
8

ENGLISH USAGE

Critical Reasoning

A typical critical reasoning question is a sequence of two or more phrases, clauses, sentences or statements, one of which is a claim or a conclusion, which follows the premise.

For example “The ground is wet, so it must have been raining”.

The conclusion is that it must be raining which is based on the premise (or) evidence that the ground is wet.

In order to join these two ideas, there is a third variable called assumption. It has been assumed in the question that the ground can only be wet due to the rains.

In order to solve a critical reasoning question, it is very important to understand that all these premises are interlinked and must be defined in each question.

As in the case of other questions based on verbal reasoning, it is important that we

- Go through the question-stem first, to get focus
- Read** the argument carefully and translate it into your own language to get its flow
- Predict** the answer before proceeding to read the answer options
- Proceed through the process of **POE** and find a reason to reject each of the incorrect answer choices.

A question may have more than one correct answer. Our aim is to choose not **the right** answer, **but the best** answer.

Read all the answer choices at least once. Don't choose an answer just because it seems to be the correct answer, before going through all the choices. There may be a better answer choice.

Try to eliminate as many answer choices in the first reading as you can. Spend most of your time on the short-listed answers only.

Eliminate the comic or the funny choices.

Read the question very carefully. Focus always has its merits.

Learn to use the DENIAL TEST. It can help you choose the right answer. But dwell on it too long and use it too often and you might end up wasting your valuable time.

There are two ways to reach the answer.

- (A) Read the evidence and use it to reach the answer
- (B) Eliminate all the answer choices, which you feel cannot be the answer.

Now both the ways have their merits and demerits. Although (A) should be the default method, the important thing is, you can use (B) to narrow the range of answer choices. In case you are unable to grasp the question, use (B) to improve your chances of success.

Be wary of the same sounding word trap. For example, the question might be about graduate studies, whereas a correct sounding answer trap might read postgraduate studies. And remember, the more stressed you are, the more likely you are to fall in this trap.

Question Types:

There are, on the whole, six types of questions:

1. **Assumption questions:** When you read the passage in question, you should be looking for an unstated premise on which the argument depends.

For example:

Use of this product causes cancer. Therefore, this product should be banned. Now in these statements there is no link unless we state that use of this product is the only cause of cancer. Hence, assumption is the missing link.

Pointers:

- Assumptions are never stated in the passage. If you see an answer choice that comes straight from the passage, it is not an assumption.
- Assumptions support the conclusion of the passage. Find the conclusion and then try all the choices to see which one makes the conclusion stronger.

Example 

Mrs. Sheela's daughter, who had love marriage, was very unhappy with her husband. When she turned to Mrs. Sheela for support, Mrs. Sheela replied, "I can't believe it. You have had a love marriage!"

What is Mrs. Sheela's assumption based on which she has said the above statement?

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- (1) She believes that love marriages do not have any problems.
 - (2) Problems are faced only by those who have had arranged marriages.
 - (3) Problems within a marriage must be solved by the spouses themselves.
 - (4) None of the above.

Obviously Mrs Sheela assumes only (1).



In the 1990's Children's literature in India was symbolized by books of the R.L. Stein kind. Then Harry Potter happened, "After Potter, we expect an increase in demand", commented one of the top publishing firms in India.

What did the commentator assume when he gave a statement like the one above?

- (1) Children will like Harry Potter a lot.
- (2) Like R.L. Stein, Potter will also become a big hit.
- (3) After Potter, when another writer emerges, he expects an increase in demand.
- (4) Potter will bring lots of profits, but after a while.

The speaker expects an increase in demand for children's literature. The expectation is based on the assumption that Harry Potter will lead to a general increase of interest in children's literature. Therefore, (4) should be the right answer.

2. Strengthen questions:

There are many ways to strengthen or weaken an ARGUMENT:

1. Strengthen/weaken (deny) the assumption (most of the times)
2. Strengthen (add new, but favorable)/weaken (add new, but unfavorable) the evidence
3. Strengthen/weaken the alternative conclusion.

This question is like an assumption question. It asks you to find an unstated premise on which the argument depends, and then bolster it.

Pointers:

- The best answer will strengthen the argument with new information. If you see an answer choice that comes straight from the passage – it's bound to be incorrect.
- New information should help form the stated conclusion with the help of the already stated evidence.



Water resource management has linkages with the management of other resources as well. The large scale deforestation taking place in our mountains has serious implications for water supply in the mountains as well as the plains.

Which of the following, if true, would substantiate the above belief?

- (1) There is a large and growing demand for wood and wood products which would lead to further deforestation.
- (2) The glaciers in the mountains often carry off with them entire trees.
- (3) The scale at which deforestation is taking place indicates that in a few years the forest zones will be severely depleted.
- (4) The maintenance of forests implies that topsoil is not eroded and moisture is retained, thus ensuring the life of streams.

