-and-services tax that pays for Canadian social services is not applied.

Which one of the following is best supported on the basis of the information above?

- (A) If the upward trend in out-shopping continues at a significant level and the amounts paid by the government for Canadian social services are maintained, the Canadian goods-and-services tax will be assessed at a higher rate.
- (B) If Canada imposes a substantial tariff on the goods bought across the border, a reciprocal tariff on cross-border shopping in the other direction will be imposed, thereby harming Canadian businesses.
- (C) The amounts the Canadian government pays out to those who provide social services to Canadians are increasing.
- (D) The same brands of goods are available to Canadian shoppers across the border as are available in Canada.
- (E) Out-shopping purchases are subject to Canadian taxes when the purchaser crosses the border to bring them into Canada.
- 14. Surveys indicate that 52 percent of all women aged eighteen to sixty-five are in the labor force (employed outside the home) in any given month. On the basis of these surveys, a market researcher concluded that 48 percent of all women aged eighteen to sixty-five are full-time homemakers year-round.

Which of the following, if true, would most seriously weaken the researcher's conclusion?

- (A) More women are in the labor force today than during any other period since the Second World War.
- (B) Many workers, both men and women, enter and exit the labor force frequently.
- (C) Although only a small sample of the total population is surveyed each month, these samples have been found to be a reliable indicator of total monthly employment.
- (D) Surveys show that more women than ever before consider having a rewarding job an important priority.
- (E) Women who are in the labor force have more discretionary income available to them than do women who are not.

15. Left-handed persons suffer more frequently than do right-handed persons from certain immune disorders, such as allergies. Left-handers tend to have an advantage over the right-handed majority, however, on tasks controlled by the right hemisphere of the brain, and mathematical reasoning is strongly under the influence of the right hemisphere in most people.

If the information above is true, it best supports which of the following hypotheses?

- (A) Most people who suffer from allergies or other such immune disorders are left-handed rather than right-handed.
- (B) Most left-handed mathematicians suffer from some kind of allergy.
- (C) There are proportionally more left-handers among people whose ability to reason mathematically is above average than there are among people with poor mathematical reasoning ability.
- (D) If a left-handed person suffers from an allergy, that person will probably be good at mathematics.
- (E) There are proportionally more people who suffer from immune disorders such as allergies than there are people who are left-handed or people whose mathematical reasoning ability is unusually good.
- 16. After observing the Earth's weather patterns and the 11-year sunspot cycle of the Sun for 36 years, scientists have found that high levels of sunspot activity precede shifts in wind patterns that affect the Earth's weather. One can conclude that meteorologists will be able to improve their weather forecasts based on this information.

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

- (A) Weather forecasts are more detailed today than they were 36 years ago.
- (B) Scientists can establish that sunspot activity directly affects the Earth's weather.
- (C) Evidence other than sunspot activity has previously enabled meteorologists to forecast the weather conditions that are predictable on the basis of sunspot activity.
- (D) Scientists have not determined why the sunspot activity on the Sun follows an 11-year cycle.
- (E) It has been established that predictable wind patterns yield predictable weather patterns.

CRITICAL REASONING TEST SECTION 19 25 Minutes 16 Ouestions

1. A publisher is now providing university professors with the option of ordering custom textbooks for their courses. The professors can edit out those chapters of a book they are not interested in and add material of their own choosing.

The widespread use of the option mentioned above is LEAST likely to contribute to fulfilling which of the following educational objectives?

- (A) Coverage of material relevant to a particular student body's specific needs
- (B) Offering advanced elective courses that pursue in-depth investigation of selected topics in a field
- (C) Ensuring that students nationwide engaged in a specific course of study are uniformly exposed to a basic set of readings
- (D) Making the textbooks used in university courses more satisfactory from the individual teacher's point of view
- (E) Keeping students' interest in a course by offering lively, well-written reading assignments
- 2. Mechanicorp's newest product costs so little to make that it appears doubtful the company will be able to sell it without increasing the markup the company usually allows for profit: potential clients would simply not believe that something so inexpensive would really work. Yet Mechanicorp's reputation is built on fair prices incorporating only modest profit margins.

