

# LSAT Sample Practice Questions

**Instruction:** This file contains 100 LSAT sample questions for the following sections: **Critical Reasoning, Analytical Reasoning and Reading Comprehension.** Among them, all **Critical Reasoning** questions were followed with complete explanations. For answers with complete explanations to other questions, please order the [LSAT Prep Course](#) with hundred of pages of test techniques and strategies.

## Free LSAT Critical Reasoning Questions

1. One of the truisms of the advertising industry is that it is rarely necessary to say something of substance in an advertisement in order to boost sales. Instead, one only needs to attract the potential customer's attention; memory does the rest, for it is more important for sales that people know of a product than that they know something about it.

Which of the following is assumed by the argument?

- A. People can remember a product without having much information about it.
- B. Advertisements, in their own way, function to improve people's memories.
- C. Attracting a potential customer's attention is a simple matter.
- D. The advertising industry knows little of substance about the products it promotes.
- E. Advertisements seldom tell the truth about a product.

### Explanation:

The passage discusses how advertising usually need only draw people's attention to a product and need not provide any substance for people to remember the product. Thus, the passage implies that people can remember a product without having much information about it, and A is the correct answer.

B is incorrect. The passage suggests that if advertisements draw people's attention to a product, the people are more apt to remember the product. The advertisement is not said to improve people's memories, only to draw people's attention so they will use their existing memories.

C is also incorrect. The passage says that all one usually needs to do is attract a potential customer's attention. It does not say how easy or difficult that is.

The fourth answer choice is incorrect. The passage says that it is rarely necessary to say something of substance in an advertisement but does not suggest that the advertising industry knows little of substance about the product.

The last answer choice is incorrect. The passage does not suggest that advertisements make false claims about products.

2. Why save endangered species? For the general public, endangered species appear to be little more than biological oddities. A very different perception is gained from considering the issue of extinction in a wider context. The important point is that many major social advances have been made on the basis of life forms whose worth would never have been perceived in advance. Consider the impact of rubber-producing plants on contemporary life and industry: approximately two-thirds of the world's rubber supply comes from rubber producing plants and is made into objects as diverse as rubber washers and rubber boots.

The point of the passage is made chiefly by

- A. acknowledging the validity of two opposing points of view
- B. appealing to the emotions of the audience rather than to their intellects
- C. suggesting a useful perspective for viewing the question raised at the beginning of the passage
- D. trying to discredit the view of an opponent without presenting an alternative hypothesis
- E. generalizing from similar to dissimilar cases.

**Explanation:**

The passage suggests that considering the possibility of extinction with an eye toward the possible utility of a previously unvalued species will lead to a different answer to the question than considering the possibility of extinction from a more general perspective. C describes the author's procedure of suggesting a new perspective and is thus the correct answer.

The first choice is incorrect. The author argues that it is important to preserve endangered species without endorsing any opposing point of view. The view attributed to the general public is not accepted; rather, an argument is given to show what that view misses. B is incorrect. The author uses an approach that is primarily factual, and does not seek to arouse the emotions of its audience. D is also incorrect. The author tries to undermine an opposing position by presenting an alternative to it. The last answer choice is incorrect. The generalization about the potential value of life forms whose value was not perceived in advance is supported by an example of a similar case, namely that of rubber plants.

3. Only a member of the Regionalist party would oppose the bill for a new recycling law that would protect the environment from industrial interests. Ellen cannot be a member of the Regionalist party because she supports the bill.

Which of the following statements points out why the conclusion is invalidly drawn?

- A. Regionalist party members have organized to oppose industrial interests on several other issues.
- B. Industrial interests need not oppose the protection of the environment.
- C. Past attempts to protect the environment through recycling laws have failed.
- D. It is possible that some Regionalist party members may not oppose the bill for a new recycling law.
- E. Ellen has attended programs and distributed literature prepared by the Regionalist party.

**Explanation:**

The fact that only a member of the Regionalist party would oppose the bill does not imply that all members of the Regionalist party would oppose the bill. Based on the initial statement, Ellen may or may not be a member of the Regionalist party if she supports the bill. For the conclusion to be valid, the initial statement would have to read, "All members of the Regionalist party would oppose the bill for a new recycling law..." Thus, the choice of D makes the relevant logical point.

The first three answer choices are incorrect. Each presents at best a piece of background information without being specifically related to the question of whether all Regionalist party members would oppose the bill. The last answer choice is also incorrect. Ellen's attending programs and distributing literature prepared by the Regionalist party might appear to make it likely that the conclusion is false. But suggesting that the conclusion might be false does not help show why the conclusion is invalidly drawn.

4. Roberta was born in 1967, and so in 1976 she was nine years old. It is clear from this example that the last two digits of a person's birth year will be the same as the last two digits of the year of that person's ninth birthday, except that the position of the digits will be reversed.

Which of the following is the best criticism of the assertions made?

- A. The generalization is valid only for those birth years that do not end in two zeroes.
- B. The example does not exhibit the same principle as is expressed in the generalization based on it.

- C. The generalization is valid only for those birth years in which the last digit is one greater than the second-to-last digit.
- D. The example cannot be shown to be correct unless the truth of the generalization is already presupposed.
- E. The generalization is valid only for those birth years in which the last digit is greater than five.

**Explanation:**

The generalization is only true for some birth years. A good criticism of the generalization would show when the generalization is not true. C does just that and thus is the correct answer.

A is incorrect. It is false that the generalization holds for all years that do not end in two zeros. For example, 1970 is a birth year that does not end in two zeros. However, 1970 plus nine equals 1979, and hence this is a case for which the generalization is not valid. Since this answer choice is false, it cannot be a good criticism of the assertions.

The second answer choice is also incorrect. In the example, the last two digits of the person's birth year-67-are the same as the last two digits of the year of the person's ninth birthday-76-except reversed. Thus, the example does in fact exhibit the same principle as the generalization.

The fourth answer choice is incorrect. The difference between 1976 and 1967 is nine. The correctness of the first statement depends only on this fact and the fact that Roberta was born in 1967 and was still alive in 1976. Thus, the truth of the generalization is not presupposed.

The last answer choice is also incorrect. Consider birth year 1923. a person born in 1923 would have been nine in 1932 and the generalization holds. So E is false.

5.The greatest chance for the existence of extraterrestrial life is on a planet beyond our solar system. The Milky Way galaxy alone contains 100 billion other suns, many of which could be accompanied by planets similar enough to Earth to make them suitable abodes of life.

The statement presupposes which of the following?

- A. Living creatures on another planet would probably have the same appearance as those on Earth.
- B. Life cannot exist on other planets in our solar system.
- C. If the appropriate physical conditions exist, life is an inevitable consequence.
- D. More than one of the suns in the galaxy is accompanied by an Earth-like planet.

E. It is likely that life on another planet would require conditions similar to those on Earth.

**Explanation:**

In stating that planets may exist that are similar enough to Earth to make them suitable for supporting life, the author implicitly rules out planets dissimilar to Earth as likely to support life. The assumption underlying the statement is that life on another planet is likely to require conditions similar to those on Earth. Therefore, E is the correct answer.

A is not correct. The statement presupposes nothing about the appearance of extraterrestrial life. B is incorrect. The statement implies that it is relatively unlikely that life exists on other planets in our solar system, but it makes no presupposition absolutely ruling out the possibility that such life exists. The answer choice of C is incorrect. Although the statement suggests that there is the greatest chance for life when physical conditions are appropriate, it leaves open the possibility that no life will exist even with appropriate conditions. D is also incorrect. The statement says that it is possible that more than one of the suns in the galaxy is accompanied by an Earth-like planet, but it does not presuppose that there are actually any such suns.

6. The state with the greatest fraction of its population in urban areas, if the urban areas are considered to include the suburbs, is California. The West is highly urbanized, but California is exceptional even in that region: 91 percent of its population lives in urban areas. Geographically, however, California is rural: 96 percent of its land is outside urban areas.

If all of the statements are true, which of the following is best supported on the basis of them?

- A. No state has a smaller fraction of its population in rural areas than California has.
- B. The current rate of population growth in California's urban areas exceeds that current rate of population growth in California's rural areas.
- C. In California 96 percent of the population lives on 9 percent of the land.
- D. No state has a smaller area devoted to urban settlement than California has.
- E. California's population density is among the highest of all states in the United States.

**Explanation:**

The passage states that of all the states, California has the greatest fraction of its population (91 out of 100) living in urban areas. That means only 9 out of every 100 California residents live in rural areas. The greatest fraction of any other states' population living in urban areas, to be smaller than California's fraction, must be 90 or fewer out of every 100. That means that, in every other state, 10 or more out of every 100 residents live in rural areas. Since 9 out of every 100 is smaller than 10 or more out of every 100, so A is the correct answer.

B is incorrect. In order to decide whether this statement is true, it is necessary to know about rates of population growth. No such information is provided in the passage. The third answer choice is also incorrect. Since 96 percent of the land is outside urban areas, 4 percent is inside urban areas. Thus, 91 percent of the population lives on 4 percent of the land. The fourth answer choice is incorrect. The passage does not provide enough information to determine whether this statement is true or false. No comparison is made between the amount of land area in California devoted to urban settlement and the amount of land area in other states devoted to urban settlement. E is incorrect. The passage does not provide sufficient information to determine whether this statement is true or false. Information on the actual size of the population as compared to total land area of California and other states would be necessary to make a judgment about population density in these states.

7. A ten-year comparison between the countries of Arudia and Cazonia in terms of crop yields per acre revealed that when only planted acreage is compared, Cazonian yields are equal to 68 percent of Arudian yields. When total agricultural acreage (planted acreage plus fallow acreage) is compared, however, Cazonia's yield is 114 percent of Arudia's yield.

From the information above, which of the following can be most reliably inferred about Arudian and Cazonian agriculture during the ten-year period?

- A. A higher percentage of total agricultural acreage was fallow in Arudia than in Cazonia.
- B. Arudia had more fallow acreage than planted acreage.
- C. Fewer total acres of available agricultural land were fallow in Cazonia than in Arudia.
- D. Cazonia had more planted acreage than fallow acreage.
- E. Cazonia produced a greater volume of crops than Arudia produced.

**Explanation:**

If crop yield per planted acre was less in Cazonia than it was in Arudia, yet crop yield per total (planted plus fallow) agricultural acreage was greater in Cazonia than it was in Arudia, there must have been a lower percentage of the total acreage that was left fallow in Cazonia than there was in Arudia. Therefore, the correct answer is A.

B is incorrect. From the information in the passage, it is impossible to tell whether Arudia had more or less fallow acreage than planted acreage. C is not correct. Since the comparisons made in the passage are based on crop yields per acre, it is impossible to tell whether there was more or less fallow acreage in Cazonia than in Arudia. D is also incorrect. From the information in the passage, it is impossible to tell whether Cazonia had more or less planted acreage than fallow acreage. The last answer choice is incorrect. Since the comparisons made in the passage are based on crop yields per acre, it is impossible to tell whether Cazonia produced a greater volume of crops than Arudia produced.

8. In the United States between 1850 and 1880, the number of farmers continued to increase, but at a rate lower than that of the general population.

Which of the following statements directly contradicts the information presented above?

- A. The number of farmers in the general population increased slightly in the thirty years between 1850 and 1880.
- B. The rate of growth of the United States labor force and the rate of growth of the general population rose simultaneously in the thirty years between 1850 and 1880.
- C. The proportion of farmers in the United States labor force remained constant in the thirty years between 1850 and 1880.
- D. The proportion of farmers in the United States labor force decreased from 64 percent in 1850 to 49 percent in 1880.
- E. The proportion of farmers in the general population increased from 68 percent in 1850 to 72 percent in 1880.

**Explanation:**

The passage indicates that the proportion of farmers in the general population decreased from 1850 to 1880. The fifth answer choice says exactly the opposite—that this proportion increased; therefore, it contradicts the passage and is the correct response.

A is incorrect. The passage also indicates that the number of farmers increased between 1850 and 1880, and thus agrees with this choice. B is also incorrect. The passage does not tell us about the rate of growth of the labor force. It can be inferred from the passage that the general population grew, but this choice agrees with, rather than contradicts, this conclusion. The choice of C is not the correct answer. We cannot draw any conclusions about the proportion of farmers in the labor force from the passage alone. The fourth is also incorrect. We cannot draw any conclusions about the proportion of farmers in the labor force from the passage alone.

