

Critical Reasoning



Drill 1: Solutions

Exercise 1

1. Premise: No one under eighteen years of age can vote.
Jen is under eighteen years of age.
Conclusion: Therefore, Jen cannot vote.
2. Premise: After all, a significant percentage of their students are undergraduates, and such institutions are clearly obligated to provide them quality education.

Conclusion: Research universities also must aggressively support teaching.

Drill 2: Solutions

Exercise 1

Exercise 2

Order obtained through logical sequence of actions.

1. 6
2. 2
3. 4
4. 1
5. 5
6. 3

Answer order obtained through action sequence approach.

CONCEPT REVIEW QUESTIONS

1. Answer C

It is clear that 'no. of options' and 'patient's chances of following advice' are inversely proportional. This inversely proportional principle is best expressed in option c.

- a) There is no talk of becoming confused about the advice. Just because there are many options does not mean one should be confused about them.
- b) There is no talk of seeing a difference between benefits from each option.
- d) There is no mention of imagining the consequences of not of ignoring a piece of advice.

2. Answer D

The practice: Doctors study animal brain in order to understand human brain.

The question asks us which answer option does not explain the logic behind the practice.

- a) If human and animal brains have similar instincts, studying animal brain will help understand human brain. Explains the logic. Not the answer.
- b) Experiments are conducted on animals because they're allowed; not conducted on humans because they're banned. Explains the logic for studying animal brain. Not the answer.
- c) Animal experiments being cheaper than human experiments explains the practice. Not the answer.
- d) This is opposite to the given practice. It says that one must study human brain in order to understand the animal brain. Thus this is the ANSWER!

3. Answer A

Apparent contradiction- Half of the respondents reported that they were in the top quarter of the graduating class in 1960.

- a) A disproportionately large number of high ranking alumni responded to the survey. This would mean that a larger number of respondents to the survey were alumni with a higher academic rank. This accounts for the apparent contradiction mentioned above.
- b) Few respondents were mistaken about their class rank. 'Few respondents' means 'no respondents at all' (Note the difference between 'few' and 'a few'). Thus, when no respondent was mistaken, the contradiction would never happen.
- c) If not all the alumni who were actually in the top quarter responded to in the survey then the results would have been different from what was obtained.
- d) If almost all the alumni who graduated from the class of 1960 responded to the survey then the contradiction would remain unchanged.

4. Answer D

Here, the premise is based on a survey conducted among girl students of elementary schools in a 'medium-sized city' and based on this the conclusion drawn is about the 'national' dropout rate among elementary school going girl students. Based on what students in medium-sized cities feel, an opinion about the entire nation cannot be formed. This is the flaw in the argument. Hence the answer should be option D because it highlights the same point.

5. Answer A

Premise: People are not intellectually well suited to live in large, bureaucratic societies.

Conclusion: People can find happiness only in smaller political units like villages.

As per the argument, people cannot find happiness in large bureaucratic societies. The assumption should connect the premise (intellectual suitability) and the conclusion (ability to find happiness).

The answer option which does it is option A.

6. Answer D

Dr. Karthik opined that medical outsourcing will provide sustained (long-lasting) improvement in rural patient care whereas Dr Divya is of the opinion that even though medical outsourcing might help initially, over a period of time rural and urban health care will suffer. Hence the point being discussed by the two doctors is whether the technology of medical outsourcing will benefit rural patients in the long run. Hence the answer is option D.

7. Answer B

Dr Divya accepts that medical outsourcing might help rural patient care initially. Then she talks about how over a period of time people will start misusing it and in the end it will bring down the quality of both rural and urban patient care. Thus, it is clear that she is describing medical outsourcing as a step that initiates a process that leads to an undesirable end. Hence the answer is option B.

a) There is no mention of the treatment harming a particular patient. The only talk is about how the 'method' getting misused.

c) Dr Divya does not question Dr Karthik's professional training at any point.

d) No medical statistics are invoked by Dr Divya. She only talks about the possibilities of the technology getting misused.

8. Answer B

The reasoning pattern in the question can be depicted as follows:

Drought → Water level ↓ → Food ↓

X Drought <-----Food↑

a) Only two terms are talked about in this option.

Dirty clothes hamper full → Sock drawer empty

Sock drawer empty → Dirty clothes hamper full

Sock drawer not empty → Dirty clothes hamper not full

- b) The reasoning pattern in this option is similar to that found in the question.
 Temperature below FP → Petunias ↓ → Flowers ↓
 X Temperature below FP <----- Flowers ↑
- c) This does not follow the same line of reasoning as that in the question.
- d) The term 'global temperature' and 'earth's temperature' are different entities and cannot be considered to be the same.

9. Answer D

Here, the author is using the seemingly contradictory opinions about milk presented in articles as the premise to conclude that experts are useless for guiding one's decisions about one's health. But the author fails to consider that fact that, like most things in this world, even milk has its share of positives and negatives. This is the apparent flaw in his argument. Hence the answer should be option D.

10. Answer D

Mr. Mallya's reasoning is that since the town officials did not use the airline's service to attend an out-of town conference there is no need to follow their advice regarding using the airlines more often. But he fails to consider the fact that the town officials may have a genuine reason for not using the airlines (for example, there are places that are better connected by road or the lack of direct flight to the destination). So without considering the possible reasons as to why they did it, Mr. Mallya presumes that if the town officials did not follow their own advice, that that advice is not worth following. Hence the answer should be option D.

11. Answer D

Scientists' belief: An asteroid that stuck 60 million years ago caused the extinction of the dinosaurs.

