



GMAT® Critical Reasoning

Practice Set - 1

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Introduction

A lot of GMAT instructors recommend that to improve their score on the Critical Reasoning section of the GMAT, students should practice from LSAT Logical Reasoning questions. While overall this strategy is fine, one problem students face is that a lot of the questions on the LSAT are not representative of those on the GMAT; some have dubious answers while some are of a question type that is not tested on the GMAT at all.

To help students overcome this problem we, at Aristotle, have come out with compilation of 101 LSAT questions that are very similar to those that students are likely to see on the GMAT. All these questions have been compiled from past official LSAT tests (tests which are readily available in the public domain) and we haven't made any changes to these.

An answer key has been provided at the end of this booklet but the explanations for each answer have not been provided. In case you want the detailed explanation to a question(s) please post the question(s) on the 'Forums' section on our website – www.aristotleprep.com – and one of our experts will revert within 24 hours of the same.

Good luck!

CR Practice Set - 1

1. **Ann:** All the campers at Camp Winnehatchee go to Tri-Cities High School

Bill: That's not true. Some Tri-Cities students are campers at Camp Lakemont.

Bill's answer can be best explained on the assumption that he has interpreted Ann's remark to mean that

- (A) most of the campers at Camp Lakemont come from high schools other than Tri-Cities
 - (B) most Tri-Cities High School students are campers at Camp Winnehatchee
 - (C) some Tri-Cities High School students have withdrawn from Camp Lakemont
 - (D) all Tri-Cities High School students have withdrawn from Camp Lakemont
 - (E) only campers at Camp Winnehatchee are students at Tri-Cities High School
2. More than a year ago, the city announced that police would crack down on illegally parked cars and that resources would be diverted from writing speeding tickets to ticketing illegally parked cars. But no crackdown has taken place. The police chief claims that resources have had to be diverted from writing speeding tickets to combating the city's staggering drug problem. Yet the police are still writing as many speeding tickets as ever. Therefore, the excuse about resources being tied up in fighting drug-related crime simply is not true.

The conclusion in the passage depends on the assumption that

- (A) every member of the police force is qualified to work on combating the city's drug problem
 - (B) drug-related crime is not as serious a problem for the city as the police chief claims it is
 - (C) writing speeding tickets should be as important a priority for the city as combating drug-related crime
 - (D) the police could be cracking down on illegally parked cars and combating the drug problem without having to reduce writing speeding tickets
 - (E) the police cannot continue writing as many speeding tickets as ever while diverting resources to combating drug-related crime
3. Dried grass clippings mixed into garden soil gradually decompose, providing nutrients for beneficial soil bacteria. This results in better-than-average plant growth. Yet mixing fresh grass clippings into garden soil usually causes poorer-than-average plant growth.

Which one of the following, if true, most helps to explain the difference in plant growth described above?

- (A) The number of beneficial soil bacteria increases whenever any kind of plant material is mixed into garden soil.
- (B) Nutrients released by dried grass clippings are immediately available to beneficial soil bacteria.

- (C) Some dried grass clippings retain nutrients originally derived from commercial lawn fertilizers, and thus provide additional enrichment to the soil.
- (D) Fresh grass clippings mixed into soil decompose rapidly, generating high levels of heat that kill beneficial soil bacteria.
- (E) When a mix of fresh and dried grass clippings is mixed into garden soil, plant growth often decreases.

4. A gas tax of one cent per gallon would raise one billion dollars per year at current consumption rates. Since a tax of fifty cents per gallon would therefore raise fifty billion dollars per year, it seems a perfect way to deal with the federal budget deficit. This tax would have the additional advantage that the resulting drop in the demand for gasoline would be ecologically sound and would keep our country from being too dependent on foreign oil producers.

Which one of the following most clearly identifies an error in the author's reasoning?

- (A) The author cites irrelevant data.
 - (B) The author relies on incorrect current consumption figures.
 - (C) The author makes incompatible assumptions.
 - (D) The author mistakes an effect for a cause.
 - (E) The author appeals to conscience rather than reason.
5. There is no reason why the work of scientists has to be officially confirmed before being published. There is a system in place for the confirmation or disconfirmation of scientific finding, namely, the replication of results by other scientists. Poor scientific work on the part of any one scientist, which can include anything from careless reporting practices to fraud, is not harmful. It will be exposed and rendered harmless when other scientists conduct the experiments and obtain disconfirmatory results.

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

- (A) Scientific experiments can go unchallenged for many years before they are replicated.
 - (B) Most scientists work in universities, where their work is submitted to peer review before publication.
 - (C) Most scientists are under pressure to make their work accessible to the scrutiny of replication.
 - (D) In scientific experiments, careless reporting is more common than fraud.
 - (E) Most scientists work as part of a team rather than alone.
6. **Alice:** Quotas on automobile imports to the United States should be eliminated. Then domestic producers would have to compete directly with Japanese manufacturers and would be forced to produce higher-quality cars. Such competition would be good for consumers.

David: You fail to realize, Alice, that quotas on automobile imports are pervasive worldwide. Since German, Britain, and France have quotas, so should the United States.

Which one of the following most accurately characterizes David's response to Alice's statement?

- (A) David falsely accuses Alice of contradicting herself.
- (B) David unfairly directs his argument against Alice personally.
- (C) David uncovers a hidden assumption underlying Alice's position.
- (D) David takes a position that is similar to the one Alice has taken.
- (E) David fails to address the reasons Alice cites in favour of her conclusion.

7. Governments have only one response to public criticism of socially necessary services: regulation of the activity of providing those services. But governments inevitably make the activity more expensive by regulating it, and that is particularly troublesome in these times of strained financial resources. However, since public criticism of child-care services has undermined all confidence in such services, and since such services are socially necessary, the government is certain to respond.

Which one of the following statements can be inferred from the passage?

- (A) The quality of child care will improve.
- (B) The cost of providing child-care services will increase.
- (C) The government will use funding to foster advances in child care.
- (D) If public criticism of policy is strongly voiced, the government is certain to respond.
- (E) If child-care services are not regulated, the cost of providing child care will not increase.

8. Advertisers are often criticized for their unscrupulous manipulation of people's tastes and wants. There is evidence, however, that some advertisers are motivated by moral as well as financial considerations. A particular publication decided to change its image from being a family newspaper to concentrating on sex and violence, thus appealing to a different readership. Some advertisers withdrew their advertisements from the publication, and this must have been because they morally disapproved of publishing salacious material.

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

- (A) The advertisers switched their advertisements to other family newspapers.
- (B) Some advertisers switched from family newspapers to advertise in the changed publication.
- (C) The advertisers expected their product sales to increase if they stayed with the changed publication, but to decrease if they withdrew.
- (D) People who generally read family newspapers are not likely to buy newspapers that concentrate on sex and violence.
- (E) It was expected that the changed publication would appeal principally to those in a different income group.

9. If retail stores experience a decrease in revenues during this holiday season, then either attitudes toward extravagant gift-giving have changed or prices have risen beyond the level most people can afford. If attitudes have changed, then we all have something to celebrate this season. If prices have risen beyond the level most people can afford, then it must be that salaries have not kept pace with rising prices during the past year.

Assuming the premises above to be true, if salaries have kept pace with rising prices during the past year, which one of the following must be true?

- (A) Attitudes toward extravagant gift-giving have changed.
 - (B) Retail stores will not experience a decrease in retail sales during this holiday season.
 - (C) Prices in retail stores have not risen beyond the level that most people can afford during this holiday season.
 - (D) Attitudes toward extravagant gift-giving have not changed, and stores will not experience a decrease in revenues during this holiday season.
 - (E) Either attitudes toward extravagant gift-giving have changed or prices have risen beyond the level that most people can afford during this holiday season.
10. The "suicide wave" that followed the United States stock market crash of October 1929 is more legend than fact. Careful examination of the monthly figures on the causes of death in 1929 shows that the number of suicides in October and in November was comparatively low. In only three other months were the monthly figures lower. During the summer months, when the stock market was flourishing, the number of suicides was substantially higher.

Which one of the following, if true, would best challenge the conclusion of the passage?

- (A) The suicide rate is influenced by many psychological, interpersonal, and societal factors during any given historical period.
 - (B) October and November have almost always had relatively high suicide rates, even during the 1920s and 1930s.
 - (C) The suicide rate in October and November of 1929 was considerably higher than the average for those months during several preceding and following years.
 - (D) During the years surrounding the stock market crash, suicide rates were typically lower at the beginning of any calendar year than toward the end of that year.
 - (E) Because of seasonal differences, the number of suicides in October and November of 1929 would not be expected to be the same as those for other months.
11. Learning how to build a nest plays an important part in the breeding success of birds. For example, Dr. Snow has recorded the success of a number of blackbirds in several successive years. He finds that birds nesting for the first time are less successful in breeding than are older birds, and also less successful than they themselves are a year later. This cannot be a mere matter of size and strength, since blackbirds, like the great majority of birds, are fully grown when they leave

the nest. Thus, it is difficult to avoid the conclusion that they benefit by their nesting experience.

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

- (A) Blackbirds build better nests than other birds.
 - (B) The capacity of blackbirds to lay viable eggs increases with each successive trial during the first few years of reproduction.
 - (C) The breeding success of birds nesting for the second time is greater than that of birds nesting for the first time.
 - (D) Smaller and weaker blackbirds breed just as successfully as bigger and stronger blackbirds.
 - (E) Up to 25 percent of all birds are killed by predators before they start to nest.
12. How do the airlines expect to prevent commercial plane crashes? Studies have shown that pilot error contributes to two-thirds of all such crashes. To address this problem, the airlines have upgraded their training programs by increasing the hours of classroom instruction and emphasizing communication skills in the cockpit. But it is unrealistic to expect such measures to compensate for pilots' lack of actual flying time. Therefore, the airlines should rethink their training approach to reducing commercial crashes.

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

- (A) Training programs can eliminate pilot errors.
- (B) Commercial pilots routinely undergo additional training throughout their careers.
- (C) The number of airline crashes will decrease if pilot training programs focus on increasing actual flying time.
- (D) Lack of actual flying time is an important contributor to pilot error in commercial plane crashes.
- (E) Communication skills are not important to pilot training programs.

Questions 13-14 are based on the following:

Despite improvements in treatment for asthma, the death rate from this disease has doubled during the past decade from its previous rate. Two possible explanations for this increase have been offered. First, the recording of deaths due to asthma has become more widespread and accurate in the past decade than it had been previously. Second, there has been an increase in urban pollution. However, since the rate of deaths due to asthma has increased dramatically even in cities with long-standing, comprehensive medical records and with little or no urban pollution, one must instead conclude that the cause of increased deaths is the use of bronchial inhalers by asthma sufferers to relieve their symptoms.