9. The 38 corporations that filed United States income tax returns showing a net income of more than \$ 100 million accounted for 53 percent of the total taxable income from foreign sources reported on all tax returns. Sixty percent of the total taxable income from foreign sources came from the 200 returns reporting income from 10 or more countries.

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

- A. Most of the total taxable income earned by corporations with net income above \$ 100 million was earned from foreign sources.

- B. Wealthy individuals with large personal incomes reported 47 percent of the total taxable income from foreign sources.
- C. Income from foreign sources amounted to between 53 and 60 percent of all reported taxable income.
- D. Some of the corporations with net income above \$ 100 million reported income from 10 or more countries.
- E. Most of the tax returns showing income from 10 or more countries reported net income of more than \$ 100 million.

**Explanation:**

If 38 tax returns in one category account for 53 percent of the total taxable income from foreign sources, and if 200 tax returns in another category account for 60 percent of the same amount, then the two categories must overlap to some extent. Only if the two percentages, added together, amounted to 100 percent or less is there not necessarily any overlap. Here, the two percentages add up to 113 percent. The answer choice that expresses an overlap between the category of corporations with a net income of above \$ 100 million and that of corporations with income from 10 or more countries is D, which is thus the correct answer.

A is not correct. Whereas corporations with net incomes of above \$ 100 million account for more than half of the total taxable income from foreign sources, we cannot tell from the information given what proportion of their own total incomes from all sources is derived from incomes from foreign sources. The second answer choice is incorrect. All we can infer is that 47 percent was reported by taxpayers other than corporations with net incomes above \$ 100 million. These taxpayers could be other corporations with somewhat lower incomes. C is not the correct answer choice. The figures of 53 and 60 percent refer to percentages of total taxable income from foreign sources. Neither these nor any other figures in the passage refer to or imply any percentages of all reported taxable income. E, the last choice, is also incorrect. Since there are only 38 corporations with reported net incomes of more than \$ 100 million, but 200 taxpayers with income from 10 or more countries, at the very most somewhat less than 20 percent of those 200 taxpayers could report net incomes of more than \$ 100 million.

10. The greater the division of labor in an economy, the greater the need for coordination. This is because increased division of labor entails a larger number of specialized producers, which results in a greater burden on managers and, potentially, in a greater number of disruptions of supply and production. There is always more division of labor in market economies than in planned economies.

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

- A. Disruptions of supply and production are more frequent in planned economies than in market economies.



- B. There are more specialized producers in planned economies than in market economies.
- C. The need for coordination in market economies is greater than in planned economies.
- D. A manager's task is easier in a market economy than in a planned economy.
- E. Division of labor functions more effectively in market economies than in planned economies.

**Explanation:**

C is the correct answer. If, as the first statement claims, greater division of labor entails a greater need for coordination and if, as the second statement claims, there is always more division of labor in market economies than in planned economies, then it must be true that the need for coordination in market economies is greater than in planned economies.

The first choice is incorrect. If the statements are true, then it is possible, and even expected, that disruptions of supply and production are NOT more frequent in planned economies than in market economies. The statements suggest that since there is always more division of labor in market economies than in planned economies, there is potentially a greater number of disruptions in market economies than in planned economies. B is not correct. One would expect there to be fewer, not more, specialized producers in planned economies than in market economies, other things being equal. This is because, according to the statements, there is always more division of labor in market economies than in planned economies and because increased division of labor entails a larger number of specialized producers. The fourth answer choice is incorrect. The statement lead to the conclusion that a manager's task would be harder, not easier, in a market economy than in a planned economy. This is because the increased division of labor that exists in a market economy entails a larger number of specialized producers. The last answer choice, E is also incorrect. The statement that division of labor functions more effectively in market economies than in planned economies does not follow from the statements given. The statements imply that such effectiveness is dependent on the amount of coordination available, but no information concerning that amount is given.

11. Therapists find that treatment of those people who seek help because they are unable to stop smoking or overeating is rarely successful. From these experiences, therapists have concluded that such habits are intractable, and success in breaking them is rare.

As surveys show, millions of people have dropped the habit of smoking, and many people have successfully managed a substantial weight loss.

If all of the statements are correct, an Explanation of their apparent contradiction is provided by the hypothesis that

- A. there have been some successes in therapy, and those successes were counted in the surveys

- B. it is easier to stop smoking than it is to stop overeating
- C. it is easy to break the habits of smoking and overeating by exercising willpower
- D. the group of people selected for the survey did not include those who failed to break their habits even after therapy
- E. those who succeed in curing themselves do not go for treatment and so are not included in the therapists' data

**Explanation:**

If, as this choice suggests, the very people who would lead the therapists to view such habits as more tractable do not come for treatment, it is quite understandable why therapists persist in their pessimistic view. At the same time, E is consistent with the survey results. Therefore, the last choice is the correct answer.

A is incorrect. Even assuming that this choice is true, no light is shed on why successes should be so rare in therapy, and yet, if the surveys are to be believed, so common overall. B is also incorrect. Since the comparative strength of habits is not an issue in the therapists' findings or the surveys, it cannot have anything to do with the apparent contradiction; consequently, information about it cannot help resolve that contradiction. C is also not the correct answer choice. If C were true, the survey results would appear rather unremarkable, but the therapists' findings would be baffling. The apparent contradiction would not be diminished but underscored. The fourth answer choice is incorrect. The survey results as reported focus on the numbers of people who have successfully fought a habit, not on the proportion of those who tried to break their habits who succeeded. This answer choice pertains only to the latter and so is essentially irrelevant.

12. "On the whole," Ms. Dennis remarked, "engineering students are lazier now than they used to be. I know because fewer and fewer of my students regularly do the work they are assigned."

Which of the following identifies a flaw in Ms. Dennis' reasoning?

- A. Plenty of people besides engineering students do not work as hard as they should.
- B. Ms. Dennis does not consider the excuses her students may have for being lazy.
- C. The argument does not propose any constructive solutions to the problem it identifies.
- D. The argument assumes that Ms. Dennis' students are representative of engineering students in general.
- E. Ms. Dennis does not seem sympathetic to the problems of her students.

**Explanation:**

Since the constantly decreasing work output of Ms. Dennis' students could stem from causes specific to those students, Ms. Dennis is not logically justified in extending her judgment about her own students to engineering students in general. D is a concise statement of the logically flawed assumption Ms. Dennis must be making in so extending her judgment. Thus, this answer choice is the correct answer.

A is incorrect. Whether or not other groups resemble engineering students has no bearing on whether or not certain conclusions about engineering students follow logically from certain observations about some engineering students. Thus, Ms. Dennis' lack of attention to people who are not engineering students is not a flaw in her reasoning. B is also incorrect. Any excuses offered for laziness do not alter it, though they might help us understand it. Ms. Dennis is only concerned with establishing that the laziness of engineering students is a fact; she does not inquire into possible explanations. It is not a flaw of her reasoning as it stands that it addresses the particular concerns it addresses. C is not the correct answer choice. Ms. Dennis' reasoning is involved in reaching a conclusion on the basis of certain evidence. It does not go beyond that. This choice concerns itself with matters beyond the ones Ms. Dennis reasons about, and thus cannot be considered a flaw in her reasoning. The last answer choice is also incorrect. The logical merits or flaws of an argument are independent of the emotional attitudes of the person making the argument. Since this choice describes an emotional attitude, it cannot identify a reasoning flaw.

13. The overall operating costs of many small farms are reduced when the farmers of small farms eliminate expensive commercial chemical fertilizers and pesticides in favor of crop rotation and the twice-yearly use of manure as fertilizer. Therefore, farmers of large farms should adopt the same measures. They will then realize even greater total savings than do the small farmers.

The argument assumes that

- A. it is more cost-effective for small farm farmers to eliminate the use of commercial fertilizers and pesticides than it is for large farm farmers to do so
- B. a sufficient amount of manure will be available for the fields of large farm farmers
- C. large farm farmers would not realize similar cost benefits by using treated sewage sludge instead of commercial chemical fertilizers
- D. large farm farmers generally look to small farm farmers for innovative ways of increasing crop yields or reducing operating costs
- E. the smaller the farm, the more control the farmer has over operating costs

**Explanation:**

B is the correct answer choice.

It would be impossible to argue reasonably that large farmers should use manure as fertilizer because they would realize even greater savings than the small farmers without also assuming that there is a sufficient amount of manure available for the fields of large farmers.

A is not the correct answer choice.

The argument implies that it would be more cost effective for large farmers to eliminate commercial fertilizers and pesticides than it would be for small farmers to do so. The third answer is incorrect. No statements are made in the argument concerning treated sewage sludge and no assumption is made about it. D is not the correct answer choice. This statement is not assumed because if it were false—if large farmers seldom or never looked to small farmers for innovative ways of increasing crop yields or reducing operating costs—this would not affect anything relevant to the argument about the total savings that large farmers might gain by adopting new farming practices. E is also not the correct answer choice. It may well be true that the smaller the farm, the more control the farmer has over operating costs. However, with respect to control, the argument only that large farmers have enough control over their farming methods to adopt the recommended measures.

14. Factory workers in Beltania are guaranteed lifetime jobs, bonuses paid on the basis of productivity and corporate profits, and a wage rate that is not attached to a particular job. Paradoxically, these guarantees do not discourage factory owners from introducing labor-saving machinery. Such innovations are to the factory owners' advantage despite the fact that the owners must protect the wages of their workers.

Which of the following, if true, most helps to explain why the introduction of labor-saving machinery is advantageous to factory owners?

A. Before a Beltanian Factory worker is hired, he or she must present a record of his or her previous productivity.

B. Labor-saving machinery increases productivity, thus yielding profits that more than cover the cost of retraining workers for other jobs.

C. The purchase and maintenance of new machinery adds significantly to the final cost of the goods produced.

D. Factory workers demand a change of procedure in the routine tasks they perform.

E. Limited competition exists among Beltanian factories for consumer markets.

**Explanation:**

If the second answer choice is true, introducing labor-saving machinery results in additional profits even if it also requires the retraining of workers. Hence, this answer choice

demonstrates the advantages to the factory owners of labor-saving machinery. Thus, B is the correct answer.

The first answer choice is incorrect. Productivity in a previous job may relate to productivity in the job for which a worker is hired. However, if the worker's job is eliminated by new machinery, the factory owner loses the advantage of having been able to select a highly productive worker for that job. There is no indication in this answer choice of what advantage, if any, the owner gains. C is incorrect. Since increased costs, other things being equal, mean decreased profits, this answer choice suggests the change is disadvantageous to the factory owners. D is also incorrect. Changes of procedure may result for those employees whose jobs are eliminated by the introduction of machinery, but would not necessarily result for a substantial number of factory workers. The owners have an advantage only if a substantial number of workers have been satisfied. Thus, this fourth answer choice cannot explain why the change is advantageous. The last answer choice is incorrect. Limited competition might imply that the factory owners will be able to sell their products, even if the price must be raised to cover new machinery as well as wages. Although this does not harm the factory owners, it does not suggest an advantage either.

15. During the day in Lake Constance, the zooplankton *D. hyaline* departs for the depths where food is scarce and the water cold. *D. galeata* remains near the warm surface where food is abundant. Even though *D. galeata* grows and reproduces much faster, its population is often outnumbered by *D. hyaline*.

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

- A. The number of species of zooplankton living at the bottom of the lake is twice that of species living at the surface.
- B. Predators of zooplankton, such as whitefish and perch, live and feed near the surface of the lake during the day.
- C. In order to make the most of scarce food resources, *D. hyaline* matures more slowly than *D. galeata*.
- D. *D. galeata* clusters under vegetation during the hottest part of the day to avoid the Sun's rays.
- E. *D. galeata* produces twice as many offspring per individual in any given period of time as does *D. hyaline*.

**Explanation:**

The presence of predators of zooplankton, feeding near the surface during the day, would suggest that *D. galeata* is consumed at a higher rate than *D. hyaline*.

Therefore, if this choice were true, it would help resolve the apparent paradox that *D. galeata* grows and reproduces faster than *D. hyaline*, yet *D. hyaline* has the greater population.