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

- (A) Mechanicorp will encounter difficulties in trying to set a price for its newest product that will promote sales without threatening to compromise the company's reputation.
- (B) Mechanicorp achieves large annual profits, despite small profits per unit sold, by means of a high volume of sales.
- (C) Mechanicorp made a significant computational error in calculating the production costs for its newest product.
- (D) Mechanicorp's newest product is intended to perform tasks that can be performed by other devices costing less to manufacture.
- (E) Mechanicorp's production processes are designed with the same ingenuity as are the products that the company makes.

3. Companies in the country of Kollontay can sell semiconductors in the country of Valdivia at a price that is below the cost to Valdivian companies of producing them. To help those Valdivian com-panies, the Valdivian legislature plans to set a minimum selling price in Valdivia for semiconductors manufactured in Kollontay that is ten percent greater than the average production costs for companies in Valdivia.

Which of the following, if true, most seriously threatens the success of the plan?

- (A) The annual rate of inflation in Kollontay is expected to exceed ten percent within the next year.
- (B) Valdivia is not the only country where companies in Kollontay currently sell semiconductors.
- (C) Some Valdivian companies that sell semiconductors have announced that they plan to decrease their price for semiconductors.
- (D) The government of Kollontay will also set a minimum price for selling semiconductors in that country.
- (E) Emerging companies in countries other than Kollontay will still be able to sell semiconductors in Valdivia at a price below the cost to Valdivian companies to manufacture them.
- 4. An experimental microwave clothes dryer heats neither air nor cloth. Rather, it heats water on clothes, thereby saving electricity and protecting delicate fibers by operating at a lower temperature. Microwaves are waves that usually heat metal objects, but developers of a microwave dryer are perfecting a process that will prevent thin metal objects such as hairpins from heating up and burning clothes.

Which of the following, if true, most strongly indicates that the process, when perfected, will be insufficient to make the dryer readily marketable?

- (A) Metal snap fasteners on clothes that are commonly put into drying machines are about the same thickness as most hairpins.
- (B) Many clothes that are currently placed into mechanical dryers are not placed there along with hairpins or other thin metal objects.
- (C) The experimental microwave dryer uses more electricity than future, improved models would be expected to use.
- (D) Drying clothes with the process would not cause more shrinkage than the currently used mechanical drying process causes.
- (E) Many clothes that are frequently machine-dried by prospective customers incorporate thick metal parts such as decorative brass studs or buttons.

5. Airplane manufacturer: I object to your characterization of our X-387 jets as dangerous. No X-387 in commercial use has ever crashed or even had a serious malfunction.

Airline regulator: The problem with the X-387 is not that it, itself, malfunctions, but that it creates a turbulence in its wake that can create hazardous conditions for aircraft in its vicinity.

The airline regulator responds to the manufacturer by doing which of the following?

- (A) Characterizing the manufacturer's assertion as stemming from subjective interest rather than from objective evaluation of the facts
- (B) Drawing attention to the fact that the manufacturer's interpretation of the word "dangerous" is too narrow
- (C) Invoking evidence that the manufacturer has explicitly dismissed as irrelevant to the point at issue
- (D) Citing statistical evidence that refutes the manufacturer's claim
- (E) Casting doubt on the extent of the manufacturer's knowledge of the number of recent airline disasters
- 6. Damaged nerves in the spinal cord do not regenerate themselves naturally, nor even under the spur of nerve-growth stimulants. The reason, recently discovered, is the presence of nerve-growth inhibitors in the spinal cord. Antibodies that deactivate those inhibitors have now been developed. Clearly, then, nerve repair will be a standard medical procedure in the foreseeable future.

Which of the following, if true, casts the most serious doubt on the accuracy of the prediction above?

- (A) Prevention of the regeneration of damaged nerves is merely a by-product of the main function in the human body of the substances inhibiting nerve growth.
- (B) Certain nerve-growth stimulants have similar chemical structures to those of the antibodies against nerve-growth inhibitors.
- (C) Nerves in the brain are similar to nerves in the spinal cord in their inability to regenerate themselves naturally.
- (D) Researchers have been able to stimulate the growth of nerves not located in the spinal cord by using only nerve-growth stimulants.
- (E) Deactivating the substances inhibiting nerve growth for an extended period would require a steady supply of antibodies.