13. Each of the following, if true, provides support to the argument EXCEPT:
- (A) Urban populations have doubled in the past decade.
 - (B) Records of asthma deaths are as accurate for the past twenty years as for the past ten years.
 - (C) Evidence suggests that bronchial inhalers make the lungs more sensitive to irritation by airborne pollen.

- (D) By temporarily relieving the symptoms of asthma, inhalers encourage sufferers to avoid more beneficial measures.
- (E) Ten years ago bronchial inhalers were not available as an asthma treatment.

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

- (A) Urban pollution has not doubled in the past decade.
- (B) Doctors and patients generally ignore the role of allergies in asthma.
- (C) Bronchial inhalers are unsafe, even when used according to the recommended instructions.
- (D) The use of bronchial inhalers aggravates other diseases that frequently occur among asthma sufferers and that often lead to fatal outcomes even when the asthma itself does not.
- (E) Increased urban pollution, improved recording of asthma deaths, and the use of bronchial inhalers are the only possible explanations of the increased death rate due to asthma.

15. There is little point in looking to artists for insights into political issues. Most of them hold political views that are less insightful than those of any reasonably well-educated person who is not an artist. Indeed, when taken as a whole, the statements made by artists, including those considered great, indicate that artistic talent and political insight are rarely found together.

Which one of the following can be inferred from the passage?

- (A) There are no artists who have insights into political issues.
- (B) A thorough education in art makes a person reasonably well educated.
- (C) Every reasonably well-educated person who is not an artist has more insight into political issues than any artist.
- (D) Politicians rarely have any artistic talent.
- (E) Some artists are no less politically insightful than some reasonably well-educated persons who are not artists.

16. **Rita:** The original purpose of government farm subsidy programs was to provide income stability for small family farmers. But most farm-subsidy money goes to a few farmers with large holdings. Payments to farmers whose income, before subsidies, is greater than \$100,000 a year should be stopped.

Thomas: It would be impossible to administer such a cut-off point. Subsidies are needed during the planting and growing season, but farmers do not know their income for given calendar year until tax returns are calculated and submitted the following April.

Which one of the following, if true, is the strongest counter Rita can make to Thomas' objection?

- (A) It has become difficult for small farmers to obtain bank loans to be repaid later by money from subsidies.
- (B) Having such a cut-off point would cause some farmers whose income would otherwise exceed \$100,000 to reduce their plantings.

- (C) The income of a farmer varies because weather and market prices are not stable from year to year.
- (D) If subsidy payments to large farmers were eliminated the financial condition of the government would improve.
- (E) Subsidy cut-offs can be determined on the basis of income for the preceding year.

17. Modern physicians often employ laboratory tests, in addition to physical examinations, in order to diagnose diseases accurately. Insurance company regulations that deny coverage for certain laboratory tests therefore decrease the quality of medical care provided to patients.

Which one of the following is an assumption that would serve to justify the conclusion above?

- (A) Physical examinations and the uncovered laboratory tests together provide a more accurate diagnosis of many diseases than do physical examinations alone.
- (B) Many physicians generally oppose insurance company regulations that, in order to reduce costs, limit the use of laboratory tests.
- (C) Many patients who might benefit from the uncovered laboratory tests do not have any form of health insurance.
- (D) There are some illnesses that experienced physicians can diagnose accurately from physicians examination alone.
- (E) Laboratory tests are more costly to perform than are physical examinations.

18. Oil analysts predict that if the price of oil falls by half, the consumer's purchase price for gasoline made from this oil will also fall by half.

Which one of the following, if true, would cast the most serious doubt on the prediction made by the oil analysts?

- (A) Improved automobile technology and new kinds of fuel for cars have enabled some drivers to use less gasoline.
- (B) Gasoline manufacturers will not expand their profit margins.
- (C) There are many different gasoline companies that compete with each other to provide the most attractive price to consumers.
- (D) Studies in several countries show that the amount of gasoline purchased by consumers initially rises after the price of gasoline has fallen.
- (E) Refining costs, distribution costs, and taxes, none of which varies significantly with oil prices, constitute a large portion of the prices of gasoline.

19. A survey was recently conducted among ferry passengers on the North Sea. Among the results was this: more of those who had taken anti-seasickness medication before their trip reported symptoms of seasickness than those who had not taken such medication. It is clear then, that despite claims by drug companies that clinical tests show the contrary, people would be better off not taking anti-seasickness medications.

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

- (A) Given rough enough weather, most ferry passengers will have some symptoms of seasickness.
- (B) The clinical tests reported by the drug companies were conducted by the drug companies' staffs.
- (C) People who do not take anti-seasickness medication are just as likely to respond to a survey on seasickness as people who do.
- (D) The seasickness symptoms of the people who took anti-seasickness medication would have been more severe had they not taken the medication.
- (E) People who have spent money on anti-seasickness medication are less likely to admit symptoms of seasickness than those who have not.

20. Economic considerations colour every aspect of international dealings, and nations are just like individuals in that the lender sets the terms of its dealings with the borrower. That is why a nation that owes money to another nation cannot be world leader.

The reasoning in the passage assumes which one of the following?

- (A) A nation that does not lend to any other nation cannot be a world leader.
- (B) A nation that can set the terms of its dealings with other nations is certain to be a world leader.
- (C) A nation that has the terms of its dealings with another nation set by that nation cannot be a world leader.
- (D) A nation that is a world leader can borrow from another nation as long as that other nation does not set the terms of the dealings between the two nations.
- (E) A nation that has no dealings with any other nation cannot be world leader.

21. **Political theorist:** The chief foundations of all governments are the legal system and the police force and as there cannot be a good legal system where the police are not well paid, it follows that where the police are well paid there will be good legal system.

The reasoning in the argument is not sound because it fails to establish that:

- (A) many governments with bad legal systems have poorly paid police forces.
- (B) bad governments with good legal systems must have poorly paid police forces.
- (C) a well-paid police force cannot be effective without a good legal system.
- (D) a well-paid police force is sufficient to guarantee a good legal system
- (E) some bad governments have good legal systems.

22. Court records from medieval France show that in the years 1300 to 1400 the number of people arrested in the French realm for "violent interpersonal crimes" (not committed in wars) increased by 30 percent over the number of people arrested for such crimes in the years 1200 to 1300. The increase was not the result of false arrests; therefore, medieval France had a higher level of documented interpersonal violence in the years 1300 to 1400 than in the years 1200 to 1300.

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

- (A) In the years 1300 to 1400 the French government's category of violent crimes included an increasing variety of interpersonal crimes that are actually nonviolent.
- (B) Historical accounts by monastic chroniclers in the years 1300 to 1400 are filled with descriptions of violent attacks committed by people living in the French realm
- (C) The number of individual agreements between two people in which they swore oaths not to attack each other increased substantially after 1300.
- (D) When English armies tried to conquer parts of France in the mid- to late 1300s, violence in the northern province of Normandy and the south-western province of Gascony increased.
- (E) The population of medieval France increased substantially during the first five decades of the 1300s until the deadly bubonic plague decimated the population of France after 1348.

23. Rhizobium bacteria living in the roots of bean plants or other legumes produce fixed nitrogen which is one of the essential plant nutrients and which for non-legume crops, such as wheat normally must be supplied by applications of nitrogen-based fertilizer. So if biotechnology succeeds in producing wheat strains whose roots will play host to Rhizobium bacteria, the need for artificial fertilizers will be reduced.

The argument above makes which one of the following assumptions?

- (A) Biotechnology should be directed toward producing plants that do not require artificial fertilizer.
 - (B) Fixed nitrogen is currently the only soil nutrient that must be supplied by artificial fertilizer for growing wheat crops.
 - (C) There are no naturally occurring strains of wheat or other grasses that have Rhizobium bacteria living in their roots.
 - (D) Legumes are currently the only crops that produce their own supply of fixed nitrogen.
 - (E) Rhizobium bacteria living in the roots of wheat would produce fixed nitrogen.
24. Current legislation that requires designated sections for smokers and non-smokers on the premises of privately owned businesses is an intrusion into the private sector that cannot be justified. The fact that studies indicate that non-smokers might be harmed by inhaling the smoke from others' cigarettes is not the main issue. Rather, the main issue concerns the government's violation of the right of private businesses to determine their own policies and rule.

Which one of the following is principle that, if accepted, could enable the conclusion to be properly drawn?

- (A) Government intrusion into the policies and rules of private businesses is justified only when individuals might be harmed.
- (B) The right of individuals to breathe safe air supersedes the right of businesses to be free from government intrusion.
- (C) The right of businesses to self-determination overrides whatever right or duty the government may have to protect the individual.
- (D) It is the duty of private businesses to protect employees from harm in the workplace.
- (E) Where the rights of businesses and the duty of government conflict, the main issue is finding a successful compromise.

25. Leachate is a solution, frequently highly contaminated, that develops when water permeates a landfill site. If and only if the landfill's capacity to hold liquids is exceeded does the leachate escape into the environment, generally in unpredictable quantities. A method must be found for disposing of leachate. Most landfill leachate is sent directly to sewage treatment plants, but not all sewage plants are capable of handling the highly contaminated water.

Which one of the following can be inferred from the passage?

- (A) The ability to predict the volume of escaping landfill leachate would help solve the disposal problem.
 - (B) If any water permeates a landfill, leachate will escape into the environment.
 - (C) No sewage treatment plants are capable of handling leachate.
 - (D) Some landfill leachate is sent to sewage treatment plants that are incapable of handling it.
 - (E) If leachate does not escape from a landfill into the environment, then the landfill's capacity to hold liquids has not been exceeded.
26. The soaring prices of scholarly and scientific journals have forced academic libraries used only by academic researchers to drastically reduce their list of subscriptions. Some have suggested that in each academic discipline subscription decisions should be determined solely by a journal's usefulness in that discipline, measured by the frequency with which it is cited in published writings by researchers in the discipline.

Which one of the following, if true, most seriously calls into question the suggestion described above?

