

Critical Reasoning Practice(50 ques)

1. The average normal infant born in the United States weighs between twelve and fourteen pounds at the age of three months. Therefore, if a three-month-old child weighs only ten pounds, its weight gain has been below the United States average.

Which of the following indicates a flaw in the reasoning above?

- (a) Weights in only one measure of normal infant development.
 - (b) Some three-month-old children weigh as much as seventeen pounds.
 - (c) It is possible for a normal child to weigh ten pounds at birth.
 - (d) The Phrase "below average" does not necessarily mean insufficient.
 - (e) Average weight gain is not the same as average weight.
2. Red blood cells in which the malarial-fever parasite resides are eliminated from a person's body after 120 days. Because the parasite cannot travel to a new generation of red blood cells, any fever that develops in a person more than 120 days after that person has moved to a malaria-free region is not due to the malarial parasite.

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

- (a) The fever caused by the malarial parasite may resemble the fever caused by flu viruses
- (b) The anopheles mosquito, which is the principal insect carrier of the malarial parasite, has been eradicated in many parts of the world.
- (c) Many malarial symptoms other than the fever, which can be suppressed with anti-malarial medication, can reappear within 120 days after the medication is discontinued.
- (d) In some cases, the parasite that causes malarial fever travels to cells of the spleen, which are less frequently eliminated from a person's body than are red blood cells.
- (e) In any region infested with malarial-carrying mosquitoes, there are individuals who appear to be immune to malaria.

3. Fact 1 : Television advertising is becoming less effective : the proportion of brand names promoted on television that viewers of the advertising can recall is slowly decreasing.

Fact 2 : Television viewers recall commercials aired first or last in a cluster of consecutive commercials far better than they recall commercials aired somewhere in the middle.

Fact 2 would be most likely to contribute to an explanation of fact 1 if which of the following were also true ?

- (a) The average television viewer currently recalls fewer than half the brand names promoted in commercials he or she saw.
- (b) The total time allotted to the average cluster of consecutive television commercials is decreasing.
- (c) The average number of hours per day that people spend watching television is decreasing.
- (d) The average number of clusters of consecutive commercials per hour of television is increasing.
- (e) The average number of television commercials in a cluster of consecutive commercials is increasing.

4)The number of people diagnosed as having a certain intestinal disease has dropped significantly in a rural county this year, as compared to last year. Health officials attribute this decrease entirely to improved sanitary conditions at water-treatment plants, which made for cleaner water this year and thus reduced the incidence of the disease.

Which of the following, if true, would most seriously weaken the health officials explanation for the lower incidence of the disease ?

- (a) Many new water-treatment plants have been built in the last five years in the rural county.

(b) Bottled spring water has not been consumed in significantly different quantities by people diagnosed as having the intestinal disease, as compared to people who did not contract the disease.

(c) Because of a new diagnostic technique, many people who until this year would have been diagnosed as having the intestinal disease are now correctly diagnosed as suffering from intestinal ulcers.

(d) Because of medical advances this year, far fewer people who contract the intestinal disease will develop severe cases of the disease.

(e) The water in the rural county was brought up to the sanitary standards of the water in neighboring counties ten years ago.

5. The price the government pays for standard weapons purchased from military contractors is determined by a pricing method called "historical costing". Historical costing allows contractors to protect their profits by adding a percentage increase, based on the current rate of inflation, to the previous year's contractual price.

Which of the following statements, if true, is the best basis for a criticism of historical costing as an economically sound pricing method for military contracts ?

(a) The government might continue to pay for past inefficient use of funds.

(b) The rate of inflation has varied considerably over the past twenty years.

(c) The contractual price will be greatly affected by the cost of materials used for the products.

(d) Many taxpayers question the amount of money the government spends on military contracts.

(e) The pricing method based on historical costing might not encourage the development of innovative weapons.

6. Some who favor putting governmental enterprises into private hands suggest that conservation objectives would in general be better served if private environmental groups were put in charge of operating and financing the national park system, which is now run by the government.

Which of the following, assuming that it is a realistic possibility, argues most strongly against the suggestion above ?

(a) Those seeking to abolish all restrictions on exploiting the natural resources of the parks might join the private environmental groups as members and eventually take over their leadership.

(b) Private environmental groups might not always agree on the best ways to achieve conservation objectives.

(c) If they wished to extend the park system, the private environmental groups might have to seek contributions from major donors and general public.

(d) There might be competition among private environmental groups for control of certain park areas.

(e) Some endangered species, such as the California condor, might die out despite the best efforts of the private environmental groups, even if those groups are not hampered by insufficient resources.

7. A recent spate of launching and operating mishaps with television satellites led to a corresponding surge in claims against companies underwriting satellite insurance. As a result, insurance premiums shot up, making satellites more expensive to launch and operate. This, in turn, has added to the pressure to squeeze more performance out of currently operating satellites.

