

1. Studies of fatal automobile accidents reveal that, in the majority of cases in which one occupant of an automobile is killed while another survives, it is the passenger, not the driver, who is killed. It is ironic that the innocent passenger should suffer for the driver's carelessness, while the driver often suffers only minor injuries or none at all.

Which of the following is an assumption underlying the reasoning in the passage above?

- (A) In most fatal automobile accidents, the driver of a car in which an occupant is killed is at fault.
- (B) Drivers of automobiles are rarely killed in auto accidents.
- (C) Most deaths in fatal automobile accidents are suffered by occupants of cars rather than by pedestrians.
- (D) Auto safety experts should increase their efforts to provide protection for those in the passenger seats of automobiles.
- (E) Automobile passengers sometimes play a contributing role in causing auto accidents.

2. In the years since the city of London imposed strict air-pollution regulations on local industry, the number of bird species seen in and around London has increased dramatically. Similar air-pollution rules should be imposed in other major cities.

Each of the following is an assumption made in the argument above EXCEPT:

- (A) In most major cities, air-pollution problems are caused almost entirely by local industry.
- (B) Air-pollution regulations on industry have a significant impact on the quality of the air.
- (C) The air-pollution problems of other major cities are basically similar to those once suffered by London.
- (D) An increase in the number of bird species in and around a city is desirable.
- (E) The increased sightings of bird species in and around London reflect an actual increase in the number of species in the area.

3. The U.S. census is not perfect: thousands of Americans probably go uncounted. However, the basic statistical portrait of the nation painted by the census is accurate. Certainly some of the poor go uncounted, particularly the homeless; but some of the rich go uncounted as well, because they are often abroad or traveling between one residence and another.

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

- (A) Both the rich and the poor have personal and economic reasons to avoid being counted by the census.
- (B) All Americans may reasonably be classified as either poor or rich.
- (C) The percentage of poor Americans uncounted by the census is close to the percentage of rich Americans uncounted.
- (D) The number of homeless Americans is approximately equal to the number of rich Americans.
- (E) The primary purpose of the census is to analyze the economic status of the American population.

4. A mail order company recently had a big jump in clothing sales after hiring a copywriter and a graphic artist to give its clothing catalog a magazine-like format designed to appeal to a more upscale clientele. The company is now planning to launch a house wares catalog using the same concept.

The company's plan assumes that

- (A) other house wares catalogs with magazine like formats do not already exist
- (B) an upscale clientele would be interested in a house wares catalog
- (C) the same copywriter and graphic artist could be employed for both the clothing and house wares catalogs
- (D) a magazine like format requires a copywriter and a graphic artist
- (E) customers to whom the old clothing catalog appealed would continue to make purchases from catalogs with the new format

5. The upcoming presidential election in the West African republic of Ganelon is of grave concern to the U.S. State Department. Ganelon presently has strong political and military ties to the United States. However, the Socialist party is widely expected to win the election, leading to fears that Ganelon will soon break away from the pro-American bloc and adopt a nonaligned or openly anti-American stance.

Which of the following is an assumption made in the passage above?

- (A) A Socialist party government in Ganelon is more likely to oppose the United States than is a non-Socialist party government.
- (B) The people of the United States recognize their nation's interest in the political stability of West Africa.
- (C) A weakening of U.S. political ties with Ganelon could have serious consequences for U.S. relations with other African nations.
- (D) The Socialist party leaders in Ganelon believe that their nation's interests would best be served by an alliance with anti-American forces.
- (E) The Socialist party will win the upcoming election in Ganelon.

6. Seven cubs were sighted a few days back by security cameras in the Ranthambore National Park. In another incident, residents of the village surrounding the Ranthambore National Park saw three cubs walking together. The environmentalists have claimed that with these ten new cubs the total number of Lions in the Ranthambore has reached 40, overtaking Kaziranga National Park's figure of thirty eight.

The claim made by the environmentalists is logically most vulnerable to which of the following challenges?

- (A) The witness of the villagers is unreliable and hence cannot be used to determine the number of lions at any National Park.
- (B) The number of Lions in the Ranthambore National Park has been decreasing for last twelve years.
- (C) Most of the new cubs born in the Ranthambore National Park will not live beyond six months due to frequent poaching activities.

(D) The three cubs sighted by the villagers may be a part of the group of seven spotted by security cameras.

7. The criticism surrounding the latest J phone launched by Japple is baseless. The phone is the best in the given price range since it has Loto technology which enables the users to use the phone to click the clearest of pictures.

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

- (A) Features apart from quality of pictures are not important in determining the best phone.
- (B) No other company uses the Loto technology that Japple uses.
- (C) The quality of the pictures clicked is the most important feature of a phone.
- (D) The other features of Japple like sound quality and battery life may not be as good as those of its competitor.

8. It is clear that today cancer is the deadliest disease in the world. Figures show that 2 million people of the 5 million who have died in the last three year were suffering from cancer whereas all other diseases put together claimed 3 million lives with each of these diseases accounting for 10-50% of that value.

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

- (A) No other disease claimed more than 2 million lives in the same duration.
- (B) Cancer has no cure and hence all its patients are fated to die of it.
- (C) The people who were suffering from cancer died of it.
- (D) Death rate today is much higher than it was a decade ago due to multiple reasons.

9. The fattening of liver called Cirrhosis, which is caused by consuming adulterated alcohol, is a growing urban trend and is affecting more people than ever before. As a definite measure to reverse this trend, the government must ban the sale of alcohol in unauthorized shops.

Which of the following is not an assumption in the above argument?

- (A) Consuming adulterated alcohol is the only way by which one contracts Cirrhosis.
- (B) The amount of adulterated liquor sold is more than that of unadulterated alcohol.
- (C) The alcohol sold in authorized shops is not adulterated.
- (D) Unauthorized shops are the only source of adulterated alcohol.

10. The Gross Domestic product or the GDP of a nation is the sum of the income of all the individuals of the country in the given year. Since the GDP of China is much higher than that of any other country and since population of China and America is equal, it must be true that any given Chinese would have earned more than any American in the said year.