- (A) The non-academic readership of a scholarly or scientific journal can be accurately gauged by the number of times articles appearing in it are cited in daily newspapers and popular magazines.
 - (B) The average length of a journal article in some sciences, such as physics, is less than half the average length of a journal article in some other academic disciplines, such as history.
 - (C) The increasingly expensive scholarly journals are less and less likely to be available to the general public from non-academic public libraries.
 - (D) Researchers often will not cite a journal article that has influenced their work if they think that the journal in which it appears is not highly regarded by the leading researchers in the mainstream of the discipline.
 - (E) In some academic disciplines, controversies which begin in the pages of one journal spill over into articles in other journals that are widely read by researchers in the discipline.
27. The average level of fat in the blood of people suffering from acute cases of disease W is lower than the average level for the population as a whole. Nevertheless, most doctors believe that reducing blood-fat levels is an effective way of preventing acute W.

Which one of the following, if true, does most to justify this apparently paradoxical belief?

- (A) The blood level of fat for patients who have been cured of W is on average the same as that for the population at large.
- (B) Several of the symptoms characteristic of acute W have been produced in laboratory animals fed large doses of a synthetic fat substitute, though acute W itself has not been produced in this way.
- (C) The progression from latent to acute W can occur only when the agent that causes acute W absorbs large quantities of fat from the patient's blood.
- (D) The levels of fat in the blood of patients who have disease W respond abnormally slowly to changes in dietary intake of fat.
- (E) High levels of fat in the blood are indicative of several diseases that are just as serious as W.

28. Baking for winter holidays is tradition that may have a sound medical basis. In midwinter, when days are short, many people suffer from a specific type of seasonal depression caused by lack of sunlight. Carbohydrates, both sugars and starches, boost the brain's levels of serotonin, a neurotransmitter that improve the mood. In this respect, carbon hydrates act on the brain in the same way as some antidepressants. Thus, eating holiday cookies may provide an effective form of self-prescribed medication.

Which one of the following can be properly inferred from the passage?

- (A) Seasonal depression is one of the most easily treated forms of depression.
- (B) Lack of sunlight lowers the level of serotonin in the brain.
- (C) People are more likely to be depressed in midwinter than at other times of the year.
- (D) Some antidepressants act by changing the brain's level of serotonin.
- (E) Raising the level of neurotransmitters in the brain effectively relieves depression.

29. The current proposal to give college students a broader choice in planning their own courses of study should be abandoned. The students who are supporting the proposal will never be satisfied, no matter what requirements are established. Some of these students have reached their third year without declaring a major. One first-year student has failed to complete four required courses. Several others have indicated a serious indifference to grades and intellectual achievement.

A flaw in the argument is that it does which one of the following?

- (A) avoids the issue by focusing on supporters of the proposal
- (B) argues circularly by assuming the conclusion is true in stating the premises.
- (C) fails to define the critical term "satisfied"
- (D) distorts the proposal advocated by opponents
- (E) uses the term "student" equivocally

30. The question whether intelligent life exists elsewhere in the universe is certainly imprecise because we are not sure how different from us something might be and still count as "intelligent life". Yet we cannot just decide to define "intelligent life" in

some more precise way since it is likely that we will find and recognize intelligent life elsewhere in the universe only if we leave our definitions open to new, unimagined possibilities.

The argument can most reasonably be interpreted as an objection to which one of the following claims?

- (A) The question whether intelligent life exists elsewhere in the universe is one that will never be correctly answered.
- (B) Whether or not there is intelligent life elsewhere in the universe, our understanding of intelligent life is limited.
- (C) The question about the existence of intelligent life elsewhere in the universe must be made more precise if we hope to answer it correctly.
- (D) The question whether there is intelligent life elsewhere in the universe is so imprecise as to be meaningless.
- (E) The question whether there is intelligent life elsewhere in the universe is one we should not spend our time trying to answer.

31. **Pedro:** Unlike cloth diapers, disposable diapers are a threat to the environment. Sixteen billion disposable diapers are discarded annually, filling up landfills at an alarming rate. So people must stop buying disposable diapers and use cloth diapers.

Maria: But you forget that cloth diapers must be washed in hot water, which requires energy. Moreover, the resulting wastewater pollutes our rivers. When families use diaper services, diapers must be delivered by fuel-burning trucks that pollute the air and add to traffic congestion.

Maria objects to Pedro's argument by

- (A) claiming that Pedro overstates the negative evidence about disposable diapers in the course of his argument in favour of cloth diapers.
 - (B) indicating that Pedro draws a hasty conclusion, based on inadequate evidence about cloth diapers.
 - (C) pointing out that there is an ambiguous use of the word "disposable" in Pedro's argument
 - (D) demonstrating that cloth diapers are a far more serious threat to the environment than disposable diapers are
 - (E) suggesting that the economic advantages of cloth diapers outweigh whatever environmental damage they may cause
32. In an experiment, two-year-old boys and their fathers made pie dough together using rolling pins and other utensils. Each father-son pair used a rolling pin that was distinctively different from those used by the other, "father-son pairs, and each father repeated the phrase "rolling pin" each time his son used it. But when the children were asked to identify all of the rolling pins among a group of kitchen utensils that included several rolling pins, each child picked only the one that he had used.

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

- (A) The children did not grasp the function of rolling pin.

- (B) No two children understood the name "rolling pin" to apply to the same object
- (C) The children understood that all rolling pins have the same general shape.
- (D) Each child was able to identify correctly only the utensils that he had used.
- (E) The children were not able to distinguish the rolling pins they used from other rolling pins.

33. When 100 people who have not used cocaine are tested for cocaine use, on average only 5 will test positive. By contrast, of every 100 people who have used cocaine 99 will test positive. Thus, when a randomly chosen group of people is tested for cocaine use, the vast majority of those who test positive will be people who have used cocaine.

A reasoning error in the argument is that the argument

- (A) attempts to infer a value judgment from purely factual premises.
- (B) attributes to every member of the population the properties of the average member of the population.
- (C) fails to take into account what proportion of the population have used cocaine.
- (D) ignores the fact that some cocaine users do not test positive.
- (E) advocates testing people for cocaine use when there is no reason to suspect that they have used cocaine.

34. With the passage of the new tax reform law the annual tax burden on low-income taxpayers will be reduced, on average, by anywhere from \$100 to \$300. Clearly, tax reform is in the interest of low-income taxpayers.

Which one of the following, if true, most undermines the conclusion above?

- (A) Tax reform, by simplifying the tax code will save many people the expense of having an accountant do their taxes.
- (B) Tax reform, by eliminating tax incentives to build rental housing, will push up rents an average of about \$40 per month for low-income taxpayers.
- (C) Low-income taxpayers have consistently voted for those political candidates who are strong advocates of tax reform.
- (D) The new tax reform laws will permit low and middle-income taxpayers to deduct Child-care expenses from their taxes.
- (E) Under the new tax reform laws, many low-income taxpayers who now pay taxes will no longer be required to do so.

35. If we are to expand the exploration of our solar system our next manned flight should be to Phobos, one of Mars's moons, rather than to Mars itself. The flight times to each are the same but the Phobos expedition would require less than half the fuel load of a Mars expedition and would, therefore, be much less costly. So, it is clear that Phobos should be our next step in space exploration.

Which one of the following, if true, would most help to explain the difference in fuel requirement?

- (A) More equipment would be required to explore Phobos than to explore Mars.
- (B) Smaller spaceships require less fuel than larger spaceships.

- (C) Information learned during the trip to Phobos can be used during a subsequent trip to Mars.
- (D) The shortest distance between Phobos and Mars is less than half the shortest distance Between Earth and Mars.
- (E) Lift-off for the return trip from Phobos requires much less fuel than that from Mars because of Phobos weaker gravitational pull.

36. Scientific research that involves international collaboration has produced papers of greater influence, as measured by the number of times a paper is cited in subsequent papers, than has research without any collaboration. Papers that result from international collaboration are cited an average of seven times, whereas papers with single authors are cited only three times on average. This difference shows that research projects conducted by international research teams are of greater importance than those conducted by single researchers.

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

- (A) Prolific writers can inflate the number of citations they receive by citing themselves in subsequent papers.
- (B) It is possible to ascertain whether or not a paper is the product of international collaboration by determining the number of citations it has received
- (C) The number of citations a paper receives is a measure of the importance of the research it reports.
- (D) The collaborative efforts of scientists who are citizens of the same country do not produce papers that are as important as papers that are produced by international collaboration.
- (E) International research teams tend to be more generously funded than are single researchers.

37. It is more desirable to have some form of socialized medicine than a system of medical care relying on the private sector. Socialized medicine is more broadly accessible than is private-sector system. In addition, since countries with socialized medicine have a lower infant mortality rate than do countries with a system relying entirely on the private sector, socialized medicine seems to be technologically superior.

Which one of the following best indicates a flaw in the argument about the technological superiority of socialized medicine?

- (A) The lower infant mortality rate might be due to the systems allowing greater access to Medical care
- (B) There is no necessary connection between the economic system of socialism and Technological achievement.
- (C) Infant mortality is a reliable indicator of the quality of medical care for children.
- (D) No list is presented of the countries whose infant mortality statistics are summarized under the two categories, "socialized" and "private-sector".
- (E) The argument presupposes the desirability of socialized medicine, which is what the Argument seeks to-establish.

38. **Lourdes:** Dietary fibre is an important part of a healthful diet. Experts recommend that adults consume 20 to 35 grams of fibre a day.

Kyra: But a daily intake of fibre that is significantly above that recommended level interferes with mineral absorption, especially the absorption of calcium. The public should be told to cut act on fibre intake

Which one of the following, if true, most undermines Kyra's recommendation?

- (A) Among adults, the average consumption of dietary fibre is at present approximately 10 grams a day.
- (B) The more a food is processed, the more the fibre is broken down and the lower the fibre content.
- (C) Many foodstuffs that are excellent sources of fibre are economical and readily available
- (D) Adequate calcium intake helps prevent the decrease in bone mass known as osteoporosis.
- (E) Many foodstuffs that are excellent sources of fibre are popular with consumers.

39. **Book Review:** When I read a novel set in a city I know well, I must see that the writer knows the city as well as I do if I am to take that writer seriously. If the writer is faking I know immediately and do not trust the writer. When a novelist demonstrates the required knowledge, I trust the story teller, so I trust the tale. This trust increases my enjoyment of a good novel. Peter Lee's second novel is set in San Francisco, in this novel, as in his first, Lee passes my test with flying colours.

Which one of the following can be properly inferred from the passage?