7. The human body secretes more pain-blocking hormones late at night than during the day. Consequently, surgical patients operated on at night need less anesthesia. Since larger amounts of anesthesia pose greater risks for patients, the risks of surgery could be reduced if operations routinely took place at night.

Which of the following, if true, argues most strongly against the view that surgical risks could be reduced by scheduling operations at night?

- (A) Energy costs in hospitals are generally lower at night than they are during the day.
- (B) More babies are born between midnight and seven o'clock in the morning than at any other time.
- (C) Over the course of a year, people's biological rhythms shift slightly in response to changes in the amounts of daylight to which the people are exposed.
- (D) Nurses and medical technicians are generally paid more per hour when they work during the night than when they work during the day.
- (E) Manual dexterity and mental alertness are lower in the late night than they are during the day, even in people accustomed to working at night.

Ouestions 8-9

Walter: A copy of an artwork should be worth

exactly what the original is worth if the two works are visually indistinguishable. After all, if the two works are visually indistinguishable, they have all the same qualities, and if they have all the same qualities, their prices should be equal.

Marissa:

How little you understand art! Even if someone could make a perfect copy that is visually indistinguishable from the original, the copy would have a different history and hence not have all the same qualities as the original.

- 8. Which of the following is a point at issue between Walter and Marissa?
 - (A) Whether a copy of an artwork could ever be visually indistinguishable from the original
 - (B) Whether the reproduction of a work of art is ever worth more than the original is worth
 - (C) Whether a copy of a work of art is ever mistaken for the original
 - (D) Whether a copy of a work of art could have all the same qualities as the original
 - (E) Whether originality is the only valuable attribute that a work of art can possess
- 9. Marissa uses which of the following techniques in attempting to refute Walter's argument?
 - (A) Attacking his assumption that the price of an artwork indicates its worth
 - (B) Raising a point that would undermine one of the claims on which his conclusion is based
 - (C) Questioning his claim that a perfect copy of a work of art would be visually indistinguishable from the original
 - (D) Giving reason to believe that Walter is unable to judge the quality of a work of art because of his inadequate understanding of the history of art
 - (E) Proposing alternative criteria for determining whether two works of art are visually indistinguishable

10. Magnetic resonance imaging (MRI)—a noninvasive diagnostic procedure—can be used to identify blockages in the coronary arteries. In contrast to angiograms—the invasive procedure customarily used—MRI's pose no risk to patients. Thus, to guarantee patient safety in the attempt to diagnose arterial blockages. MRI's should replace angiograms in all attempts at diagnosing coronary blockages.

Which of the following, if true, would most support the recommendation above?

- (A) Angiograms can be used to diagnose conditions other than blockages in arteries.
- (B) MRI's were designed primarily in order to diagnose blockages in the coronary arteries.
- (C) Angiograms reveal more information about the nature of a blockage than an MRI can.
- (D) An MRI is just as likely as an angiogram to identify an arterial blockage.
- (E) Some patients for whom an angiogram presents no risk are unwilling to undergo an MRI.
- 11. Naturally occurring chemicals cannot be newly patented once their structures have been published. Before a naturally occurring chemical compound can be used as a drug, however, it must be put through the same rigorous testing program as any synthetic compound, culminating in a published report detailing the chemical's structure and observed effects.

If the statements above are true, which of the following must also be true on the basis of them?

- (A) Any naturally occurring chemical can be reproduced synthetically once its structure is known.
- (B) Synthetically produced chemical compounds cannot be patented unless their chemical structures are made public.
- (C) If proven no less effective, naturally occurring chemicals are to be preferred to synthetic compounds for use in drugs.
- (D) Once a naturally occurring compound has been approved for use as a drug, it can no longer be newly patented.
- (E) A naturally occurring chemical cannot be patented unless its effectiveness as a drug has been rigorously established.

12. A public-service advertisement advises that people who have consumed alcohol should not drive until they can do so safely. In a hospital study, however, subjects questioned immediately after they consumed alcohol underestimated the time necessary to regain their driving ability. This result indicates that many people who drink before driving will have difficulty following the advertisement's advice.