A is incorrect. Nothing is said in the paragraph to show the relevance of the presence of other species of zooplankton to the relative population size of the two species. C is not correct. This information explains the slower growth and reproduction of *D. hyaline*, which is one aspect of the paradox; but it does nothing to show how *D. hyaline* can grow and reproduce more slowly and yet have the greater population. D is incorrect. Nothing is said in the paragraph to show the relevance to the paradox of *D. galeata*'s clustering under vegetation. E is also incorrect. More information on the faster reproduction of *D. galeata* does not show how, despite faster growth and reproduction, *D. galeata* has the lesser population.

16. A study attitudes toward prime-time television programs showed that programs with identical rating in terms of number of people watching received highly divergent marks for quality from their viewers. This additional piece of information could prove valuable for advertisers, who might be well advised to spend their advertising dollars for programs that viewers feel are of high quality.

Which of the following, if true, supports the claim that information about viewers' perceptions of the quality of television programs could be valuable to advertisers?

- A. The number of programs judged to be of high quality constituted a high percentage of the total number of programs judged.
- B. Many of the programs judged to be of high quality were shown on noncommercial networks.
- C. Television viewers more frequently remember the sponsors of programs they admire than the sponsors of programs they judge mediocre.
- D. Television viewers tend to watch new programs only when those programs follow old, familiar programs.
- E. Television viewers report that the quality of a television advertisement has little effect on their buying habits.

**Explanation:**

C is the correct answer, because advertisers are interested in having their products remembered favorably. By linking viewer perception of program quality with this goal, this choice gives advertisers a reason to care about the quality of programs they sponsor.

A is incorrect. That a large portion of programs are judged to be of high quality does not bolster the conclusion that information about viewer perception of program quality will be useful to advertisers. Rather, if a large portion of programs are judged to be of high quality, an

advertiser may feel relatively safe in looking only at the ratings. B is incorrect. Programs on noncommercial networks cannot contain ads. Information as to their quality will not help advertisers place ads with programs judged to be of high quality. D is incorrect. This answer makes no mention of either program quality or viewer buying habits and thus neither strengthens nor weakens the connection between the two. The idea expressed in the answer thus has nothing to do with the importance of program quality to advertisers. The last answer choice is also incorrect. This answer connects the perception of the quality of advertisements to buying habits. It does not determine a connection between perception of the quality of programs and buying habits and thus is irrelevant to any interest advertisers may have in program quality.

17. Each year, fires in the United States cause \$ 12 billion in property losses, insurance costs, fire-fighting expenses, and loss of worker productivity. These fire losses are seven times those in Japan on a per capita basis.

Which of the following, if true, would be LEAST likely to be a factor contributing to the difference between fire losses in Japan and those in the United States?

- A. Significantly more money per capita is spent each year on fire-prevention efforts in the United States than is spent on such efforts in Japan.
- B. The rate of arson, a major contributor to fire statistics in the United States, is almost negligible in Japan.
- C. Most Japanese homes, unlike those in the United States, are equipped with specially designed and effective fire-extinguishing equipment.
- D. Foam-based and plastic furniture, less popular in Japan than in the United States, ignites readily and releases twice the heat energy of equivalent weights of natural fibers.
- E. Japanese fire departments devote proportionately more personnel time to inspection, training, and public education than do United States fire departments.

**Explanation:**

The fact that more money per capita is spent on fire-prevention in the United States than in Japan would be a factor likely to contribute to greater fire loss in Japan than in the United States. Therefore, this factor would be very unlikely to contribute to lesser fire loss in Japan, and A is the correct answer.

B is incorrect. A greater incidence of arson in the United States would indeed be likely to contribute to greater fire loss in the United States. C is also incorrect. More effective fire extinguishing equipment in more Japanese homes would indeed be likely to contribute to lesser fire loss in Japan. D is incorrect. The greater popularity of foam based and plastic furniture in the United States would indeed be likely to be a factor contributing to greater fire

loss in the United States, since such furniture is a greater fire hazard than furniture of natural fibers. E is also incorrect. Greater attention to prevention and training by Japanese fire departments would indeed be likely to contribute to lesser fire loss in Japan.

18. Some would have you believe that the economic problems of Western Europe in the 1980s were caused by the Organization of Petroleum Exporting Countries (OPEC) oil cartel. This is nonsense. After all, Great Britain was not dependent on OPEC oil and yet Great Britain suffered from the same economic problems that afflicted France and West Germany.

The author's point is made primarily by

- A. offering Great Britain as a counterexample
- B. analyzing the economic difficulties of France and West Germany
- C. pointing out a misconception in reasoning
- D. proposing an alternative Explanation
- E. drawing an analogy between France and West Germany

**Explanation:**

The author argues that the economic problems of Western Europe are not caused by the Organization of Petroleum Exporting Countries (OPEC) oil cartel. This point is made by using Great Britain as an example of a Western European country that is not dependent on OPEC oil but has the same economic problems as France and West Germany. Thus, the first answer choice is the correct answer.

B is incorrect. The author's point (that the economic problems of Western Europe are not caused by the OPEC oil cartel) is made by stating that the economic problems of France and West Germany are the same as those of Great Britain and by pointing out that Great Britain does not depend on OPEC oil as France and West Germany do. This in no way implies what the nature of the economic problems of France and West Germany is. C is also incorrect. The author does not present or discuss the reasoning used to arrive at the conclusion that the OPEC oil cartel has caused the economic problems of Western Europe. Rather, the author presents evidence suggesting that the conclusion cannot be true. The fourth answer choice is not the correct answer. The author presents evidence that the economic problems of Western Europe are not caused by the OPEC oil cartel, but no suggestion is given about the true cause of those economic problems. This last answer choice is also incorrect. The author's point is made by comparing Great Britain with France and West Germany.

19. Why save endangered species? For the general public, endangered species appear to be little more than biological oddities. A very different perception is gained from considering the issue of extinction in a wider context. The important point is that many major social advances



have been made on the basis of life forms whose worth would never have been perceived in advance. Consider the impact of rubber-producing plants on contemporary life and industry: approximately two-thirds of the world's rubber supply comes from rubber-producing plants and is made into objects as diverse as rubber washers and rubber boots.

Any of the following facts could be used as illustrative examples in addition to the example of rubber-producing plants EXCEPT:

- A. The discovery of the vaccine for smallpox resulted from observing the effect of the cowpox virus on the hands of dairy workers.
- B. The major source of our pharmaceutical supplies is plants, some of them commonly thought of as weeds.
- C. Certain antibiotics were originally derived from mold growing on cantaloupes.
- D. Plastic is a unique product derived from petroleum and petroleum by-products.
- E. Hamsters and other rodents have played an important role in laboratory tests of medicine for use on humans.

**Explanation:**

Examples that would serve the same function as rubber producing plants must involve a situation in which an organism previously thought to be useless is seen to be extremely beneficial for some human endeavor. Petroleum is not an organism and is useful itself and thus is not such an example. Thus, the fourth choice is the correct answer.

Responses one, two, three and five are incorrect. They are examples of situations in which an organism previously thought to be useless is seen to be extremely beneficial for some human endeavor.

20. Superficially, college graduates in 1982 resembled college graduates of 1964; they were fairly conservative, well dressed, and interested in tradition; they respected their parents. But there was a deep-seated difference: a majority of the members of the class of 1982 who were surveyed in their freshman year stated that making a good income was an important reason for their decision to go to college.

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

- A. The concerns of college graduates of 1964 were superficial compared to the financial worries of college graduates of 1982.
- B. Fewer than half the students of the class of 1964 declared as freshmen that they entered college in order to increase their earning potential.

C. Educational background did not play as significant a part in determining income in 1964 as it did in 1982.

D. A majority of the members of the class of 1964 revised their reasons for attending college between their freshman year and college graduation.

E. College graduates of 1964 were actually less conservative than college graduates of 1982.

**Explanation:**

The passage claims that 1982 and 1964 college graduates were similar except that a majority of the 1982 graduates stated during their freshman year that making a good income was an important reason for going to college. This implies that fewer than half of the 1964 class, as freshmen, stated that making a good income was an important reason for going to college. B states a consequence of this implication and is the correct answer.

A is incorrect. The passage discusses differences in financial reasons for attending college, as expressed by freshmen in the two classes. Nothing is stated about the financial worries of either class as graduates. Neither is it clear from the passage that financial worries are necessarily implied by the desire to make a good income. C is also incorrect. The passage implies that desire for a good income was a more important reason for the members of the class of 1982 to decide to go to college than for the members of the class of 1964. However, the passage does not provide information on whether a college education provides more, less, or the same impact on income for the 1964 graduates as compared to the 1982 graduates. This fourth choice is incorrect. The passage does not describe or imply any difference in the reasons for attending college between freshman year and college graduation for either class. The last answer choice is also incorrect. The passage states that the 1964 and 1982 college graduates were both firmly conservative. Thus, the passage does not support any conclusion that the two classes differed in degree of conservatism.

21. The Supreme Court is no longer able to keep pace with the tremendous number of cases it agrees to decide. The Court schedules and hears 160 hours of oral argument each year, and 108 hours of next year's term will be taken up by cases left over from this year. Certainly the Court cannot be asked to increase its already burdensome hours. The most reasonable long-range solution to this problem is to allow the Court to decide many cases without hearing oral argument; in this way the Court might eventually increase dramatically the number of cases it decides each year.

Which of the following, if true, could best be used to argue against the feasibility of the solution suggested?

A. The time the Court spends hearing oral argument is only a small part of the total time it spends deciding a case.

B. The Court cannot legitimately avoid hearing oral argument in any case left over from last year.

C. Most authorities agree that 160 hours of oral argument is the maximum number that the Court can handle per year.

D. Even now the Court decides a small number of cases without hearing oral argument.

E. In many cases, the delay of a hearing for a full year can be extremely expensive to the parties involved.

**Explanation:**

The passage suggests that the number of cases heard by the Supreme Court each year might eventually be increased dramatically if the Supreme Court were allowed to decide many cases without the customary oral argument. If A is true, however, then the number of cases decided by the Supreme Court is primarily determined by time other than the time spent hearing oral argument. Thus, the time spent hearing oral argument does not constitute a significant bottleneck. So this choice could be used rather well to argue against the proposal made in the passage.

B is incorrect. This argues not against the feasibility of the proposed solution; it merely warns that the benefits from it would be delayed. The fact that, in view of this answer choice, there would probably not be any significant immediate relief from the burdens of hearing oral argument is irrelevant: the passage expressly concerns itself with finding a long-range solution. C is also incorrect. The thrust of the proposal is to make the 160 hours available for hearing oral argument go farther. The person making the proposal accepts the 160 hours as an upper limit. Thus, this statement supports rather than argues against the proposed solution. The fourth answer choice is incorrect. From a knowledge of the information in this answer choice no further conclusions regarding the proposal follow. This information is simply part of the current state of affairs that the proposal is designed to improve. The last choice is also incorrect. The concern of the choice—the cost to the parties involved—plays no part whatever in the argument developed in the passage; the passage is concerned solely with time-related limitations on the number of cases the Supreme Court is able to decide.

22. Some insects are able to feed on the leaves of milkweed, a toxic plant, by first cutting and draining the vein that secretes the toxin. This method of detoxification guarantees that some insects will always be able to eat milkweed, because the plant could never evolve to produce a toxin that is lethal in the trace amounts left after the vein is cut.

The argument depends on which of the following assumptions?

A. The insects that successfully detoxify milkweed are not able to undergo the evolutionary changes necessary to allow them to detoxify other plants.

B. Unlike milkweed, other kinds of toxic plants would be able to overcome their vulnerabilities to predators through evolutionary changes.

C. The toxin-carrying veins of the mildewed plant can never evolve in such a way that insects cannot cut through.

D. The method of detoxification used by insect predators of mildewed would not successfully detoxify other kinds of toxic plants.

E. There are insects that use means other than draining the toxin in order to feed on toxic plants.

**Explanation:**

C is the correct answer. It is impossible to argue logically that the insects' method of detoxification by cutting and draining guarantees that some insects will always be able to eat milkweed without assuming that for some reason that toxin-carrying veins of the milkweed can never evolve to become so strong that they would thwart the insects' attempts to cut through them.

A is incorrect. The passage does not make any claims about plants other than mildewed. The insects that detoxify mildewed by cutting veins might evolve an ability to detoxify other plants without this affecting anything relevant to the argument offered about their ability to eat mildewed. The second answer choice is incorrect. The passage is not concerned with other types of toxic plants and makes no assumption about them. The fourth answer choice is also incorrect. The method of detoxification used by the insects on milkweed might also be used to detoxify other plants without this affecting anything relevant to the argument offered about the insects' ability to eat milkweed. The fifth answer choice is incorrect. It may be true that there are insects that use means other than draining toxins in order to feed on toxic plants, but the conclusion drawn in the passage does not depend on there being any such insects.