Which of the following, if true, taken together with the information above, best supports the conclusion that the cost of television satellites will continue to increase ?

(a) Since the risk to insurers of satellites is spread over relatively few units, insurance premiums are necessarily very high.

(b) When satellites reach orbit and then fail, the causes of failure are generally impossible to pinpoint with confidence.

(c) The greater the performance demands placed on satellites, the more frequently those satellites break down.

(d) Most satellites are produced in such small numbers that no economies of scale can be realized.

(e) Since many satellites are built by unwieldy international consortia, inefficiencies are inevitable.

8. Rural households have more purchasing power than do urban or suburban households at the same income level, since some of the income urban and suburban households use for food and shelter can be used by rural households for other needs.

Which of the following inferences is best supported by the statement made above ?

(a) The average rural household includes more people than does the average urban or suburban household.

(b) Rural households have lower food and housing costs than do either urban or suburban households.

(c) Suburban households generally have more purchasing power than do either rural or urban households.

(d) The median income of urban and suburban households is generally higher than that of rural households.

(e) All three types of households spend more of their income on food and housing than on all other purchases combined.

9. In 1985 state border colleges in Texas lost the enrollment of more than half, on average, of the Mexican nationals they had previously served each year. Teaching faculties have alleged that this extreme drop resulted from a rise in tuition for international and out-of-state students from \$40 to \$120 per credit hour.

Which of the following, if feasible, offers the best prospects for alleviating the problem of the drop enrollment of Mexican nationals as the teaching faculties assessed it ?

- (a) Providing grants-in-aid to Mexican nationals to study in Mexican universities.
- (b) Allowing Mexican nationals to study the Texas border colleges and to pay in-state tuition rates, which are the same as the previous international rate.
- (c) Reemphasizing the goals and mission of the Texas state border colleges as serving both in-state students and Mexican nationals.
- (d) Increasing the financial resources of Texas colleges by raising the tuition for in-state students attending state institutions
- (e) Offering career counseling for those Mexican nationals who graduate from state border colleges and intend to return to Mexico.

10. Affirmative action is good business. So asserted the National Association of Manufacturers while urging retention of an executive order requiring some federal contractors to set numerical goals for hiring minorities and women. "Diversity in work force participation has produced new ideas in management, product development, and marketing". The association claimed.

The association's argument as it is presented in the passage above would be most strengthened if which of the following were true ?

- (a) The percentage of minority and women workers in business has increased more slowly than many minority and women's groups would prefer.
- (b) Those businesses with the highest percentage of minority and women workers are those that have been the most innovative and profitable.

(c) Disposable income has been as fast among minorities and women as among the population as a whole.

(d) The biggest growth in sales in the manufacturing sector has come in industries that market the most innovative products.

(e) Recent improvements in management practices have allowed many manufacturers to experience enormous gains in worker productivity.

11. If the airspace around centrally located airports were restricted to commercial airliners and only those private planes equipped with radar, most of the private plane traffic would be forced to use outlying airfields. Such a reduction in the amount of private-plane traffic would reduce the risk of midair collision around the centrally located airports.

The conclusion drawn in the first sentence depends on which of the following assumptions?

(a) Outlying airfields would be as convenient as centrally located airports for most pilots of private planes.

(b) Most outlying airfields are not equipped to handle commercial-airline traffic.

(c) Most private planes that use centrally located airports are not equipped with radar.

(d) Commercial airliners are at greater risk of becoming involved in midair collisions than are private planes.

(e) A reduction in the risk of midair collision would eventually lead to increases in commercial-airline traffic.

12. If the airspace around centrally located airports were restricted to commercial airliners and only those private planes equipped with radar, most of the private-plane traffic would be forced to use outlying airfields. Such a reduction in the amount of private-plane traffic would reduce the risk of midair collision around the centrally located airports.

Which of the following, if true, would most strengthen the conclusion drawn in the second sentence ?

(a) Commercial airliners are already required by law to be equipped with extremely sophisticated radar systems.

(b) Centrally located airports are experiencing overcrowded airspace primarily because of sharp increases in commercial-airline traffic.

(c) Many pilots of private planes would rather buy radar equipment than be excluded from centrally located airports.

(d) The number of midair collisions that occur near centrally located airports has decreased in recent years.

(e) Private planes not equipped with radar systems cause a disproportionately large number of midair collisions around centrally located airports.

13. Which of the following best completes the passage below ?

Established companies concentrate on defending what they already have. Consequently, they tend not to be innovative themselves and tend to underestimate the effects of the innovations of others. The clearest example of this defensive strategy is the fact that_____.

(a) ballpoint pens and soft-tip markers have eliminated the traditional market for fountain pens, clearing the way for the marketing of fountain pens as luxury or prestige items.