- (A) The book reviewer enjoys virtually any novel written by a novelist whom she trusts
- (B) If the book reviewer trusts the novelist as a storyteller, the novel in question must be set in a city the book reviewer knows well
- (C) Peter Lee's first novel was set in San Francisco
- (D) The book reviewer does not trust any novel set in a city that she does not know well
- (E) The book reviewer does not believe that she knows San Francisco better than Peter Lee does

40. Prominent business executives often play active roles in United States presidential campaigns as fundraisers or backroom strategists but few actually seek to become president themselves. Throughout history the great majority of those who have sought to become president have been lawyers, military leaders, or full-time politicians. This is understandable, for the personality and skills that make for success in business do not make for success in politics. Business is largely hierarchical, whereas politics is coordinative; as a result, business executives tend to be uncomfortable with compromises and power sharing, which are inherent in politics.

Which one of the following, if true, most seriously weakens the proposed explanation of why business executives do not run for president?

- (A) Many of the most active presidential fundraisers and backroom strategists are themselves politicians.

- (B) Military leaders are generally no more comfortable with compromises and power sharing than are business executives.
- (C) Some of the skills needed to become a successful lawyer are different from some of those needed to become a successful military leader.
- (D) Some former presidents have engaged in business ventures after leaving office
- (E) Some hierarchically structured companies have been major financial supporters of candidates for president.

41. A scientific theory is a good theory if it satisfies two requirements - it must accurately describe a large class of observations in terms of a model that is simple enough to contain only a few elements, and it must make definite predictions about the results of future observations. For example, Aristotle's cosmological theory, which claimed that everything was made out of four elements - earth, air, fire, and water - satisfied the first requirement but it did not make any definite prediction. Thus, Aristotle's cosmological theory was not a good theory.

If all the statements in the passage are true, each of the following must also be true EXCEPT:

- (A) Prediction about the results of future observations must be made by any good scientific theory.
- (B) Observation of physical phenomena was not a major concern in Aristotle's cosmological Theory
- (C) Four elements can be the basis of a scientific model that is simple enough to meet the Simplicity criterion of a good theory.
- (D) A scientific model that contains many elements is not a good theory
- (E) Aristotle's cosmological theory described a large class of observations in terms of only four elements.

42. Compared to non-profit hospitals of the same size, investor-owned hospitals require less public investment in the form of tax breaks, use fewer employees, and have higher occupancy levels. It can therefore be concluded that investor-owned hospitals are a better way of delivering medical care than are non-profit hospitals.

Which one of the following, if true, most undermines the conclusion drawn above?

- (A) Non-profit hospitals charge more per bed than do investor-owned hospitals.
- (B) Patients in non-profit hospitals recover more quickly than do patients with comparable illnesses in investor-owned hospitals
- (C) Non-profit hospitals do more fundraising than do investor-owned hospitals.
- (D) Doctors at non-profit hospitals earn higher salaries than do similarly qualified doctors at investor-owned hospitals.
- (E) Non-profit hospitals receive more donations than do investor-owned hospitals.

43. The ancient Egyptian pharaoh Akhenaten, who had a profound effect during his lifetime on Egyptian art and religion, was well loved and highly respected by his subjects. We know this from the fierce loyalty shown to him by his palace guards, as documented in reports written during Akhenaten's reign.

A questionable technique used in the argument is to:

- (A) Introduce information that actually contradicts the conclusion
- (B) Rely on evidence that in principle would be impossible to challenge
- (C) Make a generalization based on a sample that is likely to be unrepresentative
- (D) Depend on the ambiguity of the term "ancient"
- (E) Apply present-day standards in an inappropriate way to ancient times

44. **Zelda:** Dr. Ladlow, a research psychologist, has convincingly demonstrated that his theory about the determinants of rat behaviour generates consistently accurate predictions about how rats will perform in a maze. On the basis of this evidence Dr. Ladlow has claimed that his theory is irrefutably correct.

Anson: Then Dr. Ladlow is not responsible psychologist. Dr. Ladlow's evidence does not conclusively prove that his theory is correct. Responsible psychologists always accept the possibility that new evidence will show that their theories are incorrect.

Which one of the following can be properly inferred from Anson's argument?

- (A) Dr. Ladlow's evidence that his theory generates consistently accurate predictions about how rates will perform in a maze is inaccurate
- (B) Psychologists who can derive consistently accurate predictions about how rats will perform in a maze from their theories cannot responsibly conclude that those theories cannot be disproved
- (C) No matter how responsible psychologists are, they can never develop correct theoretical explanations.
- (D) Responsible psychologists do not make predictions about how rats will perform in a maze
- (E) Psychologists who accept the possibility that new evidence will show that their theories are incorrect are responsible psychologists.

45. **Smith:** Meat in the diet is healthy, despite what some people say. After all, most doctors do eat meat, and who knows more about health than doctors do?

Which one of the following is a flaw in Smith's reasoning?

- (A) Attacking the opponents' motives instead of their argument
- (B) Generalizing on the basis of a sample consisting of a typical cases
- (C) Assuming at the outset what the argument claims to establish through reasoning
- (D) Appealing to authority, even when different authorities give conflicting advice about an issue
- (E) Taking for granted that experts do not act counter to what, according to their expertise, in their best interest

46. The brains of identical twins are genetically identical. When only one of a pair of identical twins is a schizophrenic, certain areas of the affected twin's brain are smaller than corresponding areas in the brain of the unaffected twin. No such differences are found when neither twin is schizophrenic. Therefore, this discovery

provides definitive evidence that schizophrenia is caused by damage to the physical structure of the brain.

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

- (A) The brain of person suffering from schizophrenia is smaller than the brain of anyone not suffering from schizophrenia
- (B) The relative smallness of certain parts of the brains of schizophrenics is not the result of schizophrenia or of medications used in its treatment.
- (C) The brain of a person with an identical twin is no smaller, on average, than the brain of person who is not twines.
- (D) When a pair of identical twins both suffer from schizophrenia, their brains are the same size
- (E) People who have an identical twin are no more likely to suffer from schizophrenia than those who do not.

47. Sixty adults were asked to keep a diary of their meals, including what they consumed, when, and in the company of how many people. It was found that at meals with which they drank alcoholic beverages, they consumed about 175 calories more from non-alcoholic source than they did at meals with which they did not drink alcoholic beverages.

Each of the following, if true, contributes to an explanation of the difference in caloric intake EXCEPT:

- (A) Diners spent a much longer time at meals served with alcohol than they did at those serve without alcohol.
- (B) The meals eaten later in the day tended to be larger than those eaten earlier in the day, and later meals were more likely to include alcohol.
- (C) People eat more when there are more people present at the meal, and more people tended to be present at meal served with alcohol than at meals served without alcohol.
- (D) The meals that were most carefully prepared and most attractively served tended to be those at which alcoholic beverages were consumed
- (E) At meals that included alcohol, relatively more of the total calories consumed came from carbohydrates and relatively fewer of them came from fats and proteins.

48. Something must be done to ease traffic congestion. In traditional small towns, people used to work and shop in the same town in which they lived, but now that stores and workplaces are located far away from residential areas, people cannot avoid travelling long distances each day. Traffic congestion is so heavy on all roads that, even on major highways, the maximum speed averages only 35 miles per hour.

Which one of the following proposals is most supported by the statements above?

- (A) The maximum speed limit on major highways should be increased.
- (B) People who now travel on major highways should be encouraged to travel on secondary roads instead.
- (C) Residents of the remaining traditional small towns should be encouraged to move to the suburbs.

- (D) Drivers who travel well below the maximum speed limit on major highways should be fined.
- (E) New businesses should be encouraged to locate closer to where their workers would live.

49. **College professor:** College students do not write nearly as well as they used to. Almost all of the papers that my students have done for me this year have been poorly written and ungrammatical.

Which one of the following is the most serious weakness in the argument made by the professor?

- (A) It requires confirmation that the change in the professor's students is representative of a change among college students in general.
- (B) It offers no proof to the effect that the professor is an accurate judge of writing ability.
- (C) It does not take into account the possibility that the professor is a poor teacher.
- (D) It fails to present contrary evidence.
- (E) It fails to define its terms sufficiently.

50. **Mayor of Plainsville:** In order to help the economy of Plainsville, I am using some of our tax revenues to help bring a major highway through the town and thereby attract new business to Plainsville.

Citizens' group: You must have interests other than our economy in mind. If you were really interested in helping our economy, you would instead allocate the revenues to building a new business park since it would bring in twice the business that your highway would.

The argument by the citizens group relies on which one of the following assumptions?

- (A) Plainsville presently has no major highways running through it.
- (B) The mayor accepts that a new business park would bring in more new business than would the new highway.
- (C) The new highway would have no benefits for Plainsville other than attracting new business.
- (D) The mayor is required to get approval for all tax revenue allocation plans from the city council.
- (E) Plainsville's economy will not be helped unless a new business park of the sort envisioned by the citizens' group is built.

51. Recently, highly skilled workers in Eastern Europe have left jobs in record numbers to emigrate to the West. It is therefore likely that skilled workers who remain in Eastern Europe are in high demand in their home countries.

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

- (A) Eastern European factories prefer to hire workers from their home countries rather than to import workers from abroad.

- (B) Major changes in Eastern European economic structures have led to the elimination of many positions previously held by the highly skilled emigrants.
- (C) Many Eastern European emigrants need to acquire new skills after finding work in the West.
- (D) Eastern European countries plan to train many new workers to replace the highly skilled workers who have emigrated.
- (E) Because of the departure of skilled workers from Eastern European countries, many positions are now unfilled.

52. Two palaeontologists, Dr Tyson and Dr. Rees, disagree over the interpretation of certain footprints that were left among other footprints in hardened volcanic ash at site G. Dr. Tyson claims they are clearly early hominid footprints since they show human characteristics: a squarish heel and a big toe immediately adjacent to the next toe. However, since the footprints indicate that if hominids made those prints they would have had to walk in an unexpected cross-stepping manner, by placing the left foot to the right of the right foot. Dr. Rees rejects Dr. Tyson's conclusion.

Which one of the following, if true, most seriously undermines Dr. Tyson's conclusion?

- (A) The foot prints showing human characteristics were clearly those of at least two distinct individuals.
- (B) Certain species of bears had feet very like human feet, except that the outside toe on each foot was the biggest toe and the innermost toe was the smallest toe.
- (C) Footprints shaped like a human's that do not show a cross-stepping pattern exist at site M, which is a mile away from site G, and the two sets of footprints are contemporaneous.
- (D) When the moist volcanic ash became sealed under additional layers of ash before hardening, some details of some of the footprints were erased.
- (E) Most of the other footprints at site G were of animals with hooves.