23. "On the whole," Ms. Dennis remarked, "engineering students are lazier now than they used to be. I know because fewer and fewer of my students regularly do the work they are assigned."

Ms. Dennis' conclusion depends on which of the following assumptions?

A. Engineering students are working less because, in a booming market, they are spending more and more time investigating different job opportunities.

B. Whether or not students do the work they are assigned is a good indication of how lazy they are.

C. Engineering students should work harder than students in less demanding fields.

D. Ms. Dennis' students are doing less work because Ms. Dennis is not as effective a teacher as she once was.

E. Laziness is something most people do not outgrow.

**Explanation:**

The conclusion that engineering students are lazier now than they used to be does not follow from the stated observation that fewer and fewer of Ms. Dennis' students regularly do the work they are assigned. In fact, the conclusion is not in any way supported by the reported observation unless it is also true that failure to do the assigned work indicates laziness. That latter proposition must therefore be one of the tacit assumptions underlying the conclusion. B best expresses this assumption and is thus the correct answer.

A is incorrect. Ms. Dennis concludes that her students are lazy on the basis of what she sees as a consequence of that laziness. This choice suggests a cause of that laziness. But Ms. Dennis does not have to make any assumptions about the causes of that laziness in order to draw her conclusion. C is also incorrect. This comparison between the work demands on engineering students and those on other students is irrelevant to the question of whether the work habits of engineering students have changed over time. The fourth answer choice is incorrect. If Ms. Dennis believed that the reason for her own students' decreasing performance was her own declining effectiveness, she would not think of her students as exemplifying trends among engineering students in general. The last answer choice is also incorrect. Whether laziness is outgrown is irrelevant to the question of whether work habits of engineering students have changed over time.

24. In recent years shrimp harvests by commercial fishermen in the South Atlantic have declined dramatically in total weight. The decline is due primarily to competition from a growing number of recreational fishermen, how are able to net young shrimp in the estuaries where they mature.

Which of the following regulatory actions would most help increase the weight of shrimp harvests by commercial fishermen?

- A. Requiring commercial fishermen to fish in estuaries
- B. Limiting the total number of excursions per season for commercial fishermen
- C. Requiring recreational fishermen to use large-mesh nets in their fishing
- D. Putting an upper limit on the size of the shrimp recreational fishermen are allowed to catch
- E. Allowing recreational fishermen to move out of estuaries into the South Atlantic

**Explanation:**

If recreational fishermen were required to use large-mesh nets when fishing, fewer young shrimp would be trapped in those nets (making the reasonable assumptions, of course, that young, immature shrimp are smaller than mature shrimp and that by “large-mesh nets” is meant net with spaces big enough for young shrimp to pass through them). Thus, there is a strong likelihood that such a requirement would help increase commercial shrimp harvests. This makes C the best answer, and thus the correct answer.

A is incorrect. This requirement is most unlikely to bring relief; if anything, it will exacerbate the problem if commercial fishermen, too, start netting young shrimp. The second answer choice is also incorrect. This requirement would presumably make sense if the problem were caused by commercial fishermen catching too many mature shrimp. But the passage clearly indicates that the main problem is that too many young shrimp are netted before they reach maturity. D is not the correct answer choice. Since the problem lies mainly in the numbers of immature, and thus presumably small, shrimp that recreational fishermen catch, preventing those fishermen from catching large shrimp above a certain size is unlikely to provide an effective solution. The last answer choice is also incorrect. Nothing in the passage suggests that recreational fishermen are not already free to move into the open ocean if they own ocean-going craft. And if they are not already free to move into the open ocean, there is still nothing to suggest that they are interested in doing so in large enough numbers to relieve the over-fishing of young shrimp in estuaries.

25. Veteran screenwriters, aiming at creating a 120-page screenplay for a film, usually turn in 135-page first draft. As one screenwriter put it, “That gives those in charge of the movie a chance to be creative when they get the script: at the very least, they can cut 15 pages.”

The screenwriter’s statement cited above conveys which of the following propositions?

- A. Screenwriters for a film are generally not involved in any aspects of filmmaking besides providing the script.
- B. Seasoned screenwriters are resigned to, and make allowance for, draft scripts being altered by those evaluating them.
- C. Truly creative screenwriters are too temperamental to adhere to page limits set for their work.
- D. It takes a special kind of creativity to recognize what is best left out of a film script.
- E. Even experienced screenwriters cannot be expected to write scripts of consistently high quality throughout.

**Explanation:**

The screenwriter’s statement implies an acknowledgement that those evaluating screenplays will want to alter them, and it implies that screenwriters adjust the length of a first draft in order

to allow evaluators to make alterations. The second answer choice restates these implications and is the correct answer.

A is incorrect. The statement says nothing about whether screenwriters do more than provide a script. C is not correct. The statement says nothing about the temperament of screenwriters, and it gives a reason other than temperament for the length of first drafts. D is incorrect. The statement does not imply that the cuts made by evaluators are always the best cuts that could have been made. The last answer choice is also incorrect. The statement says nothing about the quality of first draft and so does not imply that they are of uneven quality.

26. The attitude that it is all right to do what harms no one but oneself is usually accompanied by a disregard for the actual interdependence of people. Destroying one's own life or health means not being available to help family members or the community; it means, instead, absorbing the limited resources of the community for food, health services, and education without contributing fully to the community.

Which of the following, if true, most strongly supports the view expressed?

- A. The cost of avoidable accidents and illnesses raises health insurance rates for everyone.
- B. Harm to one person can result in an indirect benefit, such as the availability of work in health-related fields, to others.
- C. Life would be dull if it were necessary to abstain from all of the minor pleasures that entail some risk of harm to a person who indulges in them.
- D. The contribution a person makes to the community cannot be measured by that person's degree of health.
- E. The primary damage caused by the consumption of alcohol, tobacco, and unauthorized drugs is done to the person who uses those substances.

**Explanation:**

The passage presents a view that harming oneself can harm other people as well. This answer presents a situation that illustrates how harming oneself through an avoidable accident or illness can create a cost for everyone else. Thus, the answer choice of A supports the passage.

B is incorrect. Support for the view expressed consists in showing that harm to oneself also harms others. This answer choice gives an example of a way that harm to one person can benefit others, and thus the choice weakens the passage.

The third answer choice is incorrect. This statement does not support the view that harming oneself can harm others. Rather, this choice addresses another issue that might be involved in deciding whether persons should risk harm—namely, how pleasurable the activities involved

in taking such risks might be. Thus, the answer choice is neutral with respect to the implicit argument in the passage. D is also an incorrect answer choice. Support for the view expressed consists in showing that harm to oneself also harms others. The fourth choice implies that two persons might be the same in degree of health and yet differ in their contribution to the community. This claim is neutral with respect to the issue of whether a decline in a person's health would leave that person's contribution to the community unaffected. The last answer choice is incorrect. This statement does not support argue against the passage's view that harming oneself can harm others. Rather, this statement only describes different ways of harming oneself.

27. A person who agrees to serve as mediator between two factions at the request of both abandons, by so agreeing, the right later to take sides. To take sides at a later point would be to suggest that the earlier presumptive impartiality was a sham.

The passage emphasizes which of the following points about mediators?

- A. They should try to form no opinions of their own about any issue that is related to the dispute.
- B. They should not agree to serve unless they are committed to maintaining a stance of impartiality.
- C. They should not agree to serve unless they are equally acceptable to all parties to a dispute.
- D. They should feel free to take sides in the dispute right from the start, provided that they make their biases publicly known.
- E. They should reserve the right to abandon their impartiality so as not to be open to the charge of having been deceitful.

**Explanation:**

B is the correct answer because the passage asserts that a later absence of partiality calls into question an earlier seemingly impartial attitude. Thus, the passage stresses the importance of impartiality of mediators at all times, a point also emphasized in the second answer choice. A is incorrect. The first choice goes further than anything asserted in the passage. The passage does not rule out the possibility that one can have an opinion about issues related to a disputed without taking sides in the actual dispute. C is not correct since it is a presupposition on which the passage is based rather than the point of the passage; that is, the fact that he mediator is acceptable to both parties is a given, since they both ask the mediator to serve. The fourth answer choice is incorrect. This choice contradicts the assumption behind the second sentence of the passage, that mediators start out impartial. The last answer choice is also incorrect. This choice contradicts the main point of the passage, the importance of impartiality at all times.



28. A small dose of a widely used tranquilizer allows people to lie during lie detector tests without being discovered. The stress responses that lie detector tests measure can be inhibited by the drug without noticeable side effects. One of the implications of this fact is that the drug can also be effective in reducing stress in everyday situations.

An assumption of the passage is that

- A. Tranquilizers are always an effective treatment for stress
- B. The inhibition of stress responses increases subjective stress
- C. Stress as measured by a lie detector is similar to everyday stress
- D. Persons who lie during a lie detector test always display signs of stress
- E. It is not desirable to reduce stress in everyday situations

**Explanation:**

To show the implication from the facts presented, that the tranquilizer can be effective in reducing stress in everyday situations one must assume that the stress in the everyday situation is treatable in the same way as the stress responses measured by the lie detector. The third response most closely describes this assumption and is the correct answer.

A is incorrect. The passage discusses one situation where a specific tranquilizer is effective in inhibiting stress responses. However, there is no implication or assumption that tranquilizers in general are always an effective treatment for all kinds of stress. The second answer choice is incorrect. The passage presupposes that the inhibition of stress responses indicates a reduction in stress. Thus, there is no assumption in the passage that an inhibition of the response increases subjective stress. D is also incorrect. The passage leaves open the possibility that there are people who display no signs of stress when lying. In addition, the passage states that tranquilizers will allow a person to lie without displaying signs of stress. The last answer choice is incorrect. The passage deals with the effects of a mild tranquilizer on stress. For the statements in the passage to be true, it is not necessary to make assumptions about whether or not it is desirable to reduce stress in everyday situations.

29. Experienced pilots often have more trouble than novice pilots in learning to fly the newly developed ultra-light airplanes. Being accustomed to heavier aircraft, experienced pilots, when flying ultra-light craft, seem not to respect the wind as much they should.

The passage implies that the heavier aircraft mentioned above are

- A. harder to land than ultra-light aircraft
- B. not as popular with pilots as ultra-light aircraft

- C. not as safe as ultra-light aircraft
- D. more fuel-efficient than ultra-light aircraft
- E. easier to handle in wind than ultra-light aircraft

**Explanation:**

The second sentence of the passage suggests that the wind is more of a factor in flying ultra-light aircraft than in flying heavier. This implies that heavier aircraft would be easier to fly in wind than ultra-light aircraft, so the fifth choice is the correct answer.

The passage does not discuss landing, popularity, or fuel efficiency, so choices one, two, and four are incorrect. The passage does not discuss safety directly; however, if it implies anything about safety, it is that heavier planes are safer, not less safe, than ultra-light aircraft. Choice three, therefore, is incorrect.

30. Many researchers believe that the presence of RNA in brain cells is the biochemical basis of memory; that is, the presence of RNA enables us to remember. Because certain chemicals are known to inhibit the synthesis of RNA in the body, we can test this hypothesis. Animals that have learned particular responses can be injected with an RNA inhibitor and then tested for memory of the learned responses.

Which of the following test results would most seriously weaken the case for the presence of RNA as the basis of memory?

- A. After an injection of RNA inhibitor, a wide range of behaviors in addition to the learned responses were affected.
- B. After an injection of RNA inhibitor, animals that had not consistently been giving the learned responses were able to give them consistently.
- C. After injections of RNA inhibitor, some animals lost memory of the learned responses totally but others lost it only partially.
- D. After a small injection of RNA inhibitor, animals responded well, but as the size of the injection increased, they gave fewer of the learned responses.
- E. After an injection of RNA inhibitor, animals could not learn a new response.

**Explanation:**

The researchers believe that the presence of RNA enables us to remember. However, if, after an injection of RNA inhibitor, animals gave learned responses more consistently than before, it would appear that the absence of RNA facilitates memory. Therefore, the correct answer is B.