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

- (A) Many people, if they plan to drink alcohol, make arrangements beforehand for a nondrinker to drive them home.
- (B) The subjects in the hospital study generally rated their abilities more conservatively than would people drinking alcohol outside a hospital setting.
- (C) Some people refrain from drinking if they will have to drive to get home afterward.
- (D) The subjects in the hospital study were also questioned about the time necessary to regain abilities that do not play an important role in driving safely.
- (E) Awareness of the public-service advertisement is higher among the general population than it was among the subjects in the hospital study.
- 13. Investigator: XYZ Coins has misled its clients by promoting some coins as "extremely rare" when in fact those coins are relatively common and readily available.
 - XYZ agent: That is ridiculous. XYZ Coins is one of the largest coin dealers in the world. We authenticate the coins we sell through a nationally recognized firm and operate a licensed coin dealership.

The XYZ agent's reply is most vulnerable to the criticism that it

- (A) exaggerates the investigator's a claims in order to make them appear absurd
- (B) accuses the investigator of bias but presents no evidence to support that accusation
- (C) fails to establish that other coin dealers do not also authenticate the coins those dealers sell
- (D) lists strengths of XYZ Coins while failing to address the investigator's charge
- (E) provides no definition for the inherently vague phrase "extremely rare"

14. Both Writewell and Express provide round-the-clock telephone assistance to any customer who uses their word-processing software. Since customers only call the hot lines when they find the software difficult to use, and the Writewell hot line receives four times as many calls as the Express hot line, Writewell's word-processing software must be more difficult to use than Express's.

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

- (A) Calls to the Express hot line are almost twice as long, on average, as are calls to the Writewell hot line.
- (B) Express has three times the number of wordprocessing software customers that Writewell has.
- (C) Express receives twice as many letters of complaint about its word-processing software as Writewell receives about its word-processing software.
- (D) The number of calls received by each of the two hot lines has been gradually increasing.
- (E) The Writewell hot-line number is more widely publicized than the Express hot-line number.
- 15. Over the last century, paleontologists have used small differences between fossil specimens to classify triceratops into sixteen species. This classification is unjustified, however, since the specimens used to distinguish eleven of the species come from animals that lived in the same area at the same time.

Which of the following, if true, would enable the conclusion of the argument to be properly drawn?

- (A) Not every species that lived in a given area is preserved as a fossil.
- (B) At least one individual of every true species of triceratops has been discovered as a fossil specimen.
- (C) No geographical area ever supports more than three similar species at the same time.
- (D) In many species, individuals display quite marked variation.
- (E) Differences between fossil specimens of triceratops that came from the same area are no less distinctive than differences between specimens that came from different areas.

16. Many consumers are concerned about the ecological effects of wasteful packaging. This concern probably explains why stores have been quick to stock new cleaning products that have been produced in a concentrated form. The concentrated form is packaged in smaller containers that use less plastic and require less transportation space.

Which of the following, if true, most seriously undermines the explanation offered above?

- (A) Few consumers believe that containers of concentrated cleaning products are merely small packages of regular cleaning products.
- (B) The containers in which concentrated cleaning products are packaged are no harder to recycle than those in which regular cleaning products are packaged.
- (C) Those concentrated cleaning products that are intended to be used diluted have clear instructions for dilution printed on their labels.
- (D) The smaller containers of concentrated cleaning products enable supermarkets and drugstores to increase their revenues from a given shelf space.
- (E) Consumer pressure has led to the elimination of wasteful cardboard packaging that was used for compact discs.

CRITICAL REASONING TEST SECTION 20 25 Minutes 16 Questions

1. In the first half of this year, from January to June, about three million videocassette recorders were sold. This number is only 35 percent of the total number of videocassette recorders sold last year. Therefore, total sales of videocassette recorders will almost certainly be lower for this year than they were for last year.

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

- (A) The total number of videocassette recorders sold last year was lower than the total number sold in the year before that.
- (B) Most people who are interested in owning a videocassette recorder have already purchased one.
- (C) Videocassette recorders are less expensive this year than they were last year.
- (D) Of the videocassette recorders sold last year, almost 60 percent were sold in January.
- (E) Typically, over 70 percent of the sales of videocassette recorders made in a year occur in the months of November and December.
- 2. Mud from a lake on an uninhabited wooded island in northern Lake Superior contains toxic chemicals, including toxaphene, a banned pesticide for cotton that previously was manufactured and used, not in nearby regions of Canada or the northern United States, but in the southern United States. No dumping has occurred on the island. The island lake is sufficiently elevated that water from Lake Superior does not reach it.