53. It is not known whether bovine spongiform encephalopathy (BSE), a disease of cattle invariably deadly to them, can be transmitted directly from one infected animal to another at all stages of the infection. If it can be, there is now a reservoir of infected cattle incubating the disease. There are no diagnostic tests to identify infected animals before the animals show overt symptoms. Therefore, if such direct transmission occurs, the disease cannot be eradicated by _____

Which one of the following best completes the argument?

- (A) removing from the herd and destroying any diseased animal as soon as it shows the typical symptoms of advanced BSE
- (B) developing a drug that kills the agent that cause BSE, and then treating with that drug all cattle that might have the disease
- (C) destroying all cattle in areas where BSE occurs and raising cattle only in areas to which BSE is known not to have spread
- (D) developing a vaccine that confers lifelong immunity against BSE and giving it to all cattle, destroying in due course all those animals for which the vaccine protection came too late

- (E) developing a diagnostic test that does identify any infected animal and destroying all animals found to be infected

54. Auto industry executive: Statistics show that cars that were built smaller after 1977 to make them more fuel-efficient had a higher incidence of accident-related fatalities than did their earlier larger counterparts. For this reason we oppose recent guidelines that would require us to produce cars with higher fuel efficiency.

Which of the following, if true, would constitute the strongest objection to the executive's argument?

- (A) Even after 1977, large automobiles were frequently involved in accidents that caused death or serious injury.
 - (B) Although fatalities in accidents involving small cars have increased since 1977, the number of accidents has decreased.
 - (C) New computerized fuel systems can enable large cars to meet fuel efficiency standards established by the recent guidelines.
 - (D) Modern technology can make small cars more fuel-efficient today than at any other time in their production history.
 - (E) Fuel efficiency in models of large cars rose immediately after 1977 but has been declining ever since.
55. No one who lacks knowledge of a subject is competent to pass judgment on that subject. Since political know-how is a matter, not of adhering to technical rules, but of insight and style learned through apprenticeship and experience, only seasoned politicians are competent to judge whether a particular political policy is fair to all.

A major weakness of the argument is that it

- (A) relies on a generalization about the characteristic that makes someone competent to pass judgment
 - (B) fails to give specific examples to illustrate how political know-how can be acquired
 - (C) uses the term "apprenticeship" to describe what is seldom a formalized relationship
 - (D) equates political know-how with understanding the social implications of political policies
 - (E) assumes that when inexperienced politicians set policy they are guided by the advice of more experienced politicians
56. Impact craters caused by meteorites smashing into earth, have been found all around the globe but they have been found in the greatest density in geologically stable regions. This relatively greater abundance of securely identified craters in geologically stable regions must be explained by the lower rates of destructive geophysical processes in those regions.

The conclusion is properly drawn if which one of the following is assumed?

- (A) A meteorite that strikes exactly the same spot as an earlier meteorite will obliterate all traces of the earlier impact.

- (B) Rates of destructive geophysical processes within any given region vary markedly throughout geological time.
- (C) The rate at which the Earth is struck by meteorites has greatly increased in geologically recent times.
- (D) Actual meteorite impacts have been scattered fairly evenly over the Earth's surface in the course of Earth's geological history.
- (E) The Earth's geologically stable regions have been studied more intensively by geologists than have its less stable regions.

57. That the policy of nuclear deterrence has worked thus far is unquestionable. Since the end of the Second World War, the very fact that there were nuclear armaments in existence has kept major powers from using nuclear weapons, for fear of starting a worldwide nuclear exchange that would make the land of the power initiating it uninhabitable. The proof is that a third world war between superpowers has not happened.

Which one of the following, if true, indicates a flaw in the argument?

- (A) Maintaining a high level of nuclear armaments represents a significant drain on a country's economy.
- (B) From what has happened in the past, it is impossible to infer with certainty what will happen in the future, so an accident could still trigger a third world war between superpowers.
- (C) Continuing to produce nuclear weapons beyond the minimum needed for deterrence increases the likelihood of a nuclear accident.
- (D) The major powers have engaged in many smaller-scale military operations since the end of the Second World War, while refraining from a nuclear confrontation.
- (E) It cannot be known whether it was nuclear deterrence that worked, or some other factor, such as a recognition of the economic value of remaining at peace.

58. A survey of alumni of the class of 1960 at Aurora University yielded puzzling results. When asked to indicate their academic rank, half of the respondents reported that they were in the top quarter of the graduating class in 1960.

Which one of the following most helps account for the apparent contradiction above?

- (A) A disproportionately large number of high-ranking alumni responded to the survey.
- (B) Few, if any, respondents were mistaken about their class rank.
- (C) Not all the alumni who were actually in the top quarter responded to the survey.
- (D) Almost all of the alumni who graduated in 1960 responded to the survey.
- (E) Academic rank at Aurora University was based on a number of considerations in addition to average grades.

59. The seventeenth-century physicist Sir Isaac Newton is remembered chiefly for his treaties on motion and gravity. But Newton also conducted experiments secretly for

many years based on the arcane theories of alchemy, trying unsuccessfully to transmute common metals into gold and produce rejuvenating elixirs. If the alchemists of the seventeenth century had published the results of their experiments, chemistry in the eighteenth century would have been more advanced than it actually was.

Which one of the following assumptions would allow the conclusion concerning eighteenth-century chemistry to be properly drawn?

- (A) Scientific progress is retarded by the reluctance of historians to acknowledge the failures of some of the great scientists.
- (B) Advances in science are hastened when reports of experiments, whether successful or not, are available for review by other scientists.
- (C) Newton's work on motion and gravity would not have gained wide acceptance if the results of his work in alchemy had also been made public.
- (D) Increasing specialization within the sciences makes it difficult for scientists in one field to understand the principles of other fields.
- (E) The seventeenth-century alchemists could have achieved their goals only if their experiments had been subjected to public scrutiny.

60. Sedimentary rock hardens within the earth's crust as layers of matter accumulate and the pressure of the layers above converts the layers below into rock. One particular layer of sedimentary rock that contains an unusual amount of the element iridium has been presented as support for a theory that a meteorite collided with the earth some sixty million years ago. Meteorites are rich in iridium compared to the earth's crust, and geologists theorize that a meteorite's collision with the earth raised a huge cloud of iridium-laden dust. The dust, they say, eventually settled to earth where it combined with other matter, and as new layers accumulated above it, it formed a layer of iridium-rich rock.

Which one of the following, if true, would counter the claim that the iridium-rich layer described in the passage is evidence for the meteorite collision theory?

- (A) The huge dust cloud described in the passage would have blocked the transmission of sunlight and lowered the earth's temperature.
- (B) A layer of sedimentary rock takes millions of years to harden.
- (C) Layers of sedimentary rock are used to determine the dates of prehistoric events whether or not they contain iridium.
- (D) Sixty million years ago there was a surge in volcanic activity in which the matter spewed from the volcanoes formed huge iridium-rich dust clouds.
- (E) The iridium deposit occurred at about the same time that many animal species became extinct and some scientists have theorized that mass dinosaur extinctions were caused by a meteorite collision.

61. A tree's age can be determined by counting the annual growth rings in its trunk. Each ring represents one year, and the ring's thickness reveals the relative amount of rainfall that year. Archaeologists successfully used annual rings to determine the relative ages of ancient tombs at Pazyryk. Each tomb was constructed from freshly cut logs, and the tombs builders were constrained by tradition to use only logs from trees growing in the sacred Pazyryk Valley.

Which one of the following, if true, contributes most to an explanation of the archaeologists' success in using annual rings to establish the relative ages of the tombs at the Pazyryk site?

- (A) The Pazyryk tombs were all robbed during ancient times, but breakage of the tombs seals allowed the seepage of water, which soon froze permanently, thereby preserving the tombs' remaining artefacts.
- (B) The Pazyryk Valley, surrounded by extremely high mountains, has a distinctive yearly pattern of rainfall, and so trees growing in the Pazyryk Valley have annual rings that are quite distinct from trees growing in nearby valleys.
- (C) Each log in the Pazyryk tombs has among its rings a distinctive sequence of twelve annual rings representing six drought years followed by three rainy years and three more drought years.
- (D) The archaeologists determined that the youngest tree used in any of the tombs was 90 years old and that the oldest tree was 450 years old.
- (E) All of the Pazyryk tombs contained cultural artefacts that can be dated to roughly 2300 years ago.

62. Once people habitually engaged in conversation, now the television competes for their attention. When the television is on, communication between family members stops. Where there is no communication, family ties become frayed and eventually snap. Therefore, the only solution is to get rid of the television.

Which one of the following is most closely parallel in its reasoning to the flawed reasoning in the argument above?

- (A) Once friendships thrived on shared leisure time. But contemporary economic pressures minimize the amount of free time people have and thus jeopardize many friendships.
- (B) Once people listened to the radio while pursuing other activities. Now they passively watch television. Therefore, radio was less distracting for most people than television is.
- (C) Once sports enthusiasts regularly engaged in sports, but now they watch spectator sports when they could be getting physical exercise. Without physical exercise, health deteriorates. Therefore, the only remedy is to eliminate spectator sports.
- (D) Once people were willing to tailor their day to the constraints of a bus or train schedule: now they are spoiled by the private car. The only solution is for government to offer financial incentives to encourage the use of public transportation.
- (E) Once people did their shopping in urban retail districts, where they combined their shopping with other errands. Now many people shop in suburban malls, where they concentrate on shopping exclusively. Therefore, shopping has become a leisure time activity.

63. In essence, all rent-control policies involve specifying a maximum rent that a landlord may charge for a dwelling. The rationale for controlling rents is to protect tenants in situations where limited supply will cause rents to rise sharply in the face of increased demand. However, although rent control may help some tenants in the

short run, it affects the rental-housing market adversely in the long run because landlords become reluctant to maintain the quality of their existing properties and even more reluctant to have additional rental-housing units built.

Which one of the following, if true, best explains the landlords' reluctance described above?

- (A) Tenants prefer low-quality accommodations with rent control to high-quality accommodations without it.
- (B) Rent control makes it very difficult for landlords to achieve reasonable returns on any investments in maintenance or in new construction.
- (C) Rent control is a common practice even though it does nothing to alleviate shortages in rental housing.
- (D) Rent control is generally introduced for political reasons and it takes political action to have it lifted again.
- (E) Tenants prefer rent control to the alternative of receiving direct government subsidies toward rents they cannot afford.

64. Because of the recent transformation of the market, Quore Inc. must increase productivity 10 percent over the course of the next two years or it will certainly go bankrupt. In fact, however, Quore's production structure is such that if a 10 percent productivity increase is possible, then a 20 percent increase is attainable.