A is incorrect. These results would suggest that RNA is the basis of other abilities in addition to that of memory, but there is nothing in them that would weaken the case for RNA as the basis of memory. C is not correct. These results support the case that RNA is the basis of memory, although they suggest that the degree of effectiveness of either RNA or RNA inhibitor may vary. D is incorrect. These results would suggest that RNA must be strongly inhibited in order to impair memory, but still support the case for RNA as the basis of memory. The last answer choice is also incorrect. These results would suggest that RNA is necessary for new learning, and as the learning would require memory, the results would support the case for RNA as the basis of memory.

31. The once widely held perception of intellectuals as the clarifiers of fundamental moral issues is no longer valid today. Intellectuals no longer act as advocates for oppressed groups. Instead of applying their insights and analyses to the problems of these groups, they leave the debate to the politicians.

The logical structure of the passage depends upon closely linking the clarification of fundamental moral issues with

- A. intellectualism
- B. advocacy on behalf of oppressed groups
- C. insight and analysis
- D. debate on contemporary practical issues
- E. the role of politicians

**Explanation:**

The passage suggests that in the past intellectuals clarified fundamental moral issues by acting as advocates for oppressed groups. The logical structure of the passage links clarification of fundamental moral issues with advocacy on behalf of oppressed groups, making the second choice the correct answer.

The first choice is incorrect. The passage discusses not intellectualisms, but the active role of intellectuals in society. The logical structure of the passage depends on linking two different functions of intellectuals-clarification and advocacy. The third answer choice is incorrect. Intellectuals may apply insight and analysis to clarification of moral issues. However, the logical structure of the passage depends on a specific link between clarification of fundamental moral issues and advocacy on behalf of oppressed groups. D is also incorrect. Although the passage mentions that politicians debate issues related to the problems of oppressed groups, the politicians' debating of these issues is not directly linked to clarification of fundamental moral issues. The logical structure of the passage links the role intellectuals play as clarifiers of fundamental moral issues to their role as advocates of oppressed groups.

The last answer choice is incorrect. The passage does state that intellectuals no longer serve as advocates of oppressed groups and leave the debate to the politicians. However, the logical structure does not directly link the role of politicians and the clarification of fundamental moral issues.

32. Nineteenth-century art critics judged art by the realism of its method of representation. It was assumed that the realistic method developed from primitive beginnings to the perfection of formal realism. It is one of the permanent gains of the artistic revolution of the twentieth century that we are rid of this type of aesthetics.

It can be inferred from the information given that the artistic revolution of the twentieth century had which of the following effects?

- A. It de-emphasized realistic representation as an evaluative consideration for judging works of art.
- B. It permitted modern critics to appreciate the simplicity of primitive art.
- C. It repudiated the realistic representation found in art before the nineteenth century.
- D. It reinforced traditional ways of looking at and judging great art.
- E. It allowed art critics to understand the evolution and nature of art.

**Explanation:**

The first two sentences of the passage focus on realism as the standard used in past art criticism. The final sentence says that the twentieth century artistic revolution got rid of aesthetics of the kind that was defined by this standard. Thus, the first choice is the correct answer because it states this inference.

B is incorrect. The passage does not imply that primitive art was simple and hence could not imply anything about critics' attitudes toward such simplicity. C is incorrect. The passage says that realism was rejected as the standard by which all art should be judged, not as a form of artistic representation. D is also incorrect. If it could be assumed that the nineteenth century standards include the traditional standards in their entirety, the passage would imply that the tradition is challenged rather than, as this choice states, reinforced. The last answer choice is incorrect. The passage does not imply that twentieth century critics understand the evolution or nature of art, only that they are free of a previous misconception.

33. Private ownership of services traditionally considered to be the responsibility of the government will typically improve those services. The turnpike system in the United States of the nineteenth century demonstrates the truth of this principle; the system, which had previously been controlled by the government, became a more reliable system when taken over by private organizations.

Which of the following describes a significant flaw in the argument?

- A. The author defends the conclusion by appealing to a person of authority.
- B. The author distorts an opposing view in trying to show its weaknesses.
- C. The author attacks what the author perceives as a wrong action by pointing out another perceived wrong action.
- D. The author generalizes from a sample not representative enough to establish the conclusion.
- E. The author attributes two very different meanings to the same word.

**Explanation:**

D is the correct answer. One instance where private ownership of services traditionally controlled by the government leads to a more reliable system constitutes insufficient evidence to demonstrate the truth of the general principle that private ownership of such services typically improves those services. No reason is given to believe that what was true of the turnpike system must also be true of such governmental services in general.

A is not the correct answer. The author makes no reference to a person of authority in the argument. B is incorrect. The author mentions no other opposing point of view in the argument. A generalization is expressed in the first sentence, and an attempt is made to support that generalization in second sentence. The third choice is incorrect. The author makes no judgment of right or wrong actions in the argument. The author only attempts to support a point of view concerning the improvement of services usually thought to be the responsibility of the government. E is also incorrect. There is no evidence within the argument that the author is attributing two different meanings to the same word.

34. Athletic director: "Members of our sports team included, for the fall season, 80 football player and 40 cross-country runners; for the winter season, 20 wrestlers and 40 swimmers; for the spring season, 50 track-team members and 20 lacrosse players. Each tea athlete participates in his or her sports five days a week for the whole three-month season, and no athlete is on two teams during any one season. Therefore, adding these figures, we find our team sports program serves 250 different individual athletes."

In drawing the conclusion, the athletic director fails to consider the relevant possibility that

- A. athletes can be on more than one team in a single season
- B. athletes can be on teams in more than on season
- C. some of the team sports require a larger number of athletes on the team than do others

- D. more athletes participate in team sports during one season than during another
- E. an athlete might not participate in every one of the practice sessions and athletic contests in his or her sport

**Explanation:**

The athletic director has clearly added up the 120 athletes active in the fall, the 60 athletes active in the winter, and the 70 athletes active in the spring. But while we know that the total of athletes for each season is composed of different individuals, there is nothing in the rules cited that would prevent athletes from being active in two or in all three seasons. So, the sum of 250 may include athletes that have been counted twice or three times. This is the possibility that has not been considered. Thus, B is the correct answer.

A is incorrect. The athletic director has specifically ruled this out as a possibility. C is not the correct answer choice. This possibility is reflected adequately in the different numbers of athletes active in each sport. No oversight seems likely here. D is incorrect. Not only does the athletic director not overlook this, he or she has the figures to prove it. The last answer choice is also incorrect. The athletic director could say that the program has served an athlete even if that athlete has not participated to the fullest extent possible.

35. Popular culture in the United States has become Europeanized to an extent unimaginable twenty-five years ago. Not many people then drank wine with meals, and no one drank imported mineral water. No idea would have been more astonishing than that Americans would pay to watch soccer games. Such thoughts arise because of a report that the American Association of State Highway and Transportation Officials has just adopted a proposal to develop the country's first comprehensive interstate system of routes for bicycles.

The information given, if true, best supports which of the following?

- A. Long-distance bicycle routes are used in Europe.
- B. Drinking imported mineral water is a greater luxury than drinking imported wine.
- C. United States culture has benefited from exposure to foreign ideas.
- D. Most Europeans make regular use of bicycles.
- E. The influence of the United States on European culture has assumed unprecedented proportions in the last twenty-five years.

**Explanation:**

When the author learns that an interstate system of bicycle routes is being planned, case after case of European customs becoming accepted in the United States comes to his or her mind. This mental association would be a natural one if the system of bicycle routes were itself yet

another case of a European phenomenon being brought to the United States. This in turn presupposes that long-distance bicycle routes are indeed a European phenomenon, an idea expressed by A, which is thus the correct answer.

B is incorrect. The passage does not support any inference that the European practices in question are luxuries, let alone which of them are more or less of a luxury than the others. C is not the correct answer. The passage is completely neutral on whether “Europeanization” has been beneficial, detrimental, or neither. Although many people might regard activities such as the drinking of wine and mineral water as beneficial, the passage itself does not support the statement of benefit. D is also incorrect. The passage can be taken to suggest that bicycles are indeed used fairly widely in Europe, but nothing the passage supports the inference that the majority of Europeans are regular users of bicycles. The last answer choice is incorrect. The passage is concerned solely with the influence of Europe on popular culture in the United States and not at all with any influence going the other way, however strong that influence might in fact be.

36. The sense of delayed gratification, of working now for later pleasure, has helped shape the economic behavior of our society. However, that sense is no longer nurtured as consistently in our children as it once was. For example, it used to take a bit of patience to put together the toys that children got the cereal boxes; now the toys come from the boxes whole.

Which of the following is an assumption made by the argument?

- A. The toys in cereal boxes have changed partly because the economic conditions of our society have improved.
- B. The influence of promotion gimmicks on the economic behavior of our society has increased over the years.
- C. The toys that used to come in cereal boxes were put together by the same children who played with them.
- D. Part of the pleasure of any toy lies in putting the toy together before playing with it.
- E. Today’s children do not expect a single toy to provide pleasure for a long period of time.

**Explanation:**

The phrases “delayed gratification” and “working now for later pleasure” clearly refer to somebody’s effort or sacrifice at an earlier time which is designed to yield, for that same person, pleasure at a later time. If toy components packed in cereal boxes are to provide this experience for children, then C has to be true. Therefore, C is the correct answer.

A is not the correct answer. The argument indicates nothing about the reasons for the change from packing components to packing complete toys. B is incorrect. This choice may or may

not be true as far as the argument goes. The argument suggests only that the influence of promotional gimmicks has changed in character, not necessarily that it has increased. The fourth answer choice is also incorrect. The argument strongly suggests that the pleasure comes after the effort or the work involved in assembling it, not that it accompanies the effort or work. So while this choice may be true, there is no indication that it is an assumption made by the argument. The last choice is incorrect. The references to the passage of time found in the argument (“delayed” and “now...later” in the first sentence; “patience” in the third sentence) concern the time from the receipt of unassembled toys to the completion of assembly. The argument neither says nor presumes anything about the length of time for which pleasure from a given toy will persist.

### Free LSAT Analytical Reasoning Questions

#### Game One: Questions 1 to 6

Red letters are given first to G or H.

Blue letters are given first to any one of the following: G, J, or I.

If a letter raises a problem that cannot be resolved by the person to whom it is given, it must be forwarded until it reaches someone who can resolve the problem and answer the letter. A letter must be forwarded as follows:

By G to I if the letter is red, but to J if the letter is blue;

By H to either G or I;

By I to J if the letter is red, but to K if the letter is blue;

By J to either I or K whether the letter is red or blue;

By K to L whether the letter is red or blue;

L answers every letter given to him.

1. Any of the following can be true EXCEPT:

A. G forwards a red letter to I.

B. H forwards a red letter to G.

C. H forwards a red letter to I.



D. I forwards a red letter to K.

E. J forwards a red letter to I.

2. A blue letter could reach L via which of the following sequences of people?

A. G to H to K

B. G to I to J

C. G to J to K

D. I to H to J

E. I to G to J to K

3. Any letter that reaches L must have been previously given to

A. G

B. H

C. I

D. J

E. K

4. Which of the following could be given to each of the six members of the consumer complaint department in turn?

A. A red letter that is first given to H

B. A red letter that is first given to G

C. A blue letter that is first given to G

D. A blue letter that is first given to I

E. A blue letter that is first given to J

5. Any letter that reaches L must have been given to a minimum of how many members of the consumer complaint department before reaching L?

A. 1

B. 2

C. 3

D. 4

E. 5

6. If a member of the consumer complaint department is given a letter that he or she had previously given to some other member of the department, the person who is given the letter a second time could be

A. G

B. H

C. J

D. K

E. L

**Game Two: Questions 7 to 12**

Two-way roads exist among the following towns surrounding a mountain:

Between M and N

Between M and O

Between O and R

Between R and T

Between R and U

Between T and P

Between P and S

There is also a one-way road between town P and town N; the permitted direction of travel is from P to N.

None of these roads intersect each other except at the towns.

There are no other towns or roads in the vicinity.

Bicycles must follow the direction established for general traffic on roads.

7. To bicycle from S to N by road, it is necessary to go to or through town

A. M

B. P

C. R

D. T

E. U

8. If a rock slide temporarily makes the road between O and R impassable, then in order to reach M by road from U, a bicyclist would have to go to or through a total of how many other towns besides M and U?