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

- (A) The waters of the island lake are more severely polluted than those of Lake Superior.
- (B) The toxaphene was carried to the island in the atmosphere by winds.
- (C) Banning chemicals such as toxaphene does not aid the natural environment.
- (D) Toxaphene has adverse effects on human beings but not on other organisms.
- (E) Concentrations of toxaphene in the soil of cottongrowing regions are not sufficient of be measurable.

3. Last year in the United States, women who ran for state and national offices were about as likely to win as men. However, only about fifteen percent of the candidates for these offices were women. Therefore, the reason there are so few women who win elections for these offices is not that women have difficulty winning elections but that so few women want to run.

Which of the following, if true, most seriously undermines the conclusion given?

- (A) Last year the proportion of women incumbents who won reelection was smaller than the proportion of men incumbents who won reelection.
- (B) Few women who run for state and national offices run against other women.
- (C) Most women who have no strong desire to be politicians never run for state and national offices.
- (D) The proportion of people holding local offices who are women is smaller than the proportion of people holding state and national offices who are women.
- (E) Many more women than men who want to run for state and national offices do not because they cannot get adequate funding for their campaigns.
- 4. Samples from a ceramic vase found at a tomb in Sicily prove that the vase was manufactured in Greece. Since the occupant of the tomb died during the reign of a Sicilian ruler who lived 2,700 years ago, the location of the vase indicates that there was trade between Sicily and Greece 2,700 years ago.

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

- (A) Sicilian potters who lived during the reign of the ruler did not produce work of the same level of quality as did Greek potters.
- (B) Sicilian clay that was used in the manufacture of pottery during the ruler's reign bore little resemblance to Greek clay used to manufacture pottery at that time.
- (C) At the time that the occupant of the tomb was alive, there were ships capable of transporting large quantities of manufactured goods between Sicily and Greece.
- (D) The vase that was found at the Sicilian tomb was not placed there many generations later by descendants of the occupant of the tomb.
- (E) The occupant of the tomb was not a member of the royal family to which the Sicilian ruler belonged.

5. In several cities, the government is going ahead with ambitious construction projects despite the high office-vacancy rates in those cities. The vacant offices, though available for leasing, unfortunately do not meet the requirements for the facilities needed, such as court houses and laboratories. The government, therefore, is not guilty of any fiscal westefulness.

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

- (A) Adaptation of vacant office space to meet the government's requirements, if possible, would not make leasing such office space a more cost-effective alternative to new construction.
- (B) The government prefers leasing facilities to owning them in cases where the two alternatives are equally cost-effective.
- (C) If facilities available for leasing come very close to meeting the government's requirements for facilities the government needs, the government can relax its own requirements slightly and consider those facilities in compliance.
- (D) The government's construction projects would not on being completed, add to the stock of facilities available for leasing in the cities concerned.
- (E) Before embarking on any major construction project, the government is required by law to establish beyond any reasonable doubt that there are no alternatives that are most cost-effective.
- 6. Potato cyst nematodes are a pest of potato crops. The nematodes can lie dormant for several years in their cysts, which are protective capsules, and do not emerge except in the presence of chemicals emitted by potato roots. A company that has identified the relevant chemicals in planning to market them to potato farmers to spread on their fields when no potatoes are planted; any nematodes that emerge will soon starve to death.

Which of the following, if true, best supports the claim that the company's plan will be successful?

- (A) Nematodes that have emerged from their cysts can be killed by ordinary pesticides.
- (B) The only part of a potato plant that a nematode eats is the roots.
- (C) Some bacteria commonly present in the roots of potatoes digest the chemicals that cause the nematodes to emerge from their cysts.
- (D) Trials have shown that spreading even minute quantities of the chemicals on potato fields caused nine-tenths of the nematodes present to emerge from their cysts.
- (E) the chemicals that cause the nematodes to emerge from their cysts are not emitted all the time the potato plant is growing.

7. It is better for the environment if as much of all packaging as possible is made from materials that are biodegradable in landfills. Therefore, it is always a change for the worse to replace packaging made from paper or cardboard with packaging made from plastics that are not biodegradable in landfills.