The argument above depends on which of the following assumptions

- (A) The richest American may be richer than the richest Chinese and the poorest Chinese may be poorer than the poorest American.
- (B) People receive money from sources apart from their regular income.
- (C) The distribution of GDP among citizens is uniform in US and China.
- (D) The GDP of a country is not a true measure of its prosperity and citizens' economic power.

11. The biggest vote bank in the upcoming elections is women who form 51% of the total number of voters in the state. Also, 30% of the voters of the state belong to the Thullu community. Hence it is clear that any party which is able to take both these sections of the society on board is sure to secure the 2/3rd votes needed to form the next government.

The argument above depends on which of the following assumption?

- (A) Majority of the members of the Thullu community are men.
- (B) All members of Thullu community will vote en bloc for one party.
- (C) No other community has more than 30% strength in the given state.
- (D) Majority of the residents of the state are voters.

12. The level of greenhouse gases has been increasing at an alarming rate. Increased level of greenhouse gases is detrimental not just to crops but also to life in general. To bring the amount of greenhouse gases to a safe level, emissions from vehicles must be reduced.

The argument above depends on which of the following assumption?

- (A) Emissions from vehicles account for over 50% of the greenhouse gases.
- (B) Emissions from vehicles releases gases that are deadlier than the gases released from other sources.
- (C) Reducing the emissions from vehicles alone would significantly bring down the level of greenhouse gases.
- (D) Greenhouse gases are the leading cause of many of the prevalent life-threatening diseases.

13. Because no soldier wants to be associated with bad news in the eyes of his senior officers, instances of indiscipline at lower levels are progressively softened and distorted as it goes up each step in the rank. The army general, therefore, is less informed about the extent of indiscipline at lower levels than are his juniors.

The conclusion drawn above is based on the assumption that

- (A) Instances of indiscipline are usually rife in the rank and file of army.
- (B) Instances of indiscipline should be addressed at the rank at which they occur.
- (C) The problem of indiscipline is greater at lower levels than it is at higher levels.
- (D) An army general obtains information about indiscipline at lower levels from no source other than his juniors.

14. There were 100 students in a batch out of which 50 used book A for preparation of their physics exam whereas the other 50 referred to book B. Despite the fact that all students devoted same number of hours to their preparation, the average marks obtained by the group that used the book A was

considerably higher than that of students who used the book B. Since the same teacher checked all the 100 papers the marking scheme must have been consistent. Hence book A is preferable to book B.

Which of the following is an assumption in the above argument?

- (A) Students had no other source to prepare from apart from the book they had.
- (B) The individual caliber of all students for the given subject was similar.
- (C) Book A was more exhaustive and had better course content.
- (D) More than anything else, luck plays the most important role in exams.

15. Villagers of Lalaland were found to be severely lacking iron in their body and suffering from goiter. To address this situation, government has decided to give free iodized salt rich in iron to the villagers. Hence the number of goiter cases is expected to come down in the following years.

Which of the following is not an assumption in the argument above?

- (A) Goiter is curable.
- (B) Villagers can consume this salt in some way.
- (C) Deficiency of iron leads to goiter.
- (D) Goiter can be caused only by a deficiency of iron.

16. Delhi metro recently reduced the tariff of its services at one of its routes and saw an increase of its ridership by 30%. Delhi metro should therefore reduce fares for the other routes as well to further increase the profits.

Which of the following is not an assumption made by the author in the above argument?

- (A) The increase in revenue from the increase in ridership was greater than the loss in revenue from reducing the tariff.
- (B) The increase in ridership was a consequence of the reduction in fare.
- (C) There are people who would start using the other routes of Delhi metro if the fare on those routes is relaxed.
- (D) Once the fares are reduced, Delhi metro would be a better alternative to the mode of transport presently used by people on the other routes.

17. In a recent survey of a city that has either apartments or bungalows it was found that 30% of the residents own an apartment. Also, it was revealed that only 5% of the residents own a bungalow. 60% of the residents live in a rented apartment. One can thus conclude that 5% of the residents have no roof over their head, since no person who owns either a bungalow or an apartment would stay homeless or in a rented apartment.

The above conclusion assumes which of the following?

- (A) Every dwelling in the city can be classified as either an apartment or a bungalow. (B) People who own a bungalow do not own an apartment.  
(C) There may be people who own multiple apartments.  
(D) Having a roof on your head is the most primary requirement of an individual.

18. Batsmen are often criticized for not exemplifying sportsmanship when they decide to remain quiet on not being given out by the umpire even when they know that they should be given out. But this criticism is uncalled for. It is true that sometimes batsmen, despite knowing that they are out, do choose to stay on the crease when the umpire makes the incorrect decision of declaring the batsman not out. But there also are cases when the batsman is not out yet he is given out and has no option but to comply with the decision. Hence these aberrations do get balanced out over a batsman's lifetime.

The author's belief assumes which of the following?

- (A) All batsmen who are incorrectly declared not out by the umpire choose to remain on the crease and do not walk out on their own volition.  
(B) Declaring a batsman out when he is not is as unfair as declaring one not out when actually he is out.  
(C) The number of instances when the batsman decides to remain at the crease despite knowing that he has been erroneously declared not out is close to the number when he is erroneously given out.  
(D) There are no technology-aided or other methods to determine whether the batsman is really out or not.

19. Some people proclaim BhetanChagat to be the best author of our times. I would beg to differ on the simple and proven grounds that his novels have sold fewer copies than those of the books released around the same time his books were launched.

Which of the following is an assumption in the argument above?

- (A) Some people wrongly proclaim BhetanChagat to be the best author.  
(B) Whosoever's novels sell highest number of copies is the best author.  
(C) The data on the number of copies of a novel that get sold are freely available.  
(D) Books authored by the contemporaries of BhetanChagat have a wider reach than the books written by BhetanChagat.

20. Boys are emotionally strong and seldom exemplify behavioral anomalies. They are thereby usually not mindful of the people they indulge with. But since girls are emotionally fragile, they should be careful of the people they befriend.