A. 2

B. 3

C. 4

D. 5

E. 6

9. If a bridge on the road between M and O is washed out, making the road impassable, a bicyclist would NOT be able to go by road from

A. N to M

B. N to S

C. P to M

D. P to S

E. R to M

10. If a rock slide blocks a lane of the road from R to T, with the result that travel on the road can go only one way, from R to T, it will still be possible to go on a bicycle by road from P to

A. N and /or S but impossible to go to M, O, R, T, or U

B. N, S, and /or T but impossible to go to M, O, R, or U

C. M, N, O, and /or T, but impossible to go to S, R, or U

D. M, O, R, S, and /or T but impossible to go to N or U

E. M, N, O, R, S, T, and /or U

11. Assume that one lane of the road from O to R is closed for repairs, with the result that travel on the road goes only one way, from R to O. It will then be possible to travel by road on a bicycle among any of the towns M, N, O, P, R, S, T, and U, among which such travel was possible before the closing, if which of the following one-way temporary roads is constructed?

A. From M to U

B. From P to R

C. From S to R

D. From S to U

E. From T to U

12. If M is lower and T is higher on the mountain than any of the other towns in the vicinity and if N, P, and R are all at the same altitude, the distance by road going from U to S will be shortened by building a two-way road along a level straight line between

A. R and N

B. R and M

C. P and M

D. P and R

E. T and N

### **Game Three: Questions 13 to 17**

The manager of a repertory theater company is planning a schedule of productions for the company's five-week summer festival. Two different plays will be scheduled for each of the five weeks. The ten plays that will be scheduled are four plays by playwright R, two plays by playwright S, two plays by playwright T, one play by playwright U, and one play by playwright V. The scheduling is subject to the following restrictions:

No two plays by the same playwright will be scheduled for any of the five weeks, except for week 3, for which two plays by playwright R will be scheduled.

The play by playwright V will be scheduled for week 5.

No play by playwright S will be scheduled for the same week as any play by playwright R.

13. Which of the following could be the two plays scheduled for week 1?

- A. Two plays by playwright R
- B. Two plays by playwright S
- C. A play by playwright R and a play by playwright S
- D. A play by playwright R and the play by playwright U
- E. The play by playwright U and the play by playwright V

14. If the plays by playwright R will be scheduled for weeks 2, 3, and 4, which of the following must be true?

- A. A play by playwright S will be scheduled for week 2.
- B. A play by playwright S will be scheduled for week 5.
- C. A play by playwright T will be scheduled for week 2.
- D. A play by playwright T will be scheduled for week 4.
- E. The play by playwright U will be scheduled for week 1.

15. If the plays by playwright S will be scheduled for weeks 1 and 2, which of the following must be true?

- A. A play by playwright R will be scheduled for week 4.
- B. A play by playwright T will be scheduled for week 1.
- C. A play by playwright T will be scheduled for week 4.
- D. A play by playwright T will be scheduled for week 5.
- E. The play by playwright U will be scheduled for week 4.

16. Which of the following pairs of plays CANNOT be scheduled together for any week?

- A. A play by playwright R and a play by playwright T
- B. A play by playwright R and the play by playwright U
- C. A play by playwright S and a play by playwright T

D. A play by playwright S and the play by playwright U

E. A play by playwright T and the play by playwright U

17. If a play by playwright S and the play by playwright U will both be scheduled for the same week, which of the following must be true?

A. A play by playwright R and a play by playwright T will both be scheduled for the same week

B. A play by playwright S and a play by playwright T will both be scheduled for the same week.

C. The play by playwright U will be scheduled for week 2

D. A play by playwright S will be scheduled for week 4.

E. A play by playwright T will be scheduled for week 5.

**Game Four: Questions 18 to 22**

A doctor has prescribed an exercise program for a patient. Choosing from exercises P, Q, R, S, T, U, V, and W, the patient must perform a routine of exactly five different exercises each day. In any day's routine, except the first, exactly three of the exercises must be ones that were included in the routine done on the previous day, and any permissible routine must also satisfy the following conditions:

If P is in a routine, V cannot be done in that routine.

If Q is in a routine, T must be one of the exercises done after Q in that routine.

If R is in a routine, V must be one of the exercises done after R in that routine.

The fifth exercise of any routine must be either S or U.

18. Which of the following could be the routine for the first day of the program?

A. P, R, V, S, U

B. Q, S, R, V, U

C. T, U, R, V, S

D. U, Q, S, T, W

E. V, Q, R, T, S

19. If one day's routine is P, Q, W, T, U, each of the following could be the next day's routine EXCEPT

A. Q, R, V, T, U

B. Q, T, V, W, S

C. W, R, V, T, U

D. W, T, U, V, S

E. W, T, S, P, U

A, B, C, and D each contain exactly three exercises in common with the first day and satisfy all other conditions.

20. Which of the following is true of any permissible routine?

A. P cannot be done third.

B. Q cannot be done third.

C. T cannot be done third.

D. R cannot be done fourth.

E. U cannot be done fourth.

21. If the patient chooses R and W for the first day's routine, which of the following could be the other three exercises chosen?

A. P, T, U

B. Q, S, V

C. Q, T, V

D. T, S, U

E. T, S, V

22. If R is the third exercise in a routine, which of the following CANNOT be the second exercise in that routine?

A. Q

B. S

C. T

D. U

E. W

**Game Five: Questions 23 to 26**

The membership of two committees, designated X and Y, must be drawn exclusively from a group of seven people—Frederick, Georgia, Helen, Irene, Jorge, Karin, and Lamont. The following conditions govern the assignment of people to the committees:

Each of the seven people must serve on X or Y.

No one can serve on both X and Y.

Frederick cannot serve on a committee with Georgia or with Jorge.

Helen cannot serve on a committee with Irene.

23. If Helen serves on X, which of the following must be true?

A. Frederick serves on X

B. Georgia serves on Y.

C. Irene serves on Y.

D. Karin serves on X.

E. Lamont serves on Y.

24. If exactly two people serve on X, which of the following can be one of the two?

A. Georgia

B. Helen

C. Jorge

D. Karin

E. Lamont

25. If Lamont does not serve with Karin or Irene, which of the following CANNOT be true?

A. Frederick serves with Irene.



- B. Georgia serves with Helen.
- C. Helen serves with Karin.
- D. Irene serves with Karin.
- E. Jorge serves with Lamont.

26. There would be only one possible distribution of people on the committees if which of the following restrictions were added to the original set of conditions?

- A. Frederick and Lamont must serve on X, and Helen must serve on Y.
- B. Jorge must serve on X, and Karin and Lamont must serve on Y.
- C. Georgia and Lamont must serve on X.
- D. Helen and four other people must serve on X.
- E. Irene and three other people must serve on Y.

## **LSAT READING COMPREHENSION Questions**

### **Reading Passage 1**

The evolution of intelligence among early large mammals of the grasslands was due in great measure to the interaction between two ecologically synchronized groups of these animals, the hunting carnivores and the herbivores that they hunted. The interaction resulting from the differences between predator and prey led to a general improvement in brain functions; however, certain components of intelligence were improved far more than others.

The kind of intelligence favored by the interplay of increasingly smarter catchers and increasingly keener escapers is defined by attention—that aspect of mind carrying consciousness forward from one moment to the next. It ranges from a passive, free-floating awareness to a highly focused, active fixation. The range through these states is mediated by the arousal system, a network of tracts converging from sensory systems to integrating centers in the brain stem. From the more relaxed to the more vigorous levels, sensitivity to novelty is increased. The organism is more awake, more vigilant; this increased vigilance results in the apprehension of ever more subtle signals as the organism becomes more sensitive to its surroundings. The processes of arousal and concentration give attention its direction. Arousal is at first general, with a flooding of impulses in the brain stem; then gradually the activation is channeled. Thus begins concentration, the holding of consistent images. One meaning of intelligence is the way in which these images and other alertly searched information are used in the context of previous experience. Consciousness links past

attention to the present and permits the integration of details with perceived ends and purposes.

The elements of intelligence and consciousness come together marvelously to produce different styles in predator and prey. Herbivores and carnivores develop different kinds of attention related to escaping or chasing. Although in both kinds of animal, arousal stimulates the production of adrenaline and norepinephrine by the adrenal glands, the effect in herbivores is primarily fear, whereas in carnivores the effect is primarily aggression. For both, arousal attunes the animal to what is ahead. Perhaps it does not experience forethought as we know it, but the animal does experience something like it. The predator is searchingly aggressive, innerdirected, tuned by the nervous system and the adrenal hormones, but aware in a sense closer to human consciousness than, say, a hungry lizard's instinctive snap at a passing beetle. Using past events as a framework, the large mammal predator is working out a relationship between movement and food, sensitive to possibilities in cold trails and distant sounds-and yesterday's unforgotten lessons. The herbivore prey is of a different mind. Its mood of wariness rather than searching and its attitude of general expectancy instead of anticipating are silk-thin veils of tranquility over an explosive endocrine system.

1. The author is primarily concerned with

- (A) disproving the view that herbivores are less intelligent than carnivores
- (B) describing a relationship between animals' intelligence and their ecological roles
- (C) establishing a direct link between early large mammals and their modern counterparts
- (D) analyzing the ecological basis for the dominance of some carnivores over other carnivores
- (E) demonstrating the importance of hormones in mental activity

2. The author refers to a hungry lizard (lines 68-69) primarily in order to

- (A) demonstrate the similarity between the hunting methods of mammals and those of nonmammals
- (B) broaden the application of his argument by including an insectivore as an example
- (C) make a distinction between higher and lower levels of consciousness
- (D) provide an additional illustration of the brutality characteristic of predators
- (E) offer an objection to suggestions that all animals lack consciousness

3. It can be inferred from the passage that in animals less intelligent than the mammals discussed in the passage

- (A) past experience is less helpful in ensuring survival
- (B) attention is more highly focused
- (C) muscular coordination is less highly developed
- (D) there is less need for competition among species
- (E) environment is more important in establishing the proper ratio of prey to predator

4. The sensitivity described in lines 70-76 is most clearly an example of

- (A) "free-floating awareness" (lines 20-21)
- (B) "flooding of impulses in the brain stem" (lines 36-37)
- (C) "the holding of consistent images" (lines 39-40)
- (D) "integration of details with perceived ends and purposes" (lines 45-47)
- (E) "silk-thin veils of tranquility"(lines 80-81)

5. The author's attitude toward the mammals discussed in the passage is best described as

- (A) superior and condescending
- (B) lighthearted and jocular
- (C) apologetic and conciliatory
- (D) wistful and tender
- (E) respectful and admiring

6. The author provides information that would answer which of the following questions?

- I. Why is an aroused herbivore usually fearful?
- II. What are some of the degrees of attention in large mammals?
- III. What occurs when the stimulus that causes arousal of a mammal is removed?

- (A) I only
- (B) III only
- (C) I and II only

(D) II and III only

(E) I, II and III

7. According to the passage, improvement in brain function among early large mammals resulted primarily from which of the following?

(A) Interplay of predator and prey

(B) Persistence of free-floating awareness in animals of the grasslands

(C) Gradual dominance of warm-blooded mammals over cold-blooded reptiles

(D) Interaction of early large mammals with less intelligent species

(E) Improvement of the capacity for memory among herbivores and carnivores

8. According to the passage, as the process of arousal in an organism continues, all of the following may occur EXCEPT

(A) the production of adrenaline

(B) the production of nor epinephrine

(C) a heightening of sensitivity to stimuli

(D) an increase in selectivity with respect to stimuli

(E) an expansion of the range of states mediated by the brain stem

### Reading Passage 2

Great comic art is never other-worldly, it does not seek to mystify us, and it does not deny ambiguity by branding as evil whatever differs from good. Great comic artists assume that truth may bear all lights, and thus they seek to accentuate contradictions in social action, not gloss over or transcend them by appeals to extrasocial symbols of divine ends, cosmic purpose, or laws of nature. The moment of transcendence in great comic art is a social moment, born out of the conviction that we are human, even though we try to be gods. The comic community to which artists address themselves is a community of reasoning, loving, joyful, compassionate beings, who are willing to assume the human risks of acting rationally. Without invoking gods or demons, great comic art arouses courage in reason, courage which grows out of trust in what human beings can do as humans.