Which of the following, if true, constitutes the strongest objection to the argument above?

- (A) The paper and cardboard used in packaging are usually not biodegradable in landfills.
- (B) Some plastic used in packaging is biodegradable in landfills.
- (C) In many landfills, a significant proportion of space is taken up by materials other than discarded packaging materials.
- (D) It is impossible to avoid entirely the use of packaging materials that are not biodegradable in landfills.
- (E) Sometimes, in packaging an item, plastics that are not biodegradable in landfills are combined with cardboard.
- 8. Any serious policy discussion about acceptable levels of risk in connection with explosions is not well served if the participants fail to use the word "explosion" and use the phrase "energetic disassembly" instead. In fact, the word "explosion" elicits desirable reactions, such as a heightened level of attention, whereas the substitute phrase does not. Therefore, of the two terms, "explosion" is the one that should be used throughout discussions of this sort.

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

- (A) In the kind of discussion at issue, the advantages of desirable reactions to the term "explosion" outweigh the drawbacks, if any, arising from undesirable reactions to that term.
- (B) The phrase "energetic disassembly" has not so far been used as a substitute for the word "explosion" in the kind of discussion at issue.
- (C) In any serious policy discussion, what is said by the participants is more important than how it is put into words.
- (D) The only reason that people would have for using "energetic disassembly" in place of "explosion" is to render impossible any serious policy discussion concerning explosions.
- (E) The phrase "energetic disassembly" is not necessarily out of place in describing a controlled rather than an accidental explosion.

9. Mannis Corporation's archival records are stored in an obsolete format that is accessible only by its current computer system; thus they are inaccessible when that system is not functioning properly. In order to avoid the possibility of losing access to their archival records in the case of computer malfunction. Mannis plans to replace its current computer system with a new system that stores records in a format that is accessible to several different systems.

The answer to which of the following questions would be most helpful in evaluating the effectiveness of the plan as a means of retaining access to the archival records?

- (A) Will the new computer system require fewer operators than the current system requires?
- (B) Has Mannis Corporation always stored its archival records in a computerized format?
- (C) Will the new computer system that Mannis plans ensure greater security for the records stored than does Mannis' current system?
- (D) Will Mannis' current collection of archival records be readily transferable to the new computer system?
- (E) Will the new computer system be able to perform many more tasks than the current system is able to perform?
- 10. Last year the worldwide paper industry used over twice as much fresh pulp (pulp made directly from raw plant fibers) as recycled pulp (pulp made from wastepaper). A paper-industry analyst has projected that by 2010 the industry will use at least as much recycled pulp annually as it does fresh pulp, while using a greater quantity of fresh pulp than it did last year.

If the information above is correct and the analyst's projections prove to be accurate, which of the following projections must also be accurate?

- (A) In 2010 the paper industry will use at least twice as much recycled pulp as it did last years.
- (B) In 2010 the paper industry will use at least twice as much total pulp as it did last year.
- (C) In 2010 the paper industry will produce more paper from a given amount of pulp than it did last year.
- (D) As compared with last year, in 2010 the paper industry will make more paper that contains only recycled pulp.
- (E) As compared with last year, in 2010 the paper industry will make less paper that contains only fresh pulp.

11.In malaria-infested areas, many children tend to suffer several bouts of malaria before becoming immune to the disease. Clearly, what must be happening is that those children's immune systems are only weakly stimulated by any single exposure to the malaria parasite and need to be challenged several times to produce an effective immune response.

Which of the following, if true, most seriously undermines the explanatory hypothesis?

- (A) Immediately after a child has suffered a bout of malaria, the child's caregivers tend to go to great lengths in taking precautions to prevent another infection, but this level of attention is not sustained.
- (B) Malaria is spread from person to person by mosquitoes, and mosquitoes have become increasingly resistant to the pesticides used to control them.
- (C) A certain gene, if inherited by children from only one of their parents, can render those children largely immune to infection with malaria.
- (D) Antimalaria vaccines, of which several are in development, are all designed to work by stimulating the body's immune system.
- (E) There are several distinct strains of malaria, and the body's immune response to any one of them does not protect it against the others.
- 12. An advertisement designed to convince readers of the great durability of automobiles manufactured by the Deluxe Motor Car Company cites as evidence the fact that over half of all automobiles built by the company since 1970 are still on the road today, compared to no more than a third for any other manufacturer.