The conclusion here is that deforestation will lead to depletion of water supply. Only (4) implies that forest management and water-resource management are linked. The new information is that the forests protect against soil erosion. Hence, (4).



Let us have a look at another example:

The overriding emphasis on using life insurance policies as tax saving tools in India has relegated their raison d'être - risk coverage – to a secondary factor.

Which of the following, if true, would strengthen the above claim?

- (1) It was found that most life insurance companies highlighted the tax saving factor in their advertisements
- (2) People who invested in insurance policies were mainly from urban areas
- (3) An income-tax analysis showed that most people had used insurance more than other investment avenues available to save tax
- (4) It was found that there was a rush for new life insurance policies only towards the end of the financial year when people had per force to save so as to avoid paying high taxes.

(3) strengthens the claim as it indicates that the awareness of insurance as a tax saving tool is high, which is what the author suggests. (4) is a close answer, though there may be no cause and effect relationship between the year-end rush and the tax-saving purpose.

3. Weakening questions: Here is the tricky lot. You have to expose a flaw in the reasoning of the passage. Again, the conclusion is one premise that will help you locate the flaw. Remember you need to choose an option that would prove the conclusion false (or) untrue.

Pointer:

- Attack a premise or an assumption, rather than the conclusion. A point that proves the assumption (or) evidence to be false is the answer you are looking for.

Example 

During the period 1997 – 2001, the consumption of fried products decreased 8% and heart ailments also dropped by the same percentage. This is in sharp contrast to the period 1992 – 1997, when people ate more fried products and also reported more heart ailments. Thus we can be sure that there is a link between eating fried products and heart disease.

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

- (1) In contrast to the period 1992-97, during the period 1997 – 2001, people had regular medical checkups
- (2) The oil that is used in frying foods has improved in quality significantly during the last decade
- (3) The decreases in consumption of fried foods and increase in heart ailments was reported from different geographical regions
- (4) There were better medical facilities available to some sections of society, particularly in the bigger cities in the period 1997 – 2001, as compared to previous years

(3) states that the decrease in consumption of oil and increase in heart ailments were observed in different regions. For the hypothesis to be true, the same group of people should have been sampled both for consumption as well as for measuring heart ailments (4) could also weaken the argument but to a lesser extent as it states 'a certain section.'

4. Inference question:

Difference between a conclusion and an inference:

Sometimes there is no difference. When the conclusion to an argument is not explicitly stated in the passage, it is something you could infer. In other cases, inferences have nothing to do with the main point of an argument. You can make inferences from the facts that are stated as premises.

Difference between an assumption and an inference:

Assumption is something that has to be valid for the given argument to be true. If the assumption is not true, the conclusion of the argument cannot be true (remember the Harish problem?).

An inference is a statement that is true if the given argument is true.

Hence, eliminate any answer choice that 'could be false'.

All inference questions ask you to find something that is known to be true from the information presented in the argument.

Use the Denial Test for inferences. If any answer choice could not pass the Denial Test, it is to be eliminated.

Inference based questions are of two types:

- Direct inference
- Indirect Inference

Direct inference questions can be spotted when phrases like, 'Directly inferred', 'Most directly related', 'Inferred' are used.

Indirect inference questions, on the other hand, will have phrases like, 'Critically inferred', 'Critically deduced'. In these types of questions new information, which is not explicitly stated, can be inferred.

Example 

Taxes are broadly grouped into two categories, direct and indirect taxes. In our country, about 5% of the households are in the taxable income bracket (i.e. Rs. 1, 00, 000 and above per annum). The principle reason for this is the large-scale tax evasion carried on by businessmen and industrialists.

Which of the following statements can be inferred from the above statements?

- (1) The only group that honestly pays taxes is the salaried group, because it cannot conceal its income.
- (2) A very large group of merchants and industrialists who fall within the income tax range either pay very little tax or get away without payment of any tax.
- (3) The income tax department must be more careful the next time. Because at the rate at which things are going on, the department might have to face hung losses.
- (4) The income tax department imposes high rates of taxation under both the direct and the indirect tax groups, out of which it faces losses from the direct tax group mainly.

Of all the statements, only statement (2) is best inferred from the passage. This statement gives the reason why only 5% of households are in the taxable bracket. Hence, (2) is the answer.

5. Parallel Reasoning: These questions ask you to recognize the reasoning in a passage and follow the same in an option. For example “If it rains, I will stay home today”. We can simplify the idea to “If A, then B”. Here one has to be extra cautious as parallel reasoning could be parallel on the order of premises mentioned, the structure or the reasoning base of the question. One has to see only the critical structure of the argument, not the content.