1. The passage suggests that great comic art can be characterized as optimistic about the ability of humans to
- (A) rid themselves of pride
  - (B) transcend the human condition
  - (C) differentiate clearly between good and evil
  - (D) avoid social conflicts
  - (E) act rationally
2. It can be inferred from the passage that the author admires great comic artists primarily for their
- (A) ability to understand the frequently subtle differences between good and evil
  - (B) ability to reconcile the contradictions in human behavior
  - (C) ability to distinguish between rational and irrational behavior
  - (D) insistence on confronting the truth about the human condition
  - (E) insistence on condemning human faults and weaknesses
3. Which of the following is the most accurate description of the organization of the passage?
- (A) A sequence of observations leading to a prediction
  - (B) A list of inferences drawn from facts stated at the beginning of the passage
  - (C) A series of assertions related to one general subject
  - (D) A statement of the major idea, followed by specific examples
  - (E) A succession of ideas moving from specific to general

### Reading Passage 3

The dark regions in the starry night sky are not pockets in the universe that are devoid of stars as had long been thought. Rather, they are dark because of interstellar dust that hides the stars behind it. Although its visual effect is so pronounced, dust is only a minor constituent of the material, extremely low in density, that lies between the stars. Dust accounts for about one

percent of the total mass of interstellar matter. The rest is hydrogen and helium gas, with small amounts of other elements. The interstellar material, rather like terrestrial clouds, comes in all shapes and sizes. The average density of interstellar material in the vicinity of our Sun is 1,000 to 10,000 times less than the best terrestrial laboratory vacuum. It is only because of the enormous interstellar distances that so little material per unit of volume becomes so significant. Optical astronomy is most directly affected, for although interstellar gas is perfectly transparent, the dust is not.

1. According to the passage, which of the following is a direct perceptual consequence of interstellar dust?

- (A) Some stars are rendered invisible to observers on Earth.
- (B) Many visible stars are made to seem brighter than they really are.
- (C) The presence of hydrogen and helium gas is revealed.
- (D) The night sky appears dusty at all times to observers on Earth.
- (E) The dust is conspicuously visible against a background of bright stars.

2. It can be inferred from the passage that the density of interstellar material is

- (A) higher where distances between the stars are shorter
- (B) equal to that of interstellar dust
- (C) unusually low in the vicinity of our Sun
- (D) independent of the incidence of gaseous components
- (E) not homogeneous throughout interstellar space

3. It can be inferred from the passage that it is because space is so vast that

- (A) little of the interstellar material in it seems substantial
- (B) normal units of volume seem futile for measurements of density
- (C) stars can be far enough from Earth to be obscured even by very sparsely distributed matter
- (D) interstellar gases can, for all practical purposes, be regarded as transparent
- (E) optical astronomy would be of little use even if no interstellar dust existed

### Reading Passage 4

In his 1976 study of slavery in the United States, Herbert Gutman, like Fogel, Engerman, and Genovese, has rightly stressed the slaves' achievements. But unlike these historians, Gutman gives plantation owners little credit for these achievements. Rather, Gutman argues that one must look to the Black family and the slaves' extended kinship system to understand how crucial achievements, such as the maintenance of a cultural heritage and the development of a communal consciousness, were possible.

His findings compel attention. Gutman recreates the family and extended kinship structure mainly through an ingenious use of what any historian should draw upon, quantifiable data, derived in this case mostly from plantation birth registers. He also uses accounts of ex-slaves to probe the human reality behind his statistics. These sources indicate that the two-parent household predominated in slave quarters just as it did among freed slaves after emancipation. Although Gutman admits that forced separation by sale was frequent, he shows that the slaves' preference, revealed most clearly on plantations where sale was infrequent, was very much for stable monogamy. In less conclusive fashion Fogel, Engerman, and Genovese had already indicated the predominance of two-parent households; however, only Gutman emphasizes the preference for stable monogamy and points out what stable monogamy meant for the slaves' cultural heritage. Gutman argues convincingly that the stability of the Black family encouraged the transmission of—and so was crucial in sustaining—the Black heritage of folklore, music, and religious expression from one generation to another, a heritage that slaves were continually fashioning out of their African and American experiences.

Gutman's examination of other facets of kinship also produces important findings. Gutman discovers that cousins rarely married, an exogamous tendency that contrasted sharply with the endogamy practiced by the plantation owners. This preference for exogamy, Gutman suggests, may have derived from West African rules governing marriage, which, though they differed from one tribal group to another, all involved some kind of prohibition against unions with close kin. This taboo against cousins' marrying is important, argues Gutman, because it is one of many indications of a strong awareness among slaves of an extended kinship network.

The fact that distantly related kin would care for children separated from their families also suggests this awareness. When blood relationships were few, as in newly created plantations in the Southwest, "fictive" kinship arrangements took their place until a new pattern of consanguinity developed. Gutman presents convincing evidence that this extended kinship structure—which he believes developed by the mid-to-late eighteenth century—provided the foundations for the strong communal consciousness that existed among slaves.

In sum, Gutman's study is significant because it offers a closely reasoned and original explanation of some of the slaves' achievements, one that correctly emphasizes the resources that slaves themselves possessed.

1. According to the passage, Fogel, Engerman, Genovese, and Gutman have all done which of the following?

- I. Discounted the influence of plantation owners on slaves' achievements.
- II. Emphasized the achievements of slaves.
- III. Pointed out the prevalence of the two-parent household among slaves.
- IV. Showed the connection between stable monogamy and slaves' cultural heritage.

- (A) I and II only
- (B) I and IV only
- (C) II and III only
- (D) I, III, and IV only
- (E) II, III, and IV only

2. With which of the following statements regarding the resources that historians ought to use would the author of the passage be most likely to agree?

- (A) Historians ought to make use of written rather than oral accounts.
- (B) Historians should rely primarily on birth registers.
- (C) Historians should rely exclusively on data that can be quantified.
- (D) Historians ought to make use of data that can be quantified.
- (E) Historians ought to draw on earlier historical research but they should do so in order to refute it.

3. Which of the following statements about the formation of the Black heritage of folklore, music, and religious expression is best supported by the information presented in the passage?

- (A) The heritage was formed primarily out of the experiences of those slaves who attempted to preserve the stability of their families.
- (B) The heritage was not formed out of the experiences of those slaves who married their cousins.



- (C) The heritage was formed more out of the African than out of the American experiences of slaves.
- (D) The heritage was not formed out of the experiences of only a single generation of slaves.
- (E) The heritage was formed primarily out of slaves' experiences of interdependence on newly created plantations in the Southwest.

4. It can be inferred from the passage that, of the following, the most probable reason why a historian of slavery might be interested in studying the type of plantations mentioned in line 31 is that this type would

- (A) give the historian access to the most complete plantation birth registers
- (B) permit the historian to observe the kinship patterns that had been most popular among West African tribes
- (C) provide the historian with evidence concerning the preference of freed slaves for stable monogamy
- (D) furnish the historian with the opportunity to discover the kind of marital commitment that slaves themselves chose to have
- (E) allow the historian to examine the influence of slaves' preferences on the actions of plantation owners

5. According to the passage, all of the following are true of the West African rules governing marriage mentioned in lines (57-61) EXCEPT:

- (A) The rules were derived from rules governing fictive kinship arrangements.
- (B) The rules forbade marriages between close kin.
- (C) The rules are mentioned in Herbert Gutman's study.
- (D) The rules were not uniform in all respects from one West African tribe to another.
- (E) The rules have been considered to be a possible source of slaves' marriage preferences.

6. Which of the following statements concerning the marriage practices of plantation owners during the period of Black slavery in the United States can most logically be inferred from the information in the passage.

- (A) These practices began to alter sometime around the mid-eighteenth century.

- (B) These practices varied markedly from one region of the country to another.
- (C) Plantation owners usually based their choice of marriage partners on economic considerations.
- (D) Plantation owners often married earlier than slaves.
- (E) Plantation owners often married their cousins.
7. Which of the following best describes the organization of the passage?
- (A) The author compares and contrasts the work of several historians and then discusses areas for possible new research.
- (B) The author presents his thesis, draws on the work of several historians for evidence to support his thesis, and concludes by reiterating his thesis.
- (C) The author describes some features of a historical study and then uses those features to put forth his own argument.
- (D) The author summarizes a historical study, examines two main arguments from the study, and then shows how the arguments are potentially in conflict with one another.
- (E) The author presents the general argument of a historical study, describes the study in more detail, and concludes with a brief judgments of the study's value.
8. Which of the following is the most appropriate title for the passage, based on its content?
- (A) The Influence of Herbert Gutman on Historians of Slavery in the United States
- (B) Gutman's Explanation of How Slaves Could Maintain a Cultural Heritage and Develop a Communal Consciousness
- (C) Slavery in the United States: New Controversy About an Old Subject
- (D) The Black Heritage of Folklore, Music, and Religious Expression: Its Growing Influence
- (E) The Black Family and Extended Kinship Structure: How They Were Important for the Freed Slave

### Reading Passage 5

"I want to criticize the social system, and to show it at work, at its most intense." Virginia Woolf's provocative statement about her intentions in writing *Mrs. Dalloway* has regularly been

ignored by the critics, since it highlights an aspect of her literary interests very different from the traditional picture of the "poetic" novelist concerned with examining states of reverie and vision and with following the intricate pathways of individual consciousness. But Virginia Woolf was a realistic as well as a poetic novelist, a satirist and social critic as well as a visionary: literary critics' cavalier dismissal of Woolf's social vision will not withstand scrutiny.

In her novels, Woolf is deeply engaged by the questions of how individuals are shaped (or deformed) by their social environments, how historical forces impinge on people's lives, how class, wealth, and gender help to determine people's fates. Most of her novels are rooted in a realistically rendered social setting and in a precise historical time.

Woolf's focus on society has not been generally recognized because of her intense antipathy to propaganda in art. The pictures of reformers in her novels are usually satiric or sharply critical. Even when Woolf is fundamentally sympathetic to their causes, she portrays people anxious to reform their society and possessed of a message or program as arrogant or dishonest, unaware of how their political ideas serve their own psychological needs. (Her *Writer's Diary* notes: "the only honest people are the artists," whereas "these social reformers and philanthropists...harbor...discreditable desires under the disguise of loving their kind....") Woolf detested what she called "preaching" in fiction, too, and criticized novelist D.H. Lawrence (among others) for working by this method.

Woolf's own social criticism is expressed in the language of observation rather than in direct commentary, since for her, fiction is a contemplative, not an active art. She describes phenomena and provides materials for a judgment about society and social issues; it is the reader's work to put the observations together and understand the coherent point of view behind them. As a moralist, Woolf works by indirection, subtly under-mining officially accepted mores, mocking, suggesting, calling into question, rather than asserting, advocating, bearing witness: hers is the satirist's art.

Woolf's literary models were acute social observers like Chekhov and Chaucer. As she put it in *The Common Reader*. "It is safe to say that not a single law has been framed or one stone set upon another because of anything Chaucer said or wrote; and yet, as we read him, we are absorbing morality at every pore." Like Chaucer, Woolf chose to understand as well as to judge, to know her society root and branch—a decision crucial in order to produce art rather than polemic.

1. Which of the following would be the most appropriate title for the passage?

- (A) Poetry and Satire as Influences on the Novels of Virginia Woolf
- (B) Virginia Woolf: Critic and Commentator on the Twentieth-Century Novel
- (C) Trends in Contemporary Reform Movements as a Key to Understanding Virginia Woolf's Novels

- (D) Society as Allegory for the Individual in the Novels of Virginia Woolf
- (E) Virginia Woolf's Novels: Critical Reflections on the Individual and on Society

2. In the first paragraph of the passage, the author's attitude toward the literary critics mentioned can best be described as

- (A) disparaging
- (B) ironic
- (C) factious
- (D) skeptical but resigned
- (E) disappointed but hopeful

3. It can be inferred from the passage that Woolf chose Chaucer as a literary model because she believed that

- (A) Chaucer was the first English author to focus on society as a whole as well as on individual characters
- (B) Chaucer was an honest and forthright author, whereas novelists like D. H. Lawrence did not sincerely wish to change society
- (C) Chaucer was more concerned with understanding his society than with calling its accepted mores into question
- (D) Chaucer's writing was greatly, if subtly, effective in influencing the moral attitudes of his readers
- (E) her own novels would be more widely read if, like Chaucer, she did not overtly and vehemently criticize contemporary society

4. It can be inferred from the passage that the most probable reason Woolf realistically described the social setting in the majority of her novels was that she

- (A) was aware that contemporary literary critics considered the novel to be the most realistic of literary genres
- (B) was interested in the effect of a person's social milieu on his or her character and actions
- (C) needed to be as attentive to detail as possible in her novels in order to support the arguments she advanced in them

- (D) wanted to show that a painstaking fidelity in the representation of reality did not in any way hamper the artist
- (E) wished to prevent critics from charging that her novels were written in an ambiguous and inexact style

5. Which of the following phrases best expresses the sense of the word "contemplative" as it is used in line 51 of the passage?