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

- (A) It is only Quore's production structure that makes it possible for Quore to survive the transformation of the market.
- (B) Quore will not go bankrupt if it achieves a productivity increase of 20 percent over the next two years.
- (C) If the market had not been transformed, Quore would have required no productivity increase in order to avoid bankruptcy.
- (D) Because of the transformation of the market Quore will achieve a productivity increase of 10 percent over the next two years.
- (E) If a 20 percent productivity increase is unattainable for Quore, then it must go bankrupt.

65. **Terry:** If you want to get a decent job, you should go to college.

Mark: That is not true. There are other reasons to go to college than wanting to get a good job.

Mark's response shows that he interpreted Terry's remarks to mean that

- (A) college is one of many places to get trained for a job
- (B) decent jobs are obtained only by persons who have gone to college
- (C) wanting to get a decent job is the only reason for going to college
- (D) training for decent jobs is available only at colleges

(E) all people who want decent jobs go to college

66. Several studies have shown that hospitals are not all equally successful: patients are much more likely to die in some of them than in others. Since the hospitals in the studies had approximately equal per-patient funding, differences in the quality of care provided by hospital staff are probably responsible for the differences in mortality rates.

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

- (A) The staff in some of the hospitals studied had earned more advanced degrees, on average, than the staff in the other hospitals.
 - (B) Patient populations vary substantially in average severity of illness from hospital to hospital.
 - (C) The average number of years that staff members stay on at a given job varies considerably from one hospital to another.
 - (D) Approximately the same surgical procedures were performed in each of the hospitals covered in the studies.
 - (E) Mortality rates for hospital patients do not vary considerably from one region of the country to another.
67. The United States government generally tries to protect valuable natural resources but one resource has been ignored for too long. In the United States, each bushel of corn produced might result in the loss of as much as two bushels of topsoil. Moreover, in the last 100 years, the topsoil in many states, which once was about fourteen inches thick, has been eroded to only six or eight inches. Nonetheless, federal expenditures for nationwide soil conservation programs have remained at ridiculously low levels. Total federal expenditures for nationwide soil conservation programs have been less than the allocations of some individual states.

Which one of the following best expresses the main point of the argument?

- (A) Corn is not a cost-effective product and substitutes should be found where possible.
 - (B) A layer of topsoil only six to eight inches thick cannot support the continued cultivation of corn.
 - (C) Soil conservation is a responsibility of the federal government, not the states.
 - (D) The federal government's expenditures for soil conservation in the various states have been inequitable.
 - (E) The federal government should spend much more on soil conservation than it has been spending.
68. Animals with a certain behavioural disorder have unusually high level of aluminium in their brain tissue. Since a silicon-based compound binds to aluminium and prevents it from affecting the brain tissue, animals can be cured of the disorder by being treated with the compound.

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

- (A) Animals with the disorder have unusually high but invariable levels of aluminium in their brain tissue.
- (B) Aluminium is the cause of the disorder rather than merely an effect of it.
- (C) Introducing the compound into the brain tissue has no side effects.
- (D) The amount of the compound needed to neutralize the aluminium in an animal's brain tissue varies depending upon the species.
- (E) Aluminium is never present in normal brain tissue.

69. As air-breathing mammals, whales must once have lived on land and needed hind limbs capable of supporting the mammals' weight. Whales have the bare remnants of a pelvis. If animals have a pelvis, we expect them to have hind limbs. A newly discovered fossilized whale skeleton has very fragile hind limbs that could not have supported the animal's weight on land. This skeleton had a partial pelvis.

If the statements above are true, which one of the following, if also true, would most strongly support the conclusion that the fragile hind limbs are remnants of limbs that land-dwelling whales once had?

- (A) Whale bones older than the fossilized hind limbs confirm that ancient whales had full pelvises.
- (B) No skeletons of ancient whales with intact hind limbs capable of supporting the mammals' weight have ever been found.
- (C) Scientists are uncertain whether the apparently non-functioning limbs of other early mammals derived from once-functioning limbs of their ancestors.
- (D) Other large-bodied mammals like seals and sea lions manoeuvre on beaches and rocky coasts without fully functioning hind limbs.
- (E) Some smaller sea-dwelling mammals, such as modern dolphins, have no visible indications of hind limbs.

70. The stated goal of the government's funding program for the arts is to encourage the creation of works of artistic excellence. Senator Beton claims, however, that a government-funded artwork can never reflect the independent artistic conscience of the artist because artists, like anyone else who accepts financial support, will inevitably try to please those who control the distribution of that support. Senator Beton concludes that government funding of the arts not only is a burden on taxpayers but also cannot lead to the creation of works of true artistic excellence.

Which one of the following is an assumption on which Senator Beton's argument is based?

- (A) Most taxpayers have little or no interest in the creation of works of true artistic excellence.
- (B) Government funding of the arts is more generous than other financial support most artists receive.
- (C) Distribution of government funds for the arts is based on a broad agreement as to what constitutes artistic excellence.
- (D) Once an artist has produced works of true artistic excellence. He or she will never accept government funding.
- (E) A contemporary work of art that does not reflect the independent artistic conscience of the artist cannot be a work of true artistic excellence.

71. Older United States automobiles have been identified as contributing disproportionately to global air pollution. The requirement in many jurisdictions that automobiles pass emission-control inspections has had the effect of taking many such automobiles out of service in the United States as they fail inspection and their owners opt to buy newer automobiles. Thus the burden of pollution such older United States automobiles contribute to the global atmosphere will be gradually reduced over the next decade.

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

- (A) It is impossible to separate the air of one country or jurisdiction from that of others.
 - (B) When automobiles that are now new become older, they will, because of a design change. Cause less air pollution than older automobiles do now.
 - (C) There is a thriving market for used older United States automobiles that are exported to regions that have no emission-control regulations.
 - (D) The number of jurisdictions in the United States requiring automobiles to pass emission-control inspections is no longer increasing.
 - (E) Even if all the older automobiles in the United States were retired from service. Air pollution from United States automobiles could still increase if the total number of automobiles in use should increase significantly.
72. The reforms to improve the quality of public education that have been initiated on the part of suppliers of public education have been insufficient. Therefore, reforms must be demanded by consumers. Parents should be given government vouchers with which to pay for their children's education and should be allowed to choose the schools at which the vouchers will be spent. To attract students, academically underachieving schools will be forced to improve their academic offerings.

The argument assumes that

- (A) in selecting schools parents would tend to prefer a reasonable level of academic quality to greater sports opportunities or more convenient location
 - (B) improvement in the academic offerings of schools will be enforced by the discipline of the job market in which graduating students compete.
 - (C) There is a single best way to educate students
 - (D) Children are able to recognize which schools are better and would influence their parents' decisions.
 - (E) Schools would each improve all of their academic offerings and would not tend to specialize in one particular field to the exclusion of others.
73. Professor Smith published a paper arguing that a chemical found in minute quantities in most drinking water had an adverse effect on the human nervous system. Existing scientific theory held that no such effect was possible because there was no neural mechanism for bringing it about. Several papers by well-known scientists in the field followed, unanimously purporting to prove Professor Smith wrong. This clearly shows that the scientific establishment was threatened by Professor Smith's work and conspired to discredit it.

Which one of the following is the central flaw in the argument given by the author of the passage?

- (A) The author passes over the possibility that Professor Smith had much to gain should Professor Smith's discovery have found general acceptance.
- (B) The author fails to mention whether or not Professor Smith knew that the existence of the alleged new effect was incompatible with established scientific theory.
- (C) The author fails to show why the other scientists could not have been presenting evidence in order to establish the truth of the matter.
- (D) The author neglects to clarify what his or her relationship to Professor Smith is.
- (E) The author fails to indicate what, if any, effect the publication of Professor Smith's paper had on the public's confidence in the safety of most drinking water.

74. The number of North American children who are obese, that is who have more body fat than do 85 percent of North American children their age, is steadily increasing according to four major studies conducted over the past 15 years.

If the finding reported above is correct, it can be properly concluded that

- (A) when four major studies all produce similar results those studies must be accurate.
- (B) North American children have been progressively less physically active over the past 15 years.
- (C) The number of North American children who are not obese increased over the past 15 years.
- (D) Over the past 15 years, the number of North American children who are underweight has declined.
- (E) The incidence of obesity in North American children tends to increase as the children grow older.

75. **Economist:** Money, no matter what its form and in almost every culture in which it has been used, derives its value from its scarcity, whether real or perceived.

Anthropologist: But cowrie shells formed the major currency in the Solomon Island economy of the Kwara'ae, and unlimited numbers of these shells washed up daily on the beaches to which the kwara'ae had access.

Which one of the following, if true about the Kwara'ae, best serves to resolve the apparently conflicting positions cited above?

- (A) During festivals they exchanged strings of cowrie-shell money with each other as part of a traditional ritual that honored their elders.
- (B) They considered porpoise teeth valuable, and these were generally threaded on strings to be worn as jewelry.
- (C) The shells used as money by men were not always from the same species of cowrie as those used as money by women.
- (D) They accepted as money only cowrie shells that were polished and carved by a neighbouring people, and such shell preparation required both time and skilled labor.

- (E) After Western traders brought money in the form of precious-metal coins to the Solomon Islands. Cowrie-shell money continued to be used as one of the major media of exchange for both goods and services.

76. School superintendent: It is a sad fact that, until now, entry into the academically best high school in our district has been restricted to the children of people who were wealthy enough to pay the high tuition. Parents who were previously denied the option of sending their children to this school now have this option since I am replacing the tuition requirement with a requirement that allows only those who live in the neighbourhood of the school to attend.

The superintendent's claim about the effect of replacing the tuition requirement relies on the assumption that

- (A) the residents of the school's neighbourhood tend to be wealthy
 - (B) people other than those wealthy enough to have paid the old tuition are able to live in the neighbourhood of the school.
 - (C) people less wealthy than those who were able to pay the old tuition are in the majority in the district.
 - (D) there are no high schools in the district other than the one referred to by the superintendent.
 - (E) there are many people not wealthy enough to have paid the old tuition who wish to have their children attend the school.
77. Approximately 7.6 million women who earn incomes have preschool-age children, and approximately 6.4 million women are the sole income earners' for their families. These figures indicate that there are comparatively few income-earning women who have preschool-age children but are not the sole income earners for their families.