Types of Parallel Reasoning

In such questions, one has to find a similar structure to the given argument. So one doesn't have to see the content of the argument, one has to see only its logical structure. The given argument, mostly two or three sentences long can be of following different types:-

1. A cause and effect relationship.
2. General description of a phenomenon.
3. Situation and a person's reaction.
4. A paragraph where same factors are repeated again and again.
5. Circular reasoning where statement “A” is based on the statement “B” and “B” is based on “A”.

Look at the big picture. Can you identify any of the answer choices which have the same structure as that of the argument?

(Only in cases where you are unable to identify any of the answer choices as the correct ones, should you try the rules given below. Keep it as uncomplicated as you can.)

- ⌚ See how many functional elements are there in the argument. The same should be there in the right answer choice.
- ⌚ Try to replace the corresponding elements of the question with the elements from the answer choice and check if the corresponding relationship still stands.
- ⌚ The sequence of the elements might not be the same in the right answer choice.

Example 

Self-perception theorists have explored situations in which consumer compliance with a minor request affects subsequent compliance with a more substantial request.

Which of the following best illustrates the above statement?

- (1) Someone who donates five dollars to cancer research might be persuaded to donate a much larger amount, when properly approached.

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- (2) Individuals who try a brand without any inducements or individuals who buy a brand repeatedly are more likely to infer increasingly positive attitudes toward the brand from their respective behaviour.
 - (3) Those who comply with a minor request, must necessarily comply with a major request also.
 - (4) (1) and (2)

Here option (1) best exemplifies the statement.



Here is another example.

All lawyers resist accepting evidence contrary to their own legal views. Since Aman isn't a lawyer, he must not resist accepting evidence contrary to his legal views.

Which of the following arguments is most parallel to the above?

- (1) All typical family drama movies are dull. Since the Lagan isn't dull, it must not be a typical family movie.
- (2) Most taxi drivers work long shifts. Since Lallit isn't a taxi driver, he usually works an eight-hour day.
- (3) All vegetarians eat a healthy diet. Since Fatima isn't a vegetarian, her diet must be unhealthy.
- (4) Well-traveled people talk a lot about where they've been. Since Anil has traveled, he must be a very interesting conversationalist.

All X do Y. Since A is ~X (not X), He must not do Y.

No. of elements here = 3

(Lawyer; resist accepting evidence contrary to their legal views; Aman)

(Sometimes the problem might arise when you try to accept "resist accepting evidence contrary to their legal views" as a single element. Remember it is a quality/property of one of the elements that is a noun. Always use the following shortcut: First choose the nouns as elements and then choose their quality/property. And most important of all "healthy and unhealthy" are not different elements; they are just the negative shades of each other.)

Starting from choice (1): Had there been the term 'a typical family drama movie' instead of 'dull' after since, this would have been the correct choice.

This choice is not logically in line with the given statement. Therefore, eliminated.

In choice (2) we are talking about long shifts and not an eight-hour day.

Choice (3) is the correct answer choice. Replace X with 'vegetarians' and Y with 'healthy diet'. We get the same logical structure of the sentence as the argument.

In choice (4), 'interesting conversationalist' is a new term introduced.

Or using rule No. 2

Now, why doesn't Aman resist accepting evidence contrary to his legal views? Because he's a lawyer, Right. Now let's us see if it corresponds favourably with the two closest answer choices, (1) and (3).

Choice (1): Here all typical family drama movies correspond to all lawyers, Lagan corresponds to Aman and quality mentioned for all the movies is that they are all dull.

So, the correct answer choice based on the question should be" All typical family drama movies are dull. Since Lagan is not a typical family drama movie, it must not be dull.

6. Resolve/Explain Questions: Here the passage will present you with two seemingly contradictory facts. Your job is to find an option that allows both the facts to be true. Here is an example:

Example 

The amount of pollution in America's environment has declined steadily since 1970, even though energy consumption, including the use of fossil fuels, which are major pollutants, has not declined and is in fact now at the highest levels ever recorded.

Which of the following, if true, best helps to explain the steady decline of environmental pollution mentioned above?

- (1) Since 1970, some people have become environmentally conscious and have significantly reduced their consumption of fossil fuels.
- (2) Reductions in the pollution created during the conversion of each unit of fuel to usable energy have more than offset increases since 1970 in units of fuel consumed.
- (3) Due to increases in efficiency, the same tasks can often be accomplished today using less energy than was required in 1970.
- (4) The proportion of fossil fuels used to create the energy consumed in America has declined since 1970.

Here (2) is the obvious answer. This is the only option that shows that the net effect of two opposing forces is beneficial.