Which of the following is an assumption in the above argument?

- (A) Behavior anomalies are a part of growing up.  
(B) Girls are usually not mindful of the people they befriend.  
(C) Boys are stronger than girls.  
(D) Those who are emotionally fragile should be mindful of the friends they make.

21. Since a competing lower-priced newspaper, The Reporter, was started five years ago, The Investigator's circulation has declined by 10,000 readers. The best way to get more people to read The Investigator is to reduce its price below that of The Reporter, at least until circulation increases to former levels.

Which of the following is an assumption that the argument depends upon?

- (A) The decline in readership of The Investigator can be reversed only partially.
- (B) The Reporter's circulation has increased by 10,000 readers.
- (C) The Reporter's circulation exceeds that of The Investigator.
- (D) Some readers of The Reporter are erstwhile readers of The Investigator.

22. On average, middle-aged consumers devote 39 percent of their retail expenditure to department store products and services, while for younger consumers the average is only 25 percent. Since the number of middle-aged people will increase dramatically within the next decade, department stores can expect retail sales to increase significantly during that period.

Which of the following is an assumption that the argument depends upon?

- (A) There will not be a significant increase in the number of younger customers within the next decade.
- (B) The increase in retail sales in the next decade will sustain in spite of increase in manufacturing costs.
- (C) The total value of the retail expenditure of middle-aged consumers exceeds that of younger consumers.
- (D) The total value of the retail expenditure of younger consumers is not likely to increase.

23. Advertising the reduced price of selected grocery items in The Independent will help you increase your sales. Consider the results of a study conducted last month. Thirty sale items from a store in Connaught Place were advertised in The Independent for four days. Each time one or more of the 30 items was purchased, clerks asked whether the shopper had read the ad. Two-thirds of the 200 shoppers asked answered in the affirmative.

Which of the following is an assumption that the argument depends upon?

- (A) Advertising in The Independent is more beneficial than advertising in other newspapers.
- (B) The specific advertisement in the paper led to the purchase of some of the thirty items advertised.
- (C) All the shoppers who had read the ad purchased at least one of the thirty items advertised.
- (D) The study took into consideration the impact of negative peer review on purchase habits.

24. Two years ago TathaGat High School began to use interactive computer instruction in three academic subjects. The school's academic performance bettered immediately, and last year's graduates have reported some impressive achievements in college. All schools in the city should adopt interactive computer instruction throughout the curriculum.

Which of the following is an assumption that the argument depends upon?

- (A) Interactive computer instruction makes for more effective learning. (B) The three academic subjects form a major part of the curriculum.  
(C) Interactive computer instruction makes a subject more interesting.  
(D) The impressive achievements in college were solely of an academic nature.

25. As violence in movies increases, so do crime rates in our cities. To combat this problem we must establish a board to censor certain movies, or we must limit admission to persons over 21 years of age. Apparently our legislators are not concerned about this issue since a bill calling for such actions recently failed to receive a majority vote.

Which of the following is an assumption that the argument depends upon?

- (A) Persons over 21 years of age are less likely to commit violence than persons under 21 years of age  
(B) Political motivations cannot wholly explain the failure of the bill to receive a majority vote.  
(C) It is possible to distinguish people who are over 21 years of age from those below 21 years.  
(D) Establishing a board to censor certain movies will not cost the government a lot of money.

26. A comprehensive study found that adults aged 40 to 50 are more likely to purchase chocolate and are more likely to purchase it in larger amounts than are members of any other demographic group. The popular belief that teenagers eat more chocolate than adults must, therefore, be false.

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

- (A) There is no difference between purchasing chocolate and consuming it.  
(B) Adults are more likely to purchase chocolate for themselves than for others.  
(C) Larger amounts of chocolate are eaten by a higher number of adults.  
(D) Most popular beliefs reflect the society's prejudices towards certain groups.

27. A claim that gained prominence decades ago was that electricity would revolutionize agriculture. Electrodes would be inserted into the soil, and the current between them would kill bugs and weeds and make crop plants stronger.

The claim mentioned above is based on which of the following assumptions?

- (A) Revolutionizing agriculture entails the use of latest technology.  
(B) Killing bugs and weeds does not amount to desecration of nature.  
(C) Electricity would not affect crops the same way it would affect weeds.  
(D) Nothing else would revolutionize agriculture as electricity would.

28. With the aim to minimize the city's average yearly expenditure on street lights, NDMC is considering replacing the incandescent bulbs currently in use with arrays of light-emitting diodes (LEDs) as the incandescent bulbs burn out. Compared to incandescent bulbs, LED arrays consume significantly less energy and cost no more to purchase.



The plan to minimize the city's average yearly expenditure on street lights assumes which of the following?

- (A) LEDs are at least as long lasting as incandescent bulbs.
- (B) LEDs are as easy to source as incandescent bulbs.
- (C) LEDs are as easy to maintain as incandescent bulbs.
- (D) LEDs are more environment friendly than incandescent bulbs.

29. Most people now agree that human activity is causing the Earth's temperature to rise. Though predictions vary, many global warming experts believe that average global temperatures will rise between three and eight degrees Fahrenheit during the next century. Such an increase would cause an alarming rise in sea levels, displacing millions of people by destroying major population centers along the world's coastlines.

Which of the following is an assumption in support of the argument's conclusion?

- (A) New technological developments in the next century will not divert rising seas from the world's coastal cities.
- (B) Individuals will not become more aware of the steps they can take to reduce the emission of greenhouse gases.
- (C) Some global warming experts predict a greater than eight degree Fahrenheit increase in global temperatures during the next century.
- (D) Human activities that contribute to global warming are unlikely to continue and greener practices will take their place.

30. TathaGat College is a much better university than Falafal University. At TathaGat college 89 percent of the faculty have PhD degrees; whereas, at Falafal University only 75 percent of the faculty have PhD degrees.

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

- (A) Some faculty at TathaGat College who have PhD degrees have been teaching for a long time.
- (B) Faculty who have PhD degrees are more in demand than faculties who do not have PhD degrees.
- (C) The number of faculty having PhD degrees is higher in TathaGat College than in Falafal University
- (D) How good a university is can be judged solely on the basis of the proportion of PhD holding faculty.