(b) a highly successful automobile was introduced by the same company that had earlier introduced a model that had been a dismal failure.

(c) an open-successful manufacturer of slide rules reacted to the introduction of electronic calculators by trying to make better slide rules.

(d) one of the first models of modern accounting machines, designed for use in the banking industry, was purchased by a public library as well as by banks

(e) the inventor of a commonly used anesthetic did not intend the product to be used by dentists, who currently account for almost the entire market for that drug.

14. Most archaeologists have held that people first reached the Americas less than 20,000 years ago by crossing a land bridge into North America. But recent discoveries of human shelters in South America dating from 32,000 years ago have led researchers to speculate the people arrived in South America first, after voyaging across the Pacific and then spread northward.

Which of the following, if it were discovered, would be pertinent evidence against the speculation above?

(a) A rock shelter near Pittsburgh, Pennsylvania, contains evidence of use by human beings 19,000 years ago.

(b) Some North American sites of human habitation predate any sites found in South America.

(c) The climate is warmer at the 32,000-year-old South American site than at the oldest known North American site.

(d) The site in South America that was occupied 32,000 years ago was continuously occupied until 6,000 year ago.

(e) The last Ice Age, between 11,500 and 20,000 years ago, considerably lowered worldwide sea levels.

15. In Asia, where palm trees are non-native, the trees' flowers have traditionally been pollinated by hand, which has kept palm fruit productivity unnaturally low. When weevils known to be efficient pollinators of palm flowers were introduced into Asia in 1980, palm fruit productivity increased-by up to fifty percent in some areas-but then decreased sharply in 1984.

Which of the following statements, if true, would best explain the 1984 decrease in productivity ?

(a) Prices for palm fruit fell between 1980 and 1984 following the rise in production and a concurrent fall in demand.

(b) Imported trees are often more productive than native trees because the imported ones have left behind their pests and diseases in their native lands.

(c) Rapid increases in productivity tend to deplete trees of nutrients needed for the development of the fruit-producing female flowers.

(d) The weevil population in Asia remained at approximately the same level between 1980 and 1984.

(e) Prior to 1980 another species of insect pollinated the Asian palm trees, but not as efficiently as the species of weevil that was introduced in 1980.

16. Since the mayor's publicity campaign for Greenville's bus service began six months ago, morning automobile traffic into the midtown area of the city has decreased seven percent. During the same period, there has been an equivalent rise in the number of persons riding buses into the midtown area. Obviously, the mayor's publicity campaign has convinced many people to leave their cars at home and ride the bus to work.

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

(a) Fares for all bus routes in Greenville have risen an average of five percent during the past six months.

(b) The mayor of Greenville rides the bus to City Hall in the city's midtown area.

(c) Road reconstruction has greatly reduced the number of lanes available to commuters in major streets leading to the midtown area during the past six months.

(d) The number of buses entering the midtown area of Greenville during the morning hours is exactly the same now as it was one year ago.

(e) Surveys show that longtime bus riders are no more satisfied with the Greenville bus service than they were before the mayor's publicity campaign began.

17. In the aftermath of a worldwide stock-market crash. Country T claimed that the severity of the stock-market crash it experienced resulted from the accelerated process of denationalization many of its industries underwent shortly before the crash.

Which of the following, if it could be carried out, would be most useful in an evaluation of Country T's assessment of the causes of the severity of its stock-market crash ?

(a) calculating the average loss experienced by individual traders in Country T during the crash

(b) using economic theory to predict the most likely date of the next crash in Country T

(c) comparing the total number of shares sold during the worst days of the crash in Country T to the total number of shares sold in Country T just prior to the crash

(d) comparing the severity of the crash in Country T to the severity of the crash in countries otherwise economically similar to Country T that have not experienced recent denationalization

(e) comparing the long-term effects of the crash on the purchasing power of the currency of Country T to the immediate, more severe short-term effects of the crash on the purchasing power of the currency of Country T that have not experienced recent denationalization

18. With the emergence of biotechnology companies, it was feared that they would impose silence about proprietary results on their in-house researchers and their academic consultants. This constraint, in turn, would slow the development of biological science and engineering.

Which of the following, if true, would tend to weaken most seriously the prediction of scientific secrecy described above ?

(a) Biotechnological research funded by industry has reached some conclusions that are of major scientific importance.

(b) When the results of scientific research are kept secret, independent researchers are unable to build on those results.

(c) Since the research priorities of biotechnology companies are not the same as those of academic institutions, the financial support of research by such companies distorts the research agenda.

(d) To enhance the companies' standing in the scientific community, the biotechnology companies encourage employees to publish their results, especially results that are important.

(e) Biotechnology companies devote some of their research resources to problems that are of fundamental scientific importance and that are not expected to produce immediate practical applications.