Reasoning behind belief: An asteroid hit could have hurled enough debris into the atmosphere to:

- block sunlight and
- cool the atmosphere

Without adequate sunlight, food sources for herbivorous dinosaurs would have disappeared, and no dinosaurs could have survived a prolonged period of low temperatures.

Scientists' results: Most of the debris launched by the asteroid would have settled to the ground within six months, too soon for the plants to disappear or the dinosaurs to freeze.

Apparent discrepancy: There is a mismatch between the results and the reasoning. The results prove that the reasoning is wrong.

How to resolve the discrepancy?

If one has to resolve this discrepancy, one has to still prove that the asteroid was the cause of dinosaurs becoming extinct. How to do that? By establishing a factor caused by the asteroid collision, other than low temperature or lack of food, as the reason for the extinction of dinosaurs. This exactly what option D does and hence is the answer.

12. Answer D

The assumption should be the connecting link between the premise and conclusion. As per the premise, retraining is efficient only if it fulfils the condition of meeting an organization's short-term needs. Thus, if large governmental retraining programmes are not efficient, then it is because they have not fulfilled that condition of meeting short-term needs. Hence the answer is option D.

13. Answer B

↓Folic acid level →↑ Homocysteine level →↑ Chances of blocked arteries

- a) Heart attack chances and homocysteine level have a directly proportional relationship. Option a shows the opposite.
- b) Heart attack chances and folic acid level have an indirectly proportional relationship. Option b captures it correction is thus the ANSWER.
- c) Blocked arteries chances and homocysteine level are directly proportional. Option c shows the opposite.
- d) Blocked artery chances and folic acid levels are indirectly proportional. Option d shows the opposite.

14. Answer D

As per the argument, there is only one reason why the percentage of Indians going abroad is high now – More money to spend on vacations. The assumption, thus, should connect the 'percentage of Indians vacationing abroad' with 'money to spend on vacations'. Option d is that perfect connecting link.

- a) As per the argument, the only reason why Indians did not do more foreign vacations 20 years ago was because they had less money. Thus option a contradicts the argument, assuming that Indians would not have had money even if foreign travel had been less expensive.
- b) The argument is about Indians vacationing abroad, and not foreigners vacationing in India. Option b is irrelevant.
- c) 'Domestic vacation' is an idea irrelevant to the argument. Moreover, as per the argument, less money was the only reason for Indians vacationing less in foreign countries.

15. Answer A

As per the given argument, there is only one reason why homeowners use low intensity bulbs – to decrease their electric bills. Based on the fact that low intensity bulbs require less electricity, 'n' number of conclusions can be drawn. But the author chose to conclude that use of low intensity bulbs alone will reduce electric bills. In order to form the link between 'less electricity' and 'low electric bills' the necessary assumption should be related to reducing electricity bills. Hence the closest answer from the given options is A. 'Utility bill' means consumption bill. Thus, wanting to reduce the electricity (a form of consumption bill) is as good as saying that one wants to reduce the utility bill.

16. Answer C

In order to draw such a conclusion it is essential that the author knows the exact sequence in which the days mentioned above are arranged.

- a) Insufficient data to reach the given conclusion.
- b) Same reason as above.
- c) If this is the assumption made, we can come up with the conclusion in the question because the sequence of the days is clearly mentioned here.
- d) This option does not specify the particular sequence of days.

17. Answer D

- a) As per the argument, authors of detective fiction most often write stories of this pattern. However, there is no information to suggest that such stories can be classified as 'well-written'.
- b) This is a part of the argument, and cannot be the conclusion.
- c) As per the argument, authors write stories with the incompetent rival failing to solve the crime 'most of the time'. It does not mean that they do it all the time. This option is thus contrary to the idea given in the argument.
- d) It can be understood from the argument that writers often adopt the given style of narration so that it lends additional complexity and challenge in solving the investigation. Hence this option can be the answer.

18. Answer B

Based on Mrs. Sharma's qualifications Mr. Dinesh suggested that she should be hired immediately. This should be based on the assumptions that these are the required qualifications and Mrs. Sharma is the only person having these qualifications. Of the given options, only option B states a fact that weakens his assumptions. If there are two other candidates with identical qualifications, there is no need to hire Mrs. Sharma immediately. There has to be further scrutiny.

- a) Whether or not Mrs. Sharma is interested in the job does not make what Dinesh said to be correct / incorrect about her. Mrs. Sharma's interest will affect her taking the job, not her qualifications for the job. Dinesh is worried only about her qualifications.
- c) Does not weaken anything Dinesh said in his argument.
- d) Same as option a.

19. Answer D

<u>NORMAL DAY</u> (Sun does not set before 6)	<u>EXCEPTIONAL DAY</u> (Sun sets before 6)
John leaves before sunset	John does not leave before sunset
David does not leave the office before John does	

The data given in the question has been tabulated in an easy form in the tabular column given above. This is a simple data verification question.

On the day in question, sun sets at 5.30, i.e., exceptional case.

- a. The exact time at which John leaves the office cannot be inferred from the data given.
- b. The exact time at which David leaves the office cannot be inferred from the data given.
- c. This is what David does on a normal day.
- d. This is what John does on all 'exceptional' days. Hence this is the answer.

20. Answer D

- a) Supports the conclusion.
- b) While this proves that ADD has a greater impact on concentration difficulty compared to habitual smoking, it still does not prove that habitual smoking does not increase concentration difficulty.
- c) Incarceration (imprisonment) rate is irrelevant to the argument.
- d) This proves that it is not smoking which causes concentration difficulty, but it is people with pre-existing concentration difficulty problem who take up to smoking. This means that smoking is not the cause of the concentration difficulty. This is thus the answer.