31. University Chancellor: We must provide more money and time for the faculty to conduct scholarly research more frequently and extensively. We all want to improve the quality of the students' learning at this institution.

The Chancellor's recommendation is based on which of the following assumptions?

- (A) The quality of student's learning at an institution is directly dependent on the amount of research done by the students.

- (B) The amount of money and time available currently for the faculty to conduct scholarly research is not translating into learning for students.
- (C) The amount of scholarly research undertaken by faculty has a direct bearing on the quality of students' learning.
- (D) Improving the quality of students' learning is a task that can be achieved by investing more money and time in training the faculty.

32. Although many doubts have been raised as to the accuracy of age estimation for a recently found Harappan artifact, all this criticism has no grounds. To estimate the age of the artifact, archeologists used a radiocarbon dating method known to be highly accurate in estimating the age of organic materials.

The conclusion above depends on which of the following assumptions?

- (A) Modern dating methods are generally more accurate than older dating methods.
- (B) Artifacts similar to the one above have been dated by radiocarbon dating method.
- (C) The recently uncovered Harappan artifact is wholly or partially made of organic material.
- (D) Radiocarbon dating cannot accurately estimate the age of certain artifacts.

33. As public concern over drug abuse has increased, authorities have become more vigilant in their efforts to prevent illegal drugs from entering the country. Many drug traffickers have consequently switched from marijuana, which is bulky, or heroin, which has a market too small to justify the risk of severe punishment, to cocaine.

The drug traffickers' action is based on which of the following assumptions?

- (A) Trafficking cocaine does not carry the risk of severe punishment.
- (B) Trafficking a bulky drug is not as economical as trafficking a less bulky drug.
- (C) Marijuana, heroin and cocaine are drugs that are barred from entering the country.
- (D) Cocaine enjoys a popularity that makes its trafficking viable in spite of risks.

34. Because occupancy rates for campus housing fell during the last academic year, so did housing revenues. To solve the problem, campus housing officials should reduce the number of available housing units, thereby increasing the occupancy rates. Also, to keep students from choosing to live off-campus, housing officials should lower the rents, thereby increasing demand.

Which of the following is an assumption that the argument depends upon?

- (A) Occupancy rates for campus housing will not increase without reducing the number of available housing units.
- (B) All students who decide to live off-campus do so because the rent of housing in campus is significantly more.
- (C) All students who decide to live off-campus do not do so because of reasons other than rent.

(D) Occupancy rates for campus housing fell during the last academic year because housing revenues fell.

35. Security company: Our research indicates that over the past six years no incidents of employee theft have been reported within 10 of the companies that have been our clients. In analyzing the security practices of these 10 companies, we have further learned that each of them requires its employees to wear photo identification badges while at work. In the future, therefore, we should recommend the use of such identification badges to all of our clients.

Which of the following is an assumption that the argument depends upon?

- A. The number of clients of the security company does not exceed ten.
- B. No instances of theft in the ten companies went unreported in the same period.
- C. Wearing photo identification badges acts as a deterrent to misbehavior.
- D. The ten companies do not have other security practices in place.

36. Exports of United States wood pulp will rise considerably during this year. The reason for the rise is that the falling value of the dollar will make it cheaper for paper manufacturers in Japan and Western Europe to buy American wood pulp than to get it from any other source.

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

- (A) Factory output of paper products in Japan and Western Europe will increase sharply during this year.
- (B) The quality of the wood pulp produced in the United States would be adequate for the purposes of Japanese and Western European paper manufacturers.
- (C) Paper manufacturers in Japan and Western Europe would prefer to use wood pulp produced in the United States if cost were not a factor.
- (D) Demand for paper products made in Japan and Western Europe will not increase sharply during this year.
- (E) Production of wood pulp by United States companies will not increase sharply during this year.

37. A company's personnel director surveyed employees about their satisfaction with the company's system for awarding employee performance ratings. The survey data indicated that employees who received high ratings were very satisfied with the system. The personnel director concluded from these data that the company's best-performing employees liked the system.

The personnel director's conclusion assumes which of the following?

- (A) No other performance rating system is as good as the current system.
- (B) The company's best-performing employees received high ratings.
- (C) Employees who received low ratings were dissatisfied with the system.
- (D) Employees who receive high ratings from a performance-rating system will like that system.
- (E) The company's best-performing employees were motivated to perform well by the knowledge that they would receive performance ratings.

38. In Argonia the average rate drivers pay for car accident insurance is regulated to allow insurance companies to make a reasonable profit. Under the regulations, the rate any individual driver pays never depends on the actual distance driven by that driver each year. Therefore, Argonians who drive less than average partially subsidize the insurance of those who drive more than average.

The conclusion above would be properly drawn if it were also true that in Argonia

- (A) the average accident insurance rate for all drivers rises whenever a substantial number of new drivers buy insurance
- (B) the average cost to insurance companies of insuring drivers who drive less than the annual average is less than the average cost of insuring drivers who drive more than the annual average
- (C) the lower the age of a driver, the higher the insurance rate paid by that driver
- (D) insurance company profits would rise substantially if drivers were classified in terms of the actual number of miles they drive each year
- (E) drivers who have caused insurance companies to pay costly claims generally pay insurance rates that are equal to or lower than those paid by other drivers

39. The school board has determined that it is necessary to reduce the number of teachers on the staff. Rather than deciding which teachers will be laid off on the basis of seniority, the school board plans to lay off the least effective teachers first.

The school board's plan assumes that

- (A) there is a way of determining the effectiveness of teachers
- (B) what one individual defines as effective teaching will not be defined as effective teaching by another individual
- (C) those with the most experience teaching are the best teachers
- (D) those teachers who are paid the most are generally the most qualified
- (E) some teachers will be more effective working with some students than with other students

40. In 1990 all of the people who applied for a job at Evco also applied for a job at Radeco, and Evco and Radeco each offered jobs to half of these applicants. Therefore, every one of these applicants must have been offered a job in 1990.