19. Some people have questioned the judge's objectivity in cases of sex discrimination against women. But the record shows that in sixty percent of such cases, the judge has decided in favor of the women. This record demonstrates that the judge has not discriminated against women in cases of sex discrimination against women.

The argument above is flawed in that it ignores the possibility that

(a) a large number of the judge's cases arose out of allegations of sex discrimination against women

- (b) many judges find it difficult to be objective in cases of sex discrimination against women
- (c) the judge is biased against women defendants or plaintiffs in cases that do not involve sex discrimination
- (d) the majority of the cases of sex discrimination against women that have reached the judge's court have been appealed from a lower court
- (e) the evidence shows that the women should have won in more than sixty percent of the judge's cases involving sex discrimination against women

20. The tobacco industry is still profitable and projections are that it will remain so. In the United States this year, the total amount of tobacco sold by tobacco farmers has increased, even though the number of adults who smoke has decreased.

Each of the following, if true, could explain the simultaneous increase in tobacco sales and decrease in the number of adults who smoke EXCEPT :

- (a) During this year, the number of women who have begun to smoke is greater than the number of men who have quit smoking
- (b) The number of teen-age children who have begun to smoke this year is greater than the number of adults who have quit smoking during the same period
- (c) During this year, the number of nonsmokers who have begun to use chewing tobacco or snuff is greater than the number of people who have quit smoking
- (d) The people who have continued to smoke consume more tobacco per person than they did in the past
- (e) More of the cigarettes made in the United States this year were exported to other countries than was the case last year.

21. Kale has more nutritional value than spinach. But since collard greens have more nutritional value than lettuce, it follows that kale has more nutritional value than lettuce.

Any of the following, if introduced into the argument as an additional premise, makes the argument above logically correct EXCEPT :

- (a) Collard greens have more nutritional value than kale
- (b) Spinach has more nutritional value than lettuce
- (c) Spinach has more nutritional value than collard greens
- (d) Spinach and collard greens have the same nutritional value
- (e) Kale and collard greens have the same nutritional value

22. On the basis of a decrease in the college-age population, many colleges now anticipate increasingly smaller freshman classes each year. Surprised by a 40 percent increase in qualified applicants over the previous year, however, administrators at Nice College now plan to hire more faculties for courses taken by all freshmen.

Which of the following statements about Nice College's current qualified applicants, if true, would strongly suggest that the administrators' plan is flawed ?

- (a) A substantially higher percentage than usual plan to study for advanced degrees after graduation from college.
- (b) According to their applications, their level of participation in extracurricular activities and varsity sports is unusually high.
- (c) According to their application, none of them lives in a foreign country.
- (d) A substantially lower percentage than usual rate Nice College as their first choice among the colleges to which they are applying.

(e) A substantially lower percentage than usual list mathematics as their intended major.

23. A researcher discovered that people who have low levels of immune-system activity tend to score much lower on test of mental health than do people with normal or high immune-system activity. The researcher concluded from this experiment that the immune system protects against mental illness as well as against physical disease.

The researcher's conclusion depends on which of the following assumptions ?

- (a) High immune-system activity protects against mental illness better than normal immune-system activity does.
- (b) Mental illness is similar to physical disease in its effects on body systems.
- (c) People with high immune-system activity cannot develop mental illness.
- (d) Mental illness does not cause people's immune-system activity to decrease.
- (e) Psychological treatment of mental illness is not as effective as is medical treatment.

24. A milepost on the towpath read "21" on the side facing the hiker as the approached it and "23" on its back. She reasoned that the next milepost forward on the path would indicate that she was halfway between one end of the path and the other. However, the milepost one mile further on read "20" facing her and "24" behind.

Which of the following, if true, would explain the discrepancy described above ?

- (a) The numbers of the next milepost had been reversed.
- (b) The numbers on the mileposts indicate kilometers, not miles.
- (c) The facing numbers indicate miles to the end of the path, not miles from the beginning.
- (d) A milepost was missing between the two the hiker encountered.

(e) The mileposts had originally been put in place for the use of mountain bikers, not for hikers.

25. Airline : Newly developed collision-avoidance systems, although not fully tested to discover potential malfunctions, must be installed immediately in passenger planes. Their mechanical warnings enable pilots to avoid crashes.

Pilots : Pilots will not fly in planes with collision-avoidance system that re not fully tested. Malfunctioning systems could mislead pilots, causing crashes.

The pilots' objection is most strengthened if which of the following is true ?

(a) It is always possible for mechanical devices to malfunction.

(b) Jet engines, although not fully tested when first put into use, have achieved exemplary performance and safety records.

(c) Although collision-avoidance systems will enable pilots to avoid some crashes, the likely malfunctions of the not-fully-tested systems will cause even more crashes.

(d) Many airline collisions are caused in party by the exhaustion of overworked pilots.