A major flaw in the reasoning is that it

- (A) relies in figures that are too imprecise to support the conclusion drawn.
 - (B) overlooks the possibility that there is little or no overlap between the two populations of women cited.
 - (C) fails to indicate whether the difference between the two figures cited will tend to remain stable over time.
 - (D) ignores the possibility, that families with preschool-age children might also have older children.
 - (E) provides no information on families in which men are the sole income earners.
78. Being articulate has been equated with having a large vocabulary. Actually, however, people with large vocabularies have no incentive for, and tend not to engage in, the kind of creative linguistic self-expression that is required when no available words seem adequate. Thus a large vocabulary is a hindrance to using language in a truly articulate way.

Which one of the following is an assumption made in the argument?

- (A) When people are truly articulate, they have the capacity to express themselves in situations in which their vocabularies seem inadequate.
- (B) People who are able to express themselves creatively in new situations have little incentive to acquire large vocabularies.
- (C) The most articulate people are people who have large vocabularies but also are able to express themselves creatively when the situation demands it.
- (D) In educating people to be more articulate, it would be futile to try to increase the size of their vocabularies.
- (E) In unfamiliar situations, even people with large vocabularies often do not have specifically suitable words available.

79. **Dr. Schilling:** Those who advocate replacing my country's private health insurance system with nationalized health insurance because of the rising costs of medical care fail to consider the high human costs that consumers pay in countries with nationalized insurance: access to high-technology medicine is restricted and kidney transplants and open-heart surgery is rationed. People are denied their right to treatments they want and need.

Dr. Laforte: Your country's reliance on private health insurance denies access even to basic, conventional medicine to the many people who cannot afford adequate health coverage. With nationalized insurance, rich and poor have equal access to life-saving medical procedures, and people's right to decent medical treatment regardless of income is not violated.

Dr. Schilling's and Dr. Laforte's statements provide the most support for holding that they would disagree about the truth of which one of the following?

- (A) People's rights are violated less when they are denied an available medical treatment they need because they lack the means to pay for it than when they are denied such treatment on noneconomic grounds.
 - (B) Where health insurance is provided by private insurance companies, people who are wealthy generally receive better health care than do people who are unable to afford health insurance.
 - (C) In countries that rely primarily on private health insurance to pay for medical costs, most people who would benefit from a kidney transplant receive one.
 - (D) In countries with nationalized health insurance, no one who needs a familiar medical treatment in order to stay alive is denied that treatment.
 - (E) Anyone who wants a particular medical treatment has a right to receive that treatment.
80. A certain viral infection is widespread among children, and about 30 percent of children infected with this virus develop middle ear infections. Antibiotics, although effective in treating bacterial infections, have no effect on the virus. Yet when middle ear infections in children infected with the virus are treated with antibiotics, the ear infections often clear up.

Which one of the following most helps to explain the success of the treatments with antibiotics?

- (A) Although some types of antibiotics fail to clear up certain infections, other types of antibiotics might provide effective treatment for those infections.
- (B) Children infected with the virus are particularly susceptible to bacteria that infect the middle ear.
- (C) Many children who develop middle ear infections are not infected with the virus.
- (D) Most viral infections are more difficult to treat than are most bacterial infections.
- (E) Among children not infected with the virus, fewer than 30percent develop middle ear infections.

81. **Naturalist:** For decades we have known that the tuatara, a New Zealand reptile, has been approaching extinction on the South Island but since South Island tuatara were thought to be of the same species as North Island tuatara there was no need to protect them. New research indicates that the South Island tuatara are a distinct species, found only in that location. Because it is now known that, if the South Island tuatara are lost, an entire species will thereby be lost, human beings are now obliged to prevent their extinction, even if it means killing many of their unendangered natural predators.

Which one of the following principles most helps to justify the naturalists' argumentation?

- (A) In order to maximize the number of living things on Earth. Steps should be taken to preserve all local populations of animals.
- (B) When an animal is in danger of dying, there is an obligation to help save its life, if doing so would not interfere with the health or well-being of other animals or people.
- (C) The threat of local extinction imposes no obligation to try to prevent that extinction, whereas the threat of global extinction does impose such an obligation.
- (D) Human activities that either intentionally or unintentionally threaten the survival of an animal species ought to be curtailed.
- (E) Species that are found in only one circumscribed geographical region ought to be given more care and attention than are other species because they are more vulnerable to extinction.

82. Nursing schools cannot attract a greater number of able applicants than they currently do unless the problems of low wages and high-stress working conditions in the nursing profession are solved. If the pool of able applicants to nursing school does not increase beyond the current level, either the profession will have to lower its entrance standards, or there will soon be an acute shortage of nurses. It is not certain, however, that lowering entrance standards will avert a shortage. It is clear that with either a shortage of nurses or lowered entrance standards of the profession, the current high quality of health care cannot be maintained.

Which one of the following can be properly inferred from the passage?

- (A) If the nursing profession solves the problems of low wages and high-stress working conditions, it will attract able applicants in greater numbers than it currently does.
- (B) The nursing profession will have to lower its entrance standards if the pool of able applicants to nursing school does not increase beyond the current level.

- (C) If the nursing profession solves the problems of low wages and high-stress working conditions, high quality health care will be maintained.
- (D) If the nursing profession fails to solve the problems of low wages and high-stress working conditions, there will soon be an acute shortage of nurses.
- (E) The current high quality of health care will not be maintained if the problems of low wages and high-stress working conditions in the nursing profession are not solved.

83. There are about 75 brands of microwave popcorn on the market; altogether, they account for a little over half of the money from sales of microwave food products. It takes three minutes to pop corn in the microwave, compared to seven minutes to pop corn conventionally. Yet by weight, microwave popcorn typically costs over five times as much as conventional popcorn. Judging by the popularity of microwave popcorn, many people are willing to pay a high price for just a little additional convenience.

If the statements in the passage are true, which one of the following must also be true?

- (A) No single brand of microwave popcorn accounts for a large share of microwave food product sales.
 - (B) There are more brands of microwave popcorn on the market than there are of any other microwave food product.
 - (C) By volume, more microwave popcorn is sold than is conventional popcorn.
 - (D) More money is spent on microwave food products that take three minutes or less to cook than on microwave food products that take longer to cook.
 - (E) Of the total number of microwave food products on the market, most are microwave popcorn products.
84. A law that is not consistently enforced does not serve its purpose. Law without enforcement is not law, it is merely stature-a promise of law. To institute real law is not merely to declare that such and such behaviour is forbidden, it is also to punish those who violate that edict. Furthermore, those who enforce law must punish without favour for their friends or malice for their enemies. To punish only those own dislike while forgiving others is not to enforce law but to engage in the arbitrary and unjust exercise of power.
- The main point of the passage is that instituting real law consists in
- (A) the exercise of power
 - (B) authorizing the enforcement of punishments
 - (C) the unbiased punishment of prohibited behaviour
 - (D) understanding the purpose of law
 - (E) clearly defining unacceptable behaviour
85. Physiological research has uncovered disturbing evidence linking a number of structural disorder disorders to logging. Among the ailments seemingly connected with this now-popular sport are spinal disk displacements, stress fractures of the feet and ankles, knee and hip joint deterioration, and tendonitis. Furthermore, these injuries do not occur exclusively among beginning runners-veteran joggers

suffer an equal percentage of injuries. What the accumulating data suggest is that the human anatomy is not able to withstand the stresses of jogging.

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

- (A) The link between jogging and certain structural disorders appears to be a causal one.
- (B) Jogging causes more serious disorders than other sports.
- (C) The jogger's level of experience is a factor determining the likelihood of a jogging injury.
- (D) Some sports are safer for the human body than jogging.
- (E) The human species is not very durable.

86. All students at Pitcombe College were asked to label themselves conservative, liberal, or middle-of-the-road politically. Of the students, 25 percent labelled themselves conservative, 24 percent labelled themselves liberal, and 51 percent labelled themselves middle-of-the-road. When asked about a particular set of issues, however, 77 percent of the students endorsed what is generally regarded as a liberal position.

If all of the statements above are true, which one of the following must also be true?

- (A) All students who labelled themselves liberal endorsed what is generally regarded as a liberal position on that set of issues.
- (B) More students who labelled themselves middle-of-the road than students who labelled themselves liberal opposed what is generally regarded as a liberal position on that set of issues.
- (C) The majority of students who labelled themselves middle-of-the-road opposed what is generally regarded as a liberal position on that set of issues.
- (D) Some students who labelled themselves conservative endorsed what is generally regarded as a liberal position on that set of issues.
- (E) Some students who labelled themselves liberal endorsed what is generally regarded as a conservative position on that set of issues.

87. **Lenore:** It is naive to think that historical explanations can be objective. In evaluating evidence, historians are always influenced by their national, political, and class loyalties.

Victor: Still, the very fact that cases of biased thinking have been detected and sources of bias identified shows that there are people who can maintain objectivity.

Victor's response does not succeed as a rebuttal of Lenore's argument because his response

- (A) displays the same kind of biased thinking as that against which Lenore's argument it directed
- (B) does not address the special case of historians who purposely distort evidence in order to promote their own political objectives
- (C) fails to provide examples of cases in which biased thinking has been detected and the source of that bias identified
- (D) does not consider sources of bias in historical explanation other than those that are due to national, political, and class loyalties

- (E) overlooks the possibility that those who detect and identify bias are themselves biased in some way

88. High-technology medicine is driving up the nation's health care costs. Recent advances in cataract surgery illustrate why this is occurring. Cataracts are a major cause of blindness, especially in elderly people. Ten years ago, cataract surgery was painful and not always effective. Thanks to the new technology used in cataract surgery, the operation now restores vision dramatically and is less expensive. These two factors have caused the number of cataract operations performed to increase greatly, which has, in turn, driven up the total amount spent on cataract surgery.

Each of the following, if true, would support a challenge to the author's explanation of the increase in the number of cataract operations EXCEPT:

- (A) The overall population of the nation has increased from what it was ten years ago
 - (B) Any one individual's chance of developing cataracts is greater than it was ten years ago.
 - (C) The number of older people has increased during the last ten years.
 - (D) Today, health insurance covers cataract surgery for more people than it did ten years ago.
 - (E) People who have had unsuccessful cataract surgery are left with more seriously impaired vision than they had before the surgery.
89. Some companies in fields where skilled employees are hard to find make signing an "agreement not to compete" a condition of employment. In such an agreement the employee promises not to go work for a competing firm for a set period after leaving his or her current employer. Courts are increasingly ruling that these agreements are not binding. Yet paradoxically, for people who signed such agreements when working for competing firms, many firms are unwilling to consider hiring them during the period covered by the agreement.