The argument above is based on which of the following assumptions about these job applicants?

- (A) All of the applicants were very well qualified for a job at either Evco or Radeco.
- (B) All of the applicants accepted a job at either Evco or Radeco.
- (C) None of the applicants was offered a job by both Evco and Radeco.
- (D) None of the applicants had applied for jobs at places other than Evco and Radeco.
- (E) None of the applicants had previously worked for either Evco or Radeco.

41. When a person is under intense psychological stress, his or her cardiovascular response is the same as it is during vigorous physical exercise. Psychological stress, then, must be beneficial for the heart as is vigorous physical exercise.

The argument above relies on which of the following assumptions?

- (A) Exercise is an effective means of relieving psychological stress.
- (B) The body's short-term cardiovascular response to any activity indicates that activity's long-term effect on the body.
- (C) Cardiovascular response during an activity is an adequate measure of how beneficial the activity is for the heart.
- (D) Psychological stress can have a positive effect on the body.
- (E) Vigorous exercise is the most reliable method of maintaining a healthy heart.

42. The wild mouflon sheep of the island of Corsica are direct descendants of sheep that escaped from domestication on the island 8,000 years ago. They therefore provide archaeologists with a picture of what some early domesticated sheep looked like, before the deliberate selective breeding that produced modern domesticated sheep began.

The argument above makes which of the following assumptions?

- (A) The domesticated sheep of 8,000 years ago were quite dissimilar from the wild sheep of the time.
- (B) There are no other existing breeds of sheep that escaped from domestication at about the same time as the forebears of the mouflon.
- (C) Modern domesticated sheep are direct descendants of sheep that were wild 8,000 years ago.
- (D) Mouflon sheep are more similar to their forebears of 8,000 years ago than modern domesticated sheep are to theirs.
- (E) The climate of Corsica has not changed at all in the last 8,000 years.

43. Within 20 years it will probably be possible to identify the genetic susceptibility an individual may have toward any particular disease. Eventually, effective strategies will be discovered to counteract each such susceptibility. Once these effective strategies are found, therefore, the people who follow them will never get sick.

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

- (A) For every disease there is only one strategy that can prevent its occurrence.
- (B) In the future, genetics will be the only medical specialty of any importance.
- (C) All human sicknesses are in part the result of individuals' genetic susceptibilities.
- (D) All humans are genetically susceptible to some diseases.
- (E) People will follow medical advice when they are convinced that it is effective.

44. Bank depositors in the United States are all financially protected against bank failure because the government insures all individuals' bank deposits. An economist argues that this insurance is partly responsible for the high rate of bank failures, since it removes from depositors any financial incentive to

find out whether the bank that holds their money is secure against failure. If depositors were more selective, then banks would need to be secure in order to compete for depositors' money.

The economist's argument makes which of the following assumptions?

- (A) Bank failures are caused when big borrowers default on loan repayments.
- (B) A significant proportion of depositors maintain accounts at several different banks.
- (C) The more a depositor has to deposit, the more careful he or she tends to be in selecting a bank.
- (D) The difference in the interest rates paid to depositors by different banks is not a significant factor in bank failures
- (E) Potential depositors are able to determine which banks are secure against failure.

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

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

- (A) Switching to cleaner-burning fuel will not be more expensive than installing scrubbers.
- (B) Northern Power can choose from among various kinds of scrubbers, some of which are more effective than others.
- (C) Northern Power is not necessarily committed to reducing harmful emissions from its plants.
- (D) Harmful emissions from Northern Power's plants cannot be reduced more by using both methods together than by the installation of scrubbers alone.
- (E) Aside from harmful emissions from the smokestacks of its plants, the activities of Northern Power do not cause significant air pollution.

46. If the county continues to collect residential trash at current levels, landfills will soon be overflowing and parkland will need to be used in order to create more space. Charging each household a fee for each pound of trash it puts out for collection will induce residents to reduce the amount of trash they create; this charge will therefore protect the remaining county parkland.

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

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

47. Although computers can enhance people's ability to communicate, computer games are a cause of underdeveloped communication skills in children. After-school hours spent playing computer games are hours not spent talking with people. Therefore, children who spend their entire spare time playing these games have less experience in interpersonal communication than other children have.

The argument depends on which of the following assumptions?

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

48. Commentator: The theory of trade retaliation states that countries closed out of any of another country's markets should close some of their own markets to the other country in order to pressure the other country to reopen its markets. If every country acted according to this theory, no country would trade with any other.

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

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

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

The argument above depends on which of the following assumptions?

- (A) A majority of civil trials involve complexities that jurors are not capable of understanding.
- (B) The judges who would decide complex civil trials would be better able to understand the complexities of those trials than jurors are.
- (C) The judges who would preside over civil trials would disallow the most complex sorts of evidence from being introduced into those trials.
- (D) Jurors' decisions are frequently incorrect even in those civil trials that do not involve great complexities.

(E) The sole reason in favor of having juries decide civil trials is the supposition that their decisions will almost always be correct.

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

The Wildlife Protection Committee's plan assumes that

- (A) poachers do not kill rhinos that are worthless to them.
- (B) hornless rhinos pose less of a threat to humans, including poachers, than do rhinos that have horns.
- (C) rhinos are the only animals poachers kill for their horns.
- (D) hornless rhinos can successfully defend their young against nonhuman predators.
- (E) imposing more stringent penalties on poachers will not decrease the number of rhinos killed by poachers.

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

The proposal above to increase mass transit ridership assumes that

- (A) current mass transit systems are subject to unexpected route closings and delays
- (B) using mass transit creates less air pollution per person than using a private automobile
- (C) the parking spaces offered by employers as tax-free benefits can be worth as much as \$2,500 per year
- (D) many employees are deterred by financial considerations from using mass transit to commute to their places of employment.
- (E) because of traffic congestion on major commuter routes, it is often faster to travel to one's place of employment by means of mass transit than by private automobile

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

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

- (A) No insurance policies are deliberately underpriced in order to attract customers to the insurance company offering such policies.
- (B) A policy that represents a net loss to the insurance company is not an underpriced policy in every case.
- (C) There are policies for which the level of claims per year can be predicted with great accuracy before premiums are set.