(e) Collision-avoidance systems, at this stage of development, appear to have worked better in passenger planes than in cargo planes during experimental flights made over a six-month period.

26. Guitar strings often go “dead”—become less responsive and bright in tone—after a few weeks of intense use. A researcher whose son is a classical guitarist hypothesized that dirt and oil, rather than changes in the material properties of the string, were responsible.

Which of the following investigations is most likely to yield significant information that would help to evaluate the researcher’s hypothesis ?

- (a) Determining if a metal alloy is used to make the strings used by classical guitarists
- (b) Determining whether classical guitarists make their strings go dead faster than do folk guitarists
- (c) Determining whether identical lengths of string, of the same gauge, go dead at different rates when strung on various brands of guitars.
- (d) Determining whether a dead string and a new string produce different qualities of sound
- (e) Determining whether smearing various substances on new guitar strings causes them to go dead

27. Most consumers do not get much use out of the sports equipment they purchase. For example, seventeen percent of the adults in the United States own jogging shoes, but only forty-five percent of the owners jog more than once a year, and only seventeen percent jog more than once a week.

Which of the following, if true, casts most doubt on the claim that most consumers get little use out of the sports equipment they purchase ?

- (a) Joggers are most susceptible to sports injuries during the first six months in which they jog.
- (b) Joggers often exaggerate the frequency with which they jog in surveys designed to elicit such information.

- (c) Many consumers purchase jogging shoes for use in activities other than jogging.
- (d) Consumers who take up jogging often purchase an athletic shoe that can be used in other sports.
- (e) Joggers who jog more than once a week are often active participants in other sports as well.

28. Two decades after the Emerald River Dam was built, none of the eight fish species native to the Emerald River was still reproducing adequately in the river below the dam. Since the dam reduced the annual range of water temperature in the river below the dam from 50 degrees to 6 degrees, scientists have hypothesized that sharply rising water temperatures must be involved in signaling the native species to begin the reproductive cycle.

Which of the following statements, if true, would most strengthen the scientists' hypothesis ?

- (a) The native fish species were still able to reproduce only in side streams of the river below the dam where the annual temperature range remains approximately 50 degrees.
- (b) Before the dam was built, the Emerald River annually overflowed its banks, creating backwaters that were critical breeding areas for the native species of fish.
- (c) The lowest recorded temperature of the Emerald River before the dam was built was 34 degrees, whereas the lowest recorded temperature of the river after the dam was built has been 43 degrees.
- (c) Nonnative species of fish, introduced into the Emerald River after the dam was built, have begun competing with the declining native fish species for food and space.
- (e) Five of the fish species native to the Emerald River are not native to any other river in North America.

29. It is true that it is against international law to sell plutonium to countries that do not yet have nuclear weapons. But if United States companies do not do so, companies in other countries will.

Which of the following is most like the argument above in its logical structure ?

(a) It is true that it is against the police department's policy to negotiate with kidnappers. But if the police want to prevent loss of life, they must negotiate in some cases.

(b) It is true that it is illegal to refuse to register for military service. But there is a long tradition in the United States of conscientious objection to serving in the armed forces.

(c) It is true that it is illegal for a government official to participate in a transaction in which there is an apparent conflict of interest. But if the facts are examined carefully, it will clearly be seen that there was no actual conflict of interest in the defendant's case.

(d) It is true that it is against the law to burglarize people's homes. But someone else certainly would have burglarized that house if the defendant had not done so first.

(e) It is true that company policy forbids supervisors to fire employees without two written warnings. But there have been many supervisors who have disobeyed this policy.

30. In recent years many cabinetmakers have been winning acclaim as artists. But since furniture must be useful, cabinetmakers must exercise their craft with an eye to the practical utility of their product. For this reason, cabinetmaking is not art.

Which of the following is an assumption that supports drawing the conclusion above from the reason given for that conclusions ?

- (a) Some furniture is made to be placed in museums, where it will not be used by anyone.
- (b) Some cabinetmakers are more concerned than others with the practical utility of the products they produce.
- (c) Cabinetmakers should be more concerned with teh practical utility of their products than they currently are.
- (d) An object is not an art object if its maker pays attention to the object's practical utility.
- (e) Artists are not concerned with the monetary value of their products.

31. Although custom prosthetic bone replacements produced through a new computer-aided design process will cost more than twice as much as ordinary replacements, custom replacements should still be cost-effective. Not only will surgery and recovery time be reduced, but custom replacements should last longer, thereby reducing the need for further hospital stays.

Which of the following must be studied in order to evaluate the arguments presented above ?

- (a) The amount of time a patient spends in surgery versus the amount of time spent recovering from surgery
- (b) The amount by which the cost of producing custom replacements has declined with the introduction of the new technique for producing them

- (c) The degree to which the use of custom replacements is likely to reduce the need for repeat surgery when compared with the use of ordinary replacement
- (d) The degree to which custom replacements produced with the new technique are more carefully manufactured than are ordinary replacement
- (e) The amount by which custom replacements produced with the new technique will drop in cost as the production procedures become standardized and applicable on a larger scale.