- (A) Gradually elucidating the rational structures underlying accepted mores
- (B) Reflecting on issues in society without prejudice or emotional commitment
- (C) Avoiding the aggressive assertion of the author's perspective to the exclusion of the reader's judgment
- (D) Conveying a broad view of society as a whole rather than focusing on an isolated individual consciousness
- (E) Appreciating the world as the artist sees it rather than judging it in moral terms

6. The author implies that a major element of the satirist's art is the satirist's

- (A) consistent adherence to a position of lofty disdain when viewing the foibles of humanity
- (B) insistence on the helplessness of individuals against the social forces that seek to determine an individual's fate
- (C) cynical disbelief that visionaries can either enlighten or improve their societies
- (D) fundamental assumption that some ambiguity must remain in a work of art in order for it to reflect society and social mores accurately
- (E) refusal to indulge in polemic when presenting social mores to readers for their scrutiny

7. The passage supplies information for answering which of the following questions?

- (A) Have literary critics ignored the social criticism inherent in the work of Chekhov and Chaucer?
- (B) Does the author believe that Woolf is solely an introspective and visionary novelist?
- (C) What are the social causes with which Woolf shows herself to be sympathetic in her writings?

- (D) Was D. H. Lawrence as concerned as Woolf was with creating realistic settings for his novels?
- (E) Does Woolf attribute more power to social environment or to historical forces as shapers of a person's life?

### Reading Passage 6

It is a popular misconception that nuclear fusion power is free of radioactivity; in fact, the deuterium-tritium reaction that nuclear scientists are currently exploring with such zeal produces both alpha particles and neutrons, (The neutrons are used to produce tritium from a lithium blanket surrounding the reactor.) Another common misconception is that nuclear fusion power is a virtually unlimited source of energy because of the enormous quantity of deuterium in the sea. Actually, its limits are set by the amount of available lithium, which is about as plentiful as uranium in the Earth's crust. Research should certainly continue on controlled nuclear fusion, but no energy program should be premised on its existence until it has proven practical. For the immediate future, we must continue to use hydroelectric power, nuclear fission, and fossil fuels to meet our energy needs. The energy sources already in major use are in major use for good reason.

1. The primary purpose of the passage is to

- (A) criticize scientists who believe that the deuterium-tritium fusion reaction can be made feasible as an energy source
- (B) admonish scientists who have failed to correctly calculate the amount of lithium
- (C) defend the continued short-term use of fossil fuels as a major energy source
- (D) caution against uncritical embrace of nuclear fusion power as a major energy source
- (E) correct the misconception that nuclear fusion power is entirely free of radioactivity

2. It can be inferred from the passage that the author believes which of the following about the current state of public awareness concerning nuclear fusion power?

- (A) The public has been deliberately misinformed about the advantages and disadvantages of nuclear fusion power.
- (B) The public is unaware of the principal advantage of nuclear fusion over nuclear fission as an energy source.
- (C) The public's awareness of the scientific facts concerning nuclear fusion power is somewhat distorted and incomplete.

- (D) The public is not interested in increasing its awareness of the advantages and disadvantages of nuclear fusion power.
- (E) The public is aware of the disadvantages of nuclear fusion power but not of its advantages.
3. The passage provides information that would answer which of the following questions?
- (A) What is likely to be the principal source of deuterium for nuclear fusion power?
- (B) How much incidental radiation is produced in the deuterium-tritium fusion reaction?
- (C) Why are scientists exploring the deuterium-tritium fusion reaction with such zeal?
- (D) Why must the tritium for nuclear fusion be synthesized from lithium?
- (E) Why does the deuterium-tritium reaction yield both alpha particles and neutrons?
4. Which of the following statements concerning nuclear scientists is most directly suggested in the passage?
- (A) Nuclear scientists are not themselves aware of all of the facts surrounding the deuterium-tritium fusion reaction.
- (B) Nuclear scientists exploring the deuterium-tritium reaction have overlooked key facts in their eagerness to prove nuclear fusion practical.
- (C) Nuclear scientists may have overestimated the amount of lithium actually available in the Earth's crust.
- (D) Nuclear scientists have not been entirely dispassionate in their investigation of the deuterium-tritium reaction.
- (E) Nuclear scientists have insufficiently investigated the lithium-to-tritium reaction in nuclear fusion.

### Reading Passage 7

It has long been known that the rate of oxidative metabolism (the process that uses oxygen to convert food into energy) in any animal has a profound effect on its living patterns. The high metabolic rate of small animals, for example, gives them sustained power and activity per unit of weight, but at the cost of requiring constant consumption of food and water.

Very large animals, with their relatively low metabolic rates, can survive well on a sporadic food supply, but can generate little metabolic energy per gram of body weight. If only oxidative metabolic rate is considered, therefore, one might assume that smaller, more active, animals could prey on larger ones, at least if they attacked in groups. Perhaps they could if it were not for anaerobic glycolysis, the great equalizer. Anaerobic glycolysis is a process in which energy is produced, without oxygen, through the breakdown of muscle glycogen into lactic acid and adenosine tri-phosphate (ATP), the energy provider. The amount of energy that can be produced anaerobically is a function of the amount of glycogen present—in all vertebrates about 0.5 percent of their muscles' wet weight. Thus the anaerobic energy reserves of a vertebrate are proportional to the size of the animal.

If, for example, some predators had attacked a 100-ton dinosaur, normally torpid, the dinosaur would have been able to generate almost instantaneously, via anaerobic glycolysis, the energy of 3,000 humans at maximum oxidative metabolic energy production. This explains how many large species have managed to compete with their more active neighbor: the compensation for a low oxidative metabolic rate is glycolysis.

There are limitations, however, to this compensation. The glycogen reserves of any animal are good, at most, for only about two minutes at maximum effort, after which only the normal oxidative metabolic source of energy remains. With the conclusion of a burst of activity, the lactic acid level is high in the body fluids, leaving the large animal vulnerable to attack until the acid is reconverted, via oxidative metabolism, by the liver into glucose, which is then sent (in part) back to the muscles for glycogen resynthesis. During this process the enormous energy debt that the animal has run up through anaerobic glycolysis must be repaid, a debt that is proportionally much greater for the larger vertebrates than for the smaller ones. Whereas the tiny shrew can replace in minutes the glycogen used for maximum effort, for example, the gigantic dinosaur would have required more than three weeks. It might seem that this interminably long recovery time in a large vertebrate would prove a grave disadvantage for survival. Fortunately, muscle glycogen is used only when needed and even then only in whatever quantity is necessary. Only in times of panic or during mortal combat would the entire reserves be consumed.

1. The primary purpose of the passage is to

- (A) refute a misconception about anaerobic glycolysis
- (B) introduce a new hypothesis about anaerobic glycolysis
- (C) describe the limitations of anaerobic glycolysis
- (D) analyze the chemistry of anaerobic glycolysis and its similarity to oxidative metabolism
- (E) explain anaerobic glycolysis and its effects on animal survival



2. According to the author, glycogen is crucial to the process of anaerobic glycolysis because glycogen

- (A) increases the organism's need for ATP
- (B) reduces the amount of ATP in the tissues
- (C) is an inhibitor of the oxidative metabolic production of ATP
- (D) ensures that the synthesis of ATP will occur speedily
- (E) is the material from which ATP is derived

3. According to the author, a major limitation of anaerobic glycolysis is that it can

- (A) produce in large animals more lactic acid than the liver can safely reconvert
- (B) necessitate a dangerously long recovery period in large animals
- (C) produce energy more slowly than it can be used by large animals
- (D) consume all of the available glycogen regardless of need
- (E) reduce significantly the rate at which energy is produced by oxidative metabolism

4. The passage suggests that the total anaerobic energy reserves of a vertebrate are proportional to the vertebrate's size because

- (A) larger vertebrates conserve more energy than smaller vertebrates
- (B) larger vertebrates use less oxygen per unit weight than smaller vertebrates
- (C) the ability of a vertebrate to consume food is a function of its size
- (D) the amount of muscle tissue in a vertebrate is directly related to its size
- (E) the size of a vertebrate is proportional to the quantity of energy it can utilize

5. The author suggests that, on the basis of energy production, a 100-ton dinosaur would have been markedly vulnerable to which of the following?

- I. Repeated attacks by a single smaller, more active adversary
- II. Sustained attack by numerous smaller, more active adversaries
- III. An attack by an individual adversary of similar size

- (A) II only
- (B) I and II only
- (C) I and III only
- (D) II and III only
- (E) I, II, and III

6. It can be inferred from the passage that the time required to replenish muscle glycogen following anaerobic glycolysis is determined by which of the following factors?

- I. Rate of oxidative metabolism
- II. Quantity of lactic acid in the body fluids
- III. Percentage of glucose that is returned to the muscles

- (A) I only
- (B) III only
- (C) I and II only
- (D) I and III only
- (E) I, II, and III

7. The author is most probably addressing which of the following audiences?

- (A) College students in an introductory course on animal physiology
- (B) Historians of science investigating the discovery of anaerobic glycolysis
- (C) Graduate students with specialized training in comparative anatomy
- (D) Zoologists interested in prehistoric animals
- (E) Biochemists doing research on oxidative metabolism

8. Which of the following best states the central idea of the passage?

- (A) The disadvantage of a low oxidative metabolic rate in large animals can be offset by their ability to convert substantial amounts of glycogen into energy.

- (B) The most significant problem facing animals that have used anaerobic glycolysis for energy is the resynthesis of its by-product, glucose, into glycogen.
- (C) The benefits to animals of anaerobic glycolysis are offset by the profound costs that must be paid.
- (D) The major factor ensuring that a large animal will triumph over a smaller animal is the large animal's ability to produce energy via anaerobic glycolysis.
- (E) The great differences that exist in metabolic rates between species of small animals and species of large animals can have important effects on the patterns of their activities.

### Reading Passage 8

Tocqueville, apparently, was wrong. Jacksonian America was not a fluid, egalitarian society where individual wealth and poverty were ephemeral conditions. At least so argues E. Pessen in his iconoclastic study of the very rich in the United States between 1825 and 1850.

Pessen does present a quantity of examples, together with some refreshingly intelligible statistics, to establish the existence of an inordinately wealthy class. Though active in commerce or the professions, most of the wealthy were not self-made, but had inherited family fortunes. In no sense mercurial, these great fortunes survived the financial panics that destroyed lesser ones. Indeed, in several cities the wealthiest one percent constantly increased its share until by 1850 it owned half of the community's wealth. Although these observations are true, Pessen overestimates their importance by concluding from them that the undoubted progress toward inequality in the late eighteenth century continued in the Jacksonian period and that the United States was a class-ridden, plutocratic society even before industrialization.

1. According to the passage, Pessen indicates that all of the following were true of the very wealthy in the United States between 1825 and 1850 EXCEPT:

- (A) They formed a distinct upper class.
- (B) Many of them were able to increase their holdings.
- (C) Some of them worked as professionals or in business.
- (D) Most of them accumulated their own fortunes.
- (E) Many of them retained their wealth in spite of financial upheavals.

2. The author's attitude toward Pessen's presentation of statistics can be best described as

- (A) disapproving
- (B) shocked
- (C) suspicious
- (D) amused
- (E) laudatory

3. Which of the following best states the author's main point?

- (A) Pessen's study has overturned the previously established view of the social and economic structure of early nineteenth-century America.
- (B) Tocqueville's analysis of the United States in the Jacksonian era remains the definitive account of this period.
- (C) Pessen's study is valuable primarily because it shows the continuity of the social system in the United States throughout the nineteenth century.
- (D) The social patterns and political power of the extremely wealthy in the United States between 1825 and 1850 are well documented.
- (E) Pessen challenges a view of the social and economic system in the United States from 1825 to 1850, but he draws conclusions that are incorrect.