(D) The income earned by investing premium income is the most important determinant of an insurance company's profits.

(E) The claims against at least some underpriced policies do not require paying out all of the premium income from those policies as soon as it is earned.

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

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

(A) Adaptation of vacant office space to meet the government's requirements, if possible, would not make leasing such office space a more cost-effective alternative to new construction.

(B) The government prefers leasing facilities to owning them in cases where the two alternatives are equally cost-effective.

(C) If facilities available for leasing come very close to meeting the government's requirements for facilities the government needs, the government can relax its own requirements slightly and consider those facilities in compliance.

(D) The government's construction projects would not on being completed, add to the stock of facilities available for leasing in the cities concerned.

(E) Before embarking on any major construction project, the government is required by law to establish beyond any reasonable doubt that there are no alternatives that are most cost-effective.

54. Any serious policy discussion about acceptable levels of risk in connection with explosions is not well served if the participants fail to use the word "explosion" and use the phrase "energetic disassembly" instead. In fact, the word "explosion" elicits desirable reactions, such as a heightened level of attention, whereas the substitute phrase does not. Therefore, of the two terms, "explosion" is the one that should be used throughout discussions of this sort.

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

(A) In the kind of discussion at issue, the advantages of desirable reactions to the term "explosion" outweigh the drawbacks, if any, arising from undesirable reactions to that term.

(B) The phrase "energetic disassembly" has not so far been used as a substitute for the word "explosion" in the kind of discussion at issue.

(C) In any serious policy discussion, what is said by the participants is more important than how it is put into words.

(D) The only reason that people would have for using "energetic disassembly" in place of "explosion" is to render impossible any serious policy discussion concerning explosions.

(E) The phrase "energetic disassembly" is not necessarily out of place in describing a controlled rather than an accidental explosion.

55. The simple facts are these: the number of people killed each year by grizzly bears is about the same as the number of people killed by lightning on golf courses. And the number of people killed by lightning

on golf courses each year is about the same as the number of people electrocuted by electric blenders. All the horrible myths and gruesome stories aside, therefore, a grizzly bear is in fact about as dangerous as an electric blender or a game of golf.

Which one of the following is an assumption that the author relies upon in the passage?

- (A) Most incidents involving grizzly bears are fatal.
- (B) Grizzly bears are no longer the danger they once were.
- (C) The number of fatalities per year is an adequate indication of something is dangerousness.
- (D) A golf course is a particularly dangerous place to be in a thunderstorm.
- (E) Something is dangerous only if it results in death in the majority of cases.

56. Railroad spokesperson: Of course it is a difficult task to maintain quality of service at the same time that the amount of subsidy the taxpayers give the railroad network is reduced. Over recent years, however, the number of passengers has increased in spite of subsidy reductions. This fact leads to the conclusion that our quality of service has been satisfactory.

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

- (A) Taxpayers do not wish to have their taxes raised to subsidize the railroads.
- (B) Some people refuse to travel by train if they are dissatisfied with the quality of service.
- (C) The quality of service on the trains must have improved in spite of subsidy reductions.
- (D) It is impossible to reduce subsidies to the railroad network without some effect on the quality of service.
- (E) The increase in the number of passengers will increase revenue sufficiently to offset the subsidy reductions.

57. "Addiction" has been defined as "dependence on and abuse of a psychoactive substance." Dependence and abuse do not always go hand in hand, however. For example, cancer patients can become dependent on morphine to relieve their pain, but this is not abusing the drug. Correspondingly, a person can abuse a drug without being dependent on it. Therefore, the definition of "addiction" is incorrect.

The relevance of the example of cancer patients to the argument depends on the assumption that

- (A) cancer patients never abuse morphine
- (B) cancer patients often become dependent on morphine
- (C) cancer patients who are dependent on morphine are addicted to it
- (D) cancer patients who abuse a drug are dependent on it
- (E) cancer patients cannot depend on morphine without abusing it

58. When permits for the discharge of chemicals into a waterway are issued, they are issued in terms of the number of pounds of each chemical that can be discharged into the waterway per day. These figures, calculated separately for each chemical for which a permit is issued, are based on an estimate of the effect of the dilution of the chemical by the amount of water flowing through the waterway. The waterway is therefore protected against being adversely affected by chemicals discharged under the permits.

The argument depends on the assumption that

- (A) relatively harmless chemicals do not interact with each other in the water to form harmful compounds.
- (B) there is a swift flow of water in the waterway that ensures rapid dispersion of chemicals discharged.
- (C) there are no chemicals for which discharge into waterways is entirely prohibited.
- (D) those who receive the permits do not always discharge the entire quantity of chemicals that the permits allow.
- (E) the danger of chemical pollution of waterways is to be evaluated in terms of human health only and not in terms of the health of both human beings and wildlife.

59. In their native habit, amaryllis plants go dormant when the soil in which they are growing dries out during the dry season. Therefore, if amaryllis plants kept as houseplants are to thrive, water should be withheld from them during part of the year so that the plants go dormant.

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

- (A) Most kinds of plants go dormant at some time or other during the year.
- (B) Amaryllis are more difficult to keep as houseplants than other kinds of plants are.
- (C) Water should be withheld from amaryllis plants kept as houseplants during the exact time of year that corresponds to the dry season in their native habitat.
- (D) Any amaryllis plant that fails to thrive is likely to have been dormant for too short a time.
- (E) Going dormant benefits amaryllis plants in their native habitat in some way other than simply preventing death during overly dry periods.

60. No computer will ever be able to do everything that some human minds can do, for there are some problems that cannot be solved by following any set of mechanically applicable rules. Yet computers can only solve problems by following some set of mechanically applicable rules.

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

- (A) At least one problem solvable by following some set of mechanically applicable rules is not solvable by any human mind.
- (B) At least one problem not solvable by following any set of mechanically applicable rules is solvable by at least one human mind.
- (C) At least one problem solvable by following some set of mechanically applicable rules is solvable by every human mind.