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

- (A) Many companies will not risk having to become involved in lawsuits, even suits that they expect to have a favourable outcome.
- (B) In some industries for example, the broadcast media, companies' main source of new employees tends to be people who are already employed by competing firms
- (C) Most companies that require their employees to sign agreements not to compete are aware that these documents are not legally binding
- (D) Many people who have signed agreements not to compete are unwilling to renege on a promise by going to work for a competing firm
- (E) Many companies consider their employees established relationships with clients and other people outside the company to be valuable company assets

90. **Many Ann:** Our country should above all, be strong. Strength gains the respect of other countries and makes a country admirable.

Inez: There are many examples in history of countries that were strong but used their strength to commit atrocities. We should judge a country by the morality of its actions, not by its strength. If the actions are morally good, the country is admirable.

Which one of the following is a presupposition that underlies Inez' argument?

- (A) At least one country is admirable
 - (B) Countries cannot be both strong and moral
 - (C) It is possible to assign moral weight to the actions of countries
 - (D) The citizens of any country does is good
 - (E) Countries should impose their standards of morality on other countries by whatever means necessary
91. All of John's friends say they know someone who has smoked 40 cigarettes a day for the past 40 years and yet who is really fit and well. John does not know anyone like that and it is quite certain that he is not unique among his friends in this respect.

If the statements in the passage are true, then which one of the following must also be true?

- (A) Smoking often lie about how much they smoke.
 - (B) People often knowingly exaggerate without intending to lie.
 - (C) All John's friends know the same lifelong heavy smoker.
 - (D) Most of John's friends are not telling the truth.
 - (E) Some of John's friends are not telling the truth.
92. For democracy to survive, it is imperative that the average citizen be able to develop informed opinions about important policy issues. In today's society, this means that citizens must be able to develop informed opinions on many scientific subjects, from ecosystems to defence system. Yet, as scientific knowledge advances, the average citizen is increasingly unable to absorb enough information to develop informed opinions on many important issues.

Of the following, which one follows logically from the passage?

- (A) Scientists have a duty to educate the public.
 - (B) The survival of democracy is threatened by the advance of scientific knowledge.
 - (C) Every citizen has a duty to and can become scientifically literate.
 - (D) The most effective democracy is one that is the most scientifically unsophisticated.
 - (E) Democracy will survive if there are at least some citizens who are capable of developing informed opinions on important scientific issues.
93. By dating fossils of pollen and beetles, which returned after an Ice Age glacier left an area, it is possible to establish an approximate date when a warmer climate developed. In one glacial area, it appears from the insect record that a warm

climate developed immediately after the melting of the glacier. From the pollen record, however, it appears that the warm climate did not develop until long after the glacier disappeared.

Each one of the following, if true, helps to explain the apparent discrepancy EXCEPT:

- (A) Cold-weather beetle fossils can be mistaken for those of beetles that live in warm climates.
 - (B) Warm-weather plants cannot establish themselves as quickly as can beetles in a new environment.
 - (C) Beetles can survive in a relatively barren postglacial area by scavenging.
 - (D) Since pollen spread unevenly in a new climate, researchers can mistake gaps in the pollen record as evidence of no new overall growth.
 - (E) Beetles are among the oldest insect species and are much older than many warm-weather plants.
94. Using clean-coal technologies to "repower" existing factories promises ultimately a substantial reduction of polluting emissions, and will affect the full range of pollutants implicated in acid rain. The strategy of using these technologies could cut sulphur dioxide emission by more than 80 percent and nitrogen oxide emissions by more than 50 percent. The mission of smaller quantity of nitrogen pollutants would in turn reduce the formation of noxious ozone in the troposphere.

Which one of the following statements is an inference that can be drawn from the information given in the passage.

- (A) Sulphur dioxide emissions are the most dangerous pollutants implicated in acid rain.
 - (B) Noxious ozone is formed in factories by chemical reactions involving sulphur dioxide.
 - (C) Twenty percent of the present level of sulphur dioxide emissions in the atmosphere is not considered a harmful level.
 - (D) A substantial reduction of polluting emissions will be achieved by the careful design of new factories.
 - (E) The choice of technologies in factories could reduce the formation of noxious ozone in the troposphere.
95. Joshua Smith's new novel was criticized by the book editor for The Daily Standard as implausible. That criticism, like so many other criticisms from the same source in the past, is completely unwarranted. As anyone who has actually read the novel would agree, each one of the incidents in which Smith's hero gets involved is the kind of incident that could very well have happened to someone or other.

Which one of the following is the most serious error of reasoning in the argument?

- (A) It relies on the assumption that a criticism can legitimately be dismissed as unwarranted if it is offered by someone who had previously displayed questionable judgment.
- (B) It ignores the fact that people can agree about something even though what they agree about is not the case.
- (C) It calls into question the intellectual integrity of the critic in order to avoid having to address the grounds on which the criticism is based

- (D) It takes for granted that a whole story will have a given characteristics if each of its parts has that characteristics
- (E) It attempts to justify its conclusion by citing reasons that most people would find plausible only if they were already convinced that the conclusion was true

96. J.J. Thomson, the discoverer of the electron and a recipient of the Nobel Prize in physics, trained many physicists, among them seven Nobel Prize winners, 32 fellows of the Royal Society of London, and 83 professors of physics. This shows that the skills needed for creative research can be taught and learned.

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

- (A) J.J. Thomson was an internationally known physicist and scientists came from all over the world to work with him
 - (B) All the scientists trained by were renowned for their creative scientific research
 - (C) At least one of the eminent scientists trained by J.J. Thomson was not a creative researcher before coming to study with him
 - (D) Creative research in physics requires research habits not necessary for creative research in other fields
 - (E) Scientists who go on to be the most successful researchers often receive their scientific education in classes taught by renowned research scientists
97. The ancient Romans understood the principles of water power very well and in some outlying parts of their empire they made extensive and excellent use of water as an energy sources. This makes it all the more striking that the Romans made do without water power in dominated by large cities.

Which one of the following, if true, contributes most to an explanation of the difference described above in the Romans use of water power?

- (A) The ancient Romans were adept at constructing and maintaining aqueducts that could carry quantities of water sufficient to supply large cities over considerable distances
 - (B) In the areas in which water power was not used water flow in rivers and streams was substantial throughout the year but nevertheless exhibited some seasonal variation
 - (C) Water power was relatively vulnerable to sabotage but any damage could be quickly and inexpensively repaired
 - (D) In most areas to which the use of water power was not extended other more traditional sources of energy continued to be used
 - (E) In heavily populated areas the introduction of water power would have been certain to cause social unrest by depriving large numbers of people of their livelihood
98. There is no mystery as to why figurative painting revived in the late 1970s. People want to look at recognizable images. Sorting out art theories reflected in abstract paintings is no substitute for the sense of empathy that comes from looking at a realistic painting of a figure in a landscape. Perhaps members of the art felt that its lack of realistic subject matter was a rejection of the viewers and their world.

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

- (A) Abstract paintings often include or forms that are suggestive of real objects or emotions.
- (B) The art-viewing public wished to see traditional subjects treated in a non-traditional manner.
- (C) Paintings that depict a recognizable physical world rather than the emotional world of the artist's life require more artistic talent to create.
- (D) The general public is unable to understand the theories on which abstract painting is based.
- (E) The artistic preferences of the art-viewing public stimulated the revival.

99. Valitania's long-standing practice of paying high salaries to its elected politicians has had a disastrous effect on the level of integrity among politicians in that country. This is because the prospect of earning a high salary is always attractive to anyone whose primary aim in life is to make money, so that inevitably the wrong people must have been attracted into Valitanian politics: people who are more interested in making money than in serving the needs of the nation

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

- (A) Many Valitanian candidates for elected office spend some of their own money to finance their campaigns.
- (B) Most Valitanian elective offices have four-year terms.
- (C) No more people compete for elected office when officeholders are paid well than when they are paid poorly.
- (D) Only politicians who rely on their offices for income tend to support policies that advance their own selfish interests.
- (E) Most of those who are currently Valitanian politicians could have obtained better-paid work outside politics.

100. **Policy Adviser:** Freedom of speech is not only a basic human right, it is also the only rational policy for this government to adopt. When ideas are openly aired good ideas flourish, silly proposals are easily recognized as such, and dangerous ideas can be responded to by forcing citizens to disseminate their thoughts in secret.

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

- (A) Most citizens would tolerate some limits on freedom of speech
- (B) With or without a policy of freedom of speech, governments respond to dangerous ideas irrationally
- (C) Freedom of religion and freedom of assembly are also basic human rights that governments must recognize
- (D) Governments are less likely to be overthrown if they openly adopt a policy allowing freedom of speech
- (E) Great ideas have flourished in societies that repress free speech as often as in those that permit it

101. The trustees of the Avonbridge summer drama workshop have decided to offer scholarships to the top 10 percent of local applicants and the top 10 percent of nonlocal applicants as judged on the basis of a qualifying audition. They are doing this to ensure that only the applicants with the most highly evaluated auditions are offered scholarships to the program.

Which one of the following points out why the trustees' plan might not be effective in achieving its goal?

- (A) The best actors can also apply for admission to another program and then not enrol in the Avonbridge program
- (B) Audition materials that produce good results for one actor may disadvantage another, resulting in inaccurate assessment
- (C) The top 10 percent of local and nonlocal applicants might not need scholarships to the Avonbridge program
- (D) Some of the applicants who are offered scholarships could have less highly evaluated auditions than some of the applicants who are not offered scholarships
- (E) Dividing applicants into local and nonlocal groups is unfair because it favours nonlocal applicants

Answer Key

Question No.	Answer	Question No.	Answer	Question No.	Answer
1	E	35	E	69	A
2	E	36	C	70	E
3	D	37	A	71	C
4	C	38	A	72	A
5	A	39	E	73	C
6	E	40	B	74	C
7	B	41	B	75	D
8	C	42	B	76	B
9	C	43	C	77	B
10	C	44	B	78	A
11	B	45	E	79	A
12	D	46	B	80	B
13	A	47	E	81	C
14	E	48	E	82	E
15	E	49	A	83	D
16	E	50	B	84	C
17	A	51	B	85	A
18	E	52	B	86	D
19	D	53	A	87	E
20	C	54	C	88	E
21	D	55	D	89	A
22	A	56	D	90	C
23	E	57	E	91	E
24	C	58	A	92	B
25	E	59	B	93	E
26	D	60	D	94	E
27	C	61	C	95	D
28	D	62	C	96	C
29	A	63	B	97	E
30	C	64	E	98	E
31	B	65	C	99	E
32	B	66	B	100	D
33	C	67	E	101	D
34	B	68	B		

All the Best!