32. Extinction is a process that can depend on a variety of ecological, geographical, and physiological variables. These variables affect different species of organisms in different ways, and should, therefore, yield a random pattern of extinctions. However, the fossil record shows that extinction occurs in a surprisingly definite pattern, with many species vanishing at the same time.

Which of the following, if true, forms the best basis for at least a partial explanation of the patterned extinctions revealed by the fossil record ?

- (a) Major episodes of extinction can result from widespread environmental disturbances that affect numerous different species.
- (b) Certain extinction episodes selectively affect organisms with particular sets of characteristics unique to their species.
- (c) Some species become extinct because of accumulated gradual changes in their local environments.
- (d) In geologically recent times, for which there is no fossil record, human intervention has changed the pattern of extinctions.
- (e) Species that are widely dispersed are the least likely to become extinct.

33. Neither a rising standard of living nor balanced trade, by itself, establishes a country's ability to compete in the international marketplace. Both are required simultaneously since standards of living can rise because of growing trade deficits and trade can be balanced by means of a decline in a country's standard of living.

If the facts stated in the passage above are true, a proper test of a country's ability to be competitive is its ability to

- (a) balance its trade while its standard of living rises
- (b) balance its trade while its standard of living falls
- (c) increase trade deficits while its standard of living rises
- (d) decrease trade deficits while its standard of living fails
- (e) keep its standard of living constant while trade deficits rise.

34. Certain messenger molecules fight damage to the lungs from noxious air by telling the muscle cells encircling the lungs airways to contract. This partially seals off the lungs. An asthma attack occurs when the messenger molecules are activated unnecessarily, in response to harmless things like pollen or household dust.

Which of the following, if true, points to the most serious flaw of a plan to develop a medication that would prevent asthma attacks by blocking receipt of any messages sent by the messenger molecules referred to above ?

- (a) Researchers do not yet know how the body produces the messenger molecules that trigger asthma attacks.
- (b) Researchers do not yet know what makes one person's messenger molecules more easily activated than another's.
- (c) Such a medication would not become available for several years, because of long lead times in both development and manufacture.

- (d) Such a medication would be unable to distinguish between messages triggered by pollen and household dust and messages triggered by noxious air.
- (e) Such a medication would be a preventative only and would be unable to alleviate an asthma attack once it had started.

35. Since the routine use of antibiotics can give rise to resistant bacteria capable of surviving antibiotic environments, the presence of resistant bacteria in people could be due to the human use of prescription antibiotics. Some scientists, however, believe that most resistant bacteria in people derive from human consumption of bacterially infected meat.

Which of the following statements, if true, would most significantly strengthen the hypothesis of the scientists ?

- (a) Antibiotics are routinely included in livestock feed so that livestock producers can increase the rate of growth of their animals.
- (b) Most people who develop food poisoning from bacterially infected meat are treated with prescription antibiotics.
- (c) The incidence of resistant bacteria in people has tended to be much higher in urban areas than in rural areas where meat is of comparable quality.
- (d) People who have never taken prescription antibiotics are those least likely to develop bacteria.
- (e) Livestock producers claim that resistant bacteria in animals cannot be transmitted to people through infected meat.

36. The recent decline in the value of the dollar was triggered by a prediction of slower economic growth in the coming year. But the prediction would not have adversely affected the dollar had it not been for the government's huge budget deficit, which must therefore be decreased to prevent future currency declines.

Which of the following, if true, would most seriously weaken the conclusion about how to prevent future currency declines ?

- (a) The government has made little attempt to reduce the budget deficit.
- (b) The budget deficit has not caused a slowdown in economic growth.
- (c) The value of the dollar declined several times in the year prior to the recent prediction of slower economic growth.
- (d) Before there was a large budget deficit, predictions of slower economic growth frequently caused declines in the dollar's value.
- (e) When there is a large budget deficit, other events in addition to predictions of slower economic growth sometimes trigger declines in currency value.

37. Which of the following best completes the passage below ?

At a recent conference on environmental threats to the North Sea, most participating countries favored uniform controls on the quality of effluents, whether or not specific environmental damage could be attributed to a particular source of effluent. What must, of course, be shown, in order to avoid excessively restrictive controls, is that_____.

- (a) any uniform controls that are adopted are likely to be implemented without delay
- (b) any substance to be made subject to controls can actually cause environmental damage
- (c) the countries favoring uniform controls are those generating the largest quantities of effluents

(d) all of any given pollutant that is to be controlled actually reaches the North Sea at present

(e) environmental damage already inflicted on the North Sea is reversible

38. Traditionally, decision-making by managers that is reasoned step-by-step has been considered preferable to intuitive decision-making. However, a recent study found that top managers used intuition significantly more than did most middle-or lower-level managers. This confirms the alternative view that intuition is actually more effective than careful, methodical reasoning.