- (D) Every problem that is solvable by following more than one set of mechanically applicable rules is solvable by almost every human mind.
- (E) Every problem that is solvable by following at least one set of mechanically applicable rules is solvable by at least one human mind.

61. Organization president: The stationery and envelopes used in all of the mailings from our national headquarters are made from recycled paper, and we never put anything but letters in the envelopes. When the envelopes have windows, these windows are also made from recycled material. Therefore the envelopes, and thus these mailings, are completely recyclable.

Which one of the following is an assumption on which the organization president's argument depends?

- (A) All the paper used by the organization for purposes other than mailings is recycled.
- (B) The mailings from the organization's national headquarters always use envelopes that have windows.
- (C) The envelope windows made from recycled material are recyclable.
- (D) The envelopes and stationery used in the organization's mailings are always recycled.
- (E) The organization sends mailings only from its national headquarters.

62. Proponents of organic farming claim that using chemical fertilizers and pesticide in farming is harmful to local wildlife. To produce the same amount of food, however, more land must be under cultivation when organic farming techniques are used than when chemicals are used. Therefore, organic farming leaves less land available as habitat for local wildlife.

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

- (A) Chemical fertilizers and pesticides pose no health threat to wildlife.
- (B) Wildlife living near farms where chemicals are used will not ingest any food or water containing those chemicals.
- (C) The only disadvantage to using chemicals in farming is their potential effect on wildlife.
- (D) The same crops are grown on organic farms as on farms where chemicals are used.
- (E) Land cultivated by organic farming methods no longer constitutes a habitat for wildlife.

63. To the editor:

In 1960, an astronomer proposed a mathematical model for determining whether extraterrestrial life exists. It was based on the assumptions that life as we know it could exist only on a planet and that many stars are, like our Sun, orbited by planets. On the basis that there are nine planets in our solar system and one of them has life as we know it, the astronomer predicted that there are as many as one million extraterrestrial civilizations across all solar systems. Yet astronomers to date have not detected even one planet outside our solar system. This indicates that the astronomer's model is wrong, and life as we know it exists only on the planet Earth.

Clay Moltz

Which one of the following, if accepted by Clay Moltz, would require him to reconsider his conclusion?

- (A) Forms of life other than life as we know it exist on other planets.
- (B) There are many stars that are not orbited by planets.
- (C) Detecting planets outside our solar system requires more sophisticated instruments than are currently available.
- (D) The soundness of the conclusion reached by applying a mathematical model depends on the soundness of the assumptions on which the model is based.
- (E) Due to sheer distances and expanses of space involved, any extraterrestrial civilization would have great difficulty communicating with ours.

64. Train service suffers when a railroad combines commuter and freight service. By dividing its attention between its freight and commuter customers, a railroad serves neither particularly well. Therefore, if a railroad is going to be a successful business, then it must concentrate exclusively on one of these two markets.

For the argument to be logically correct, it must make which one of the following assumptions?

- (A) Commuter and freight service have little in common with each other.
- (B) The first priority of a railroad is to be a successful business.
- (C) Unless a railroad serves its customers well, it will not be a successful business.
- (D) If a railroad concentrates on commuter service, it will be a successful business.
- (E) Railroad commuters rarely want freight service as well.

65. The energy an animal must expend to move uphill is proportional to its body weight, whereas the animal's energy output available to perform this task is proportional to its surface area. This is the reason that small animals, like squirrel, can run up a tree trunk almost as fast as they can move on level ground, whereas large animals tend to slow down when they are moving uphill.

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

- (A) The amount of energy needed to move uphill is no greater for large animals than it is for small animals.
- (B) Small animals can move more rapidly than large animals can.
- (C) The ratio of surface area to body weight is smaller in large animals than it is in small animals.
- (D) There is little variation in the ratio of energy output to body weight among animals.
- (E) The amount of energy needed to run at a given speed is proportional to the surface area of the running animal.

66. When Cortez arrived in Mexico in A.D. 1519, he observed the inhabitants playing a ceremonial game with a rubber ball. The pre-Columbian inhabitants of Mexico began to use rubber around A.D. 1000. Thus we can be sure that the game must have originated sometime between approximately A.D. 1000 and Cortez arrival.

The conclusion reached above depends on which one of the following assumptions?

- (A) The pre-Columbian inhabitants of Mexico played games on all ceremonial occasions.
- (B) The making of rubber balls was one of the earliest uses of rubber by the inhabitants of Mexico.
- (C) The ceremonial game referred to was popular throughout Mexico.
- (D) The game had been played since its inception with a rubber ball.
- (E) The dating of the first use of rubber in Mexico was due to Cortez.

67. Trade protection is bad policy. Take the case of the microcomputer industry. The United States government attempted to restore the computer chip market to United States manufacturers, who had ceased production in the face of an abundant supply of cheap chips from foreign manufacturers. Under trade protection, it was expected that, as government-imposed quotas and excise taxes forced the price of foreign chips to rise, United States manufactures would reenter the market. They did, but at only slightly lower prices than the now-high prices of foreign firms. The lesson has been simple: trade protection means that United States manufactures gain while United States consumers lose.

Which one of the following is an assumption on which the author's argument relies?

- (A) It is unreasonable to expect that government-imposed quotas and excise taxes will reduce prices for United States consumers.
- (B) United States manufacturers of computer chips are more concerned with high profits than are foreign manufacturers.
- (C) The United States government's primary purpose in trade protection is to restore markets and profits to United States manufacturers.
- (D) With respect to trade protection, the microcomputer industry is representative of United States industry in general.
- (E) The quality of the chips produced by United States manufacturers is better than the quality of the chips produced by foreign manufacturers.

68. An examination of corruption provides the basis for rejecting the view that an exact science of society can ever be constructed. As with all other social phenomena that involve deliberate secrecy, it is intrinsically impossible to measure corruption, and this is not merely due to the fact that social science has not yet reached its goal, achievable to be sure, of developing adequate quantifying techniques. If people were ready to answer questions about their embezzlements and bribes, it would mean that these practices had acquired the character of legitimate, taxable activities and had ceased to be corrupt. In other words, corruption must disappear if it is to be measurable.