Which of the following, if true, most strongly supports the advertisement's argument?

- (A) After taking inflation into account, a new Deluxe automobile costs only slightly more than a new model did in 1970.
- (B) The number of automobiles built by Deluxe each year has not increased sharply since 1970.
- (C) Owners of Deluxe automobiles typically keep their cars well maintained.
- (D) Since 1970, Deluxe has made fewer changes in the automobiles it manufactures than other car companies have made in their automobiles.
- (E) Deluxe automobiles have been selling at relatively stable prices in recent years.

13. Many state legislatures are considering proposals to the effect that certain policies should be determined not by the legislature itself but by public referenda in which every voter can take part. Critics of the proposals argue that the outcomes of public referenda would be biased, since wealthy special-interest groups are able to influence voters' views by means of television advertisements.

Which of the following, if true, most strengthens the critics' argument?

- (A) Many state legislators regard public referenda as a way of avoiding voting on issues on which their constituents are divided.
- (B) During elections for members of the legislature, the number of people who vote is unaffected by whether the candidates run television advertisements or not.
- (C) Proponents of policies that are opposed by wealthy special-interest groups are often unable to afford advertising time on local television stations.
- (D) Different special-interest groups often take opposing positions on questions of which policies the state should adopt.
- (E) Television stations are reluctant to become associated with any one political opinion, for fear of losing viewers who do not share that opinion.

14. Advertisement:

Of the many over-the-counter medications marketed for the relief of sinus headache. SineEase costs the least per dose. And SineEase is as effective per dose as the most effective of those other medications. So for relief from sinus headaches, SineEase is the best buy.

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

- (A) Most of the over-the-counter medications marketed for the relief of sinus headache are equally effective per dose in providing such relief.
- (B) Many of the over-the-counter medications marketed for the relief of sinus headache contain the same active ingredient as SineEase.
- (C) People who suffer from frequent sinus headaches are strongly advised to consult a doctor before taking any over-the-counter medication.
- (D) An over-the-counter medication that is marketed for the relief of symptoms of head cold is identical in composition to SineEase but costs less per dose.
- (E) The pre dose price for any given over-thecounter medication marketed for the relief of sinus headache is higher for smaller packages than it is for larger packages.

15. In the United States, vacationers account for more than half of all visitors to what are technically called "pure aquariums" but for fewer than one quarter of all visitors to zoos, which usually include a "zoo aquarium" of relatively modest scope.

Which of the following, if true, most helps to account for the difference described above between visitors to zoos and visitors to pure aquariums?

- (A) In cities that have both a zoo and a pure aquarium, local residents are twice as likely to visit the aquarium as they are to visit the zoo.
- (B) Virtually all large metropolitan areas have zoos, whereas only a few large metropolitan areas have pure aquariums.
- (C) Over the last ten years, newly constructed pure aquariums have outnumbered newly established zoos by a factor of two to one.
- (D) People who visit a zoo in a given year are two times more likely to visit a pure aquarium that year than are people who do not visit a zoo.
- (E) The zoo aquariums of zoos that are in the same city as a pure aquarium tend to be smaller than the aquariums of zoos that have no pure aquarium nearby.
- 16. Which of the following, if true, is the most logical completion of the argument below?

The tax system of the Republic of Grootland encourages borrowing by granting its taxpayers tax relief for interest paid on loans. The system also discourages saving by taxing any interest earned on savings. Nevertheless, it is clear that Grootland's tax system does not consistently favor borrowing over saving, for if it did, there would be no—.

- (A) tax relief in Grootland for those portions of a taxpayer's income, if any, that are set aside to increase that taxpayer's total savings
- (B) tax relief in Grootland for the processing fees that taxpayers pay to lending institutions when obtaining certain kinds of loans
- (C) tax relief in Grootland for interest that taxpayers are charged on the unpaid balance in credit card accounts
- (D) taxes due in Grootland on the cash value of gifts received by taxpayers from banks trying to encourage people to open savings accounts
- (E) taxes due in Grootland on the amount that a taxpayer has invested in interest-bearing savings accounts