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

(a) Methodical, step-by-step reasoning is inappropriate for making many real-life management decisions

(b) Top managers have the ability to use either intuitive reasoning or methodical, step-by-step reasoning in making decisions

(c) The decisions made by middle-and lower-level managers can be made as easily by using methodical reasoning as by using intuitive reasoning

(d) Top managers use intuitive reasoning in making the majority of their decisions

(e) Top managers are more effective at decision-making than middle-or lower-level managers

39. The imposition of quotas limiting imported steel will not help the big American steel mills. In fact, the quotas will help “mini-mills” flourish in the United States. Those small domestic mills will take more business from the big American steel mills than would have been taken by the foreign steel mills in the absence of quotas.

Which of the following, if true, would cast the most serious doubt on the claim made in the last sentence above ?

- (a) Quality rather than price is a major factor in determining the type of steel to be used for a particular application.
- (b) Foreign steel mills have long produced grades of steel comparable in quality to the steel produced by the big American mills.
- (c) American quotas on imported goods have often induced other countries to impose similar quotas on American goods.
- (d) Domestic “mini-mills” consistently produce better grades of steel than do the big American mills.
- (e) Domestic “mini-mills” produce low-volume, specialized types of steels that are not produced by the big American steel mills.

40. Correctly measuring the productivity of service workers is complex. Consider, for example, postal workers: they are often said to be more productive if more letters are delivered per postal worker. But is this really true? What if more letters are lost or delayed per worker at the same time that more are delivered?

The objection implied above to the productivity measure described is based on doubts about the truth of which of the following statements?

- (a) Postal workers are representative of service workers in general.
- (b) The delivery of letters is the primary activity of the postal service.
- (c) Productivity should be ascribed to categories of workers, not to individuals.
- (d) The quality of services rendered can appropriately be ignored in computing productivity.
- (e) The number of letters delivered is relevant to measuring the productivity of postal workers.

41. Male bowerbirds construct elaborately decorated nests, or bowers. Basing their judgement on the fact that different local populations of bowerbirds of the same species build bowers that exhibit different building and decorative styles, researchers have concluded that the bowerbirds' building styles are a culturally acquired, rather than a genetically transmitted, trait.

Which of the following, if true, would most strengthen the conclusion drawn by the researchers ?

- (a) There are more common characteristics than there are differences among the bower-building styles of the local bowerbird population that has been studied most extensively.
- (b) Young male bowerbirds are inept at bower-building and apparently spend years watching their elders before becoming accomplished in the local bower style.
- (c) The bowers of one species of bowerbird lack the towers and ornamentation characteristics of the bowers of most other species of bowerbird.
- (d) Bowerbirds are found only in New Guinea and Australia, where local population of the birds apparently seldom have contact with one another.
- (e) It is well known that the song dialects of some songbirds are learned rather than transmitted genetically.

42. A greater number of newspapers are sold in Town S than in Town T. Therefore, the citizens of Town S are better informed about major world events than are the citizens of Town T.

Each of the following, if true, weakens the conclusion above EXCEPT :

- (a) Town S has a larger population than Town T.
- (b) Most citizens of Town T work in Town S and buy their newspapers there.
- (c) The average citizen of Town S spends less time reading newspapers than does the average citizen of Town T.

(d) A weekly newspaper restricted to the coverage of local events is published in Town S.

(e) The average newsstand price of newspapers sold in Town S is lower than the average price of newspapers sold in Town T.

43. A drug that is highly effective in treating many types of infection can, at present, be obtained only from the bark of the ibora, a tree that is quite rare in the wild.

It takes the bark of 5,000 trees to make one kilogram of the drug. It follows, therefore, that continued production of the drug must inevitably lead to the ibora's extinction.

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

(a) The drug made from ibora bark is dispensed to doctors from a central authority.

(b) The drug made from ibora bark is expensive to produce.

(c) The leaves of the ibora are used in a number of medical products.

(d) The ibora can be propagated from cuttings and grown under cultivation.

(e) The ibora generally grows in largely inaccessible places.

44. High levels of fertilizer and pesticides, needed when farmers try to produce high yields of the same crop year after year, pollute water supplies. Experts therefore urge farmers to diversify their crops and to rotate their plantings yearly. To receive governmental price-support benefits for a crop, farmers must have produced that same crop for the past several years.

The statements above, if true, best support which of the following conclusions ?

(a) The rules for governmental support of farm prices work against efforts to reduce water pollution.