Which one of the following most accurately states a hidden assumption that the author must make in order to advance the argument above?

- (A) Some people believe that an exact science of society can be constructed.
- (B) The primary purpose of an exact science is to quantify and measure phenomena.

- (C) An intrinsic characteristic of social phenomena that involve deliberate secrecy is that they cannot be measured.
- (D) An exact science of social phenomena that involve deliberate secrecy cannot be constructed.
- (E) An exact science can be constructed only when the phenomena it studies can be measured.

69. In the open ocean, a shark will catch almost any small fish it decides to attack. The best chance a small fish has, once it is spotted by a hungry shark, is that the shark will promptly find something else to attack. Therefore, one of the benefits gained by small fish that swim in large groups known as schools is a reduced chance of being attacked by a shark.

Which one of the following statements is an assumption on which the author's argument depends?

- (A) Sharks live primarily on a diet of small fish.
- (B) Sharks do not eat an entire school of fish at one time.
- (C) The sheer number of fish in a school prevents sharks from attacking.
- (D) Sharks are the main danger to small fish in the open ocean.
- (E) Small fish are able to sense when they are being spotted by sharks.

70. Although physicians are alleged to hide their colleagues' medical incompetence, today that practice could be professional suicide. Because so many medical advances are well-known by all doctors, obscuring someone's incompetent procedure is almost impossible when a claimant chooses to pursue a case. Thus, in malpractice suits, physicians risk their own reputations if they testify falsely to protect their friends.

Which one of the following is an assumption supporting the conclusion in the passage?

- (A) Physicians' professional success depends upon their good reputations.
- (B) Incompetent physicians should be exposed before they commit malpractice.
- (C) False testimony is morally wrong regardless of one's profession.
- (D) Physicians should do everything possible to protect themselves from malpractice claims.
- (E) Times have changed and physicians today must keep up on all medical advances.

71. The introduction of symbols for numbers is an event lost in prehistory, but the earliest known number symbols, in the form of simple grooves and scratches on bones and stones date back 20,000 years or more. Nevertheless, since it was not until 5,500 years ago that systematic methods for writing numerals were invented, it was only then that any sort of computation became possible.

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

- (A) Grooves and scratches found on bones and stones were all made by people, and none resulted from natural processes.
- (B) Some kinds of surfaces upon which numeric symbols could have been made in the period before 5,500 years ago were not used for that purpose.
- (C) Grooves and scratches inscribed on bones and stones do not date back to the time of the earliest people.
- (D) Computation of any sort required a systematic method for writing numerals.

(E) Systematic methods for writing numerals were invented only because the need for computation arose.

72. In 1980, Country A had a per capita gross domestic product (GDP) that was \$5,000 higher than that of the European Economic Community. By 1990, the difference, when adjusted for inflation, had increased to \$6,000. Since a rising per capita GDP indicates a rising average standard of living, the average standard of living in Country A must have risen between 1980 and 1990.

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

- (A) Between 1980 and 1990, Country A and the European Economic Community experienced the same percentage increase in population.
- (B) Between 1980 and 1990 the average standard of living in the European Economic Community fell.
- (C) Some member countries of the European Economic Community had, during the 1980s, a higher average standard of living than Country A.
- (D) The per capita GDP of the European Economic Community was not lower by more than \$1,000 in 1990 than it had been in 1980.
- (E) In 1990, no member country of the European Economic Community had a per capita GDP higher than that of Country A.

73. A new medication for migraine seems effective, but there is concern that the medication might exacerbate heart disease. If patients with heart disease take the medication under careful medical supervision, however, harmful side effects can definitely be averted. The concern about those side effects is thus unfounded.

The argument depends on which one of the following assumptions?

- (A) The new medication actually is effective when taken by patients with heart disease.
- (B) No migraine sufferers with heart disease will take the new medication except under careful medical supervision.
- (C) Most migraine sufferers who have taken the new medication in trials also had heart disease.
- (D) The new medication has various other side effects, but none as serious as that of exacerbating heart disease.
- (E) The new medication will displace all migraine medications currently being used.

74. Copyright laws protect the rights of writers to profits earned from their writings, whereas patent laws protect inventors' rights to profits earned from their inventions. In Jawade, when computer-software writers demanded that their rights to profit be protected, the courts determined that information written for a machine does not fit into either the copyright or the patent category. Clearly, therefore, the profit rights of computer-software writers remain unprotected in Jawade.

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



- (A) Computer-software writers are not an influential enough group in Jawade for the government to consider modifying existing copyright laws in order to protect this group's profit rights.
- (B) No laws exist, other than copyright laws and patent laws, that would protect the profit rights of computer-software writers in Jawade.
- (C) Most of the computer software used in Jawade is imported from other countries.
- (D) Computer software is more similar to writings covered by copyright laws than it is to inventions covered by patent laws.
- (E) Copyright laws and patent laws in Jawade have not been modified since their original adoption.

75. Spectroscopic analysis has revealed the existence of frozen nitrogen, methane, and carbon monoxide on the surface of Pluto. Such ices have a tendency to vaporize, producing an atmosphere. Since the proportion of any gas in such an atmosphere depends directly on how readily the corresponding ice vaporizes, astronomers have concluded that the components of Pluto's atmosphere are nitrogen, carbon monoxide, and methane, in order of decreasing abundance.

The astronomers' argument relies on which one of the following assumptions?

- (A) There is no more frozen nitrogen on the surface of Pluto than there is either frozen carbon monoxide or methane.
- (B) Until space probes reach Pluto, direct analysis of the atmosphere is impossible.
- (C) There is no frozen substance on the surface of Pluto that vaporizes more readily than methane but less readily than carbon monoxide.
- (D) Nitrogen is found in the atmosphere of a planet only if nitrogen ice is found on the surface of that planet.
- (E) A mixture of nitrogen, carbon monoxide, and methane is characteristic of the substances from which the Solar System formed.