- (b) The only solution to the problem of water pollution from fertilizers and pesticides is to take farmland out of production.
- (c) Farmers can continue to make a profit by rotating diverse crops, thus reducing costs for chemicals, but not by planting the same crop each year.
- (d) New farming techniques will be developed to make it possible for farmers to reduce the application of fertilizers and pesticides.
- (e) Governmental price supports for farm products are set at levels that are not high enough to allow farmers to get out of debt.

45. Shelby Industries manufactures and sells the same gauges as Jones Industries. Employee wages account for forty percent of the cost of manufacturing gauges at both Shelby Industries and Jones Industries. Shelby Industries is seeking a competitive advantage over Jones Industries. Therefore, to promote this end, Shelby Industries should lower employee wages.

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

- (a) Because they make a small number of precision instruments, gauge manufacturers cannot receive volume discounts on raw materials.
- (b) Lowering wages would reduce the quality of employee work, and this reduced quality would lead to lowered sales.
- (c) Jones Industries has taken away twenty percent of Shelby Industries business over the last year.
- (d) Shelby Industries pays its employees, on average, ten percent more than does Jones Industries.
- (e) Many people who work for manufacturing plants live in areas in which the manufacturing plant they work for is the only industry.

46. some communities in Florida are populated almost exclusively by retired people and contain few, if any, families with small children. yet these communities are home to thriving businesses specializing in the rental of furniture for infants and small children.

Which of the following, if true, best reconciles the seeming discrepancy described above ?

- (a) The businesses specializing in the rental of children's furniture buy their furniture from distributors outside of Florida.
- (b) The few children who do reside in these communities all know each other and often make overnight visits to one another's houses.
- (c) Many residents of these communities who move frequently prefer renting their furniture to buying it outright.
- (d) Many residents of these communities must provide for the needs of visiting grandchildren several weeks a year.
- (e) Children's furniture available for rental is of the same quality as that available for sale in the stores.

47. Large national budget deficits do not cause large trade deficits. If they did, countries with the largest budget deficits would also have the largest trade deficits. In fact, when deficit figures are adjusted so that different countries are reliably comparable to each other, there is no such correlation.

If the statements above are all true, which of the following can properly be inferred on the basis of them ?

- (a) Countries with large national budget deficits tend to restrict foreign trade.
- (b) Reliable comparisons of the deficit figures of one country with those of another are impossible.
- (c) Reducing a country's national budget deficit will not necessarily result in a lowering of any trade deficit that country may have.

(d) When countries are ordered from largest to smallest in terms of population, the smallest countries generally have the smallest budget and trade deficits.

(e) Countries with the largest trade deficits never have similarly large national budget deficits

48. "Fast cycle time" is a strategy of designing a manufacturing organization to eliminate bottlenecks and delays in production. Not only does it speed up production, but it also assures quality. The reason is that the bottlenecks and delays cannot be eliminated unless all work is done right the first time.

The claim about quality made above rests on a questionable presupposition that

(a) any flaw in work on a product would cause a bottleneck or delay and so would be prevented from occurring on a "fast cycle" production line

(b) the strategy of "fast cycle time" would require fundamental rethinking of product design

(c) the primary goal of the organization is to produce a product of unexcelled quality, rather than to generate profits for stockholders.

(d) "fast cycle time" could be achieved by shaving time off each of the component processes in production cycle

(e) "fast cycle time" is a concept in business strategy that has not yet been put into practice in a factory

49. Many breakfast cereals are fortified with vitamin supplements. Some of these cereals provide 100 percent of the recommended daily requirement of vitamins. Nevertheless, a well-balanced breakfast, including a variety of foods, is a better source of those vitamins than are such fortified breakfast cereals alone.

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

- (a) In many foods, the natural combination of vitamins with other nutrients makes those vitamins more usable by the body than are vitamins added in vitamin supplements.
- (b) People who regularly eat cereals fortified with vitamin supplements sometimes neglect to eat the foods in which the vitamins occur naturally.
- (c) Foods often must be fortified with vitamin supplements because naturally occurring vitamins are removed during processing.
- (d) Unprocessed cereals are naturally high in several of the vitamins that are usually added to fortified breakfast cereals.
- (e) Cereals containing vitamin supplements are no harder to digest than similar cereals without added vitamins.

50. Which of the following best completes the passage below ?

The more worried investors are about losing their money, the more they will demand a high potential return on their investment; great risks must be offset by the chance of great rewards. This principle is the fundamental one in determining interest rates and it is illustrated by the fact that_____.

- (a) successful investors are distinguished by an ability to make very risky investments without worrying about their money
- (b) lenders receive higher interest rates on unsecured loans than on loans backed by collateral
- (c) in times of high inflation, the interest paid to depositors by banks can actually be below the rate of inflation

(d) at any one time, a commercial bank will have a single rate of interest that it will expect all of its individual borrowers to pay

(e) the potential return on investment in a new company is typically lower than the potential return on investment in a well-established company