

Logical Reasoning: Topics, Examples, Syllabus, Questions



Introduction

Any competitive exam in India involves a session of logical reasoning aptitude tests among all age groups. Competitive examinations include two major reasoning aptitude categories of questions: logical reasoning and analytical reasoning.

This article discusses logical reasoning, giving small insights into some sample questions and its solutions. It is compiled to help the students to prepare for such examinations with great confidence.

What is Logical Reasoning?

Logical Reasoning tests are curated to measure one's ability to think logically and test problem-solving ability. The logical reasoning syllabus ensures the holistic development of a person's analytical skills and cognitive ability. There are different types of questions under the same umbrella term, logical reasoning.

This is evaluated by looking at whether you can analyse a given pattern or sequence provided with the assistance of visual graphics/ images/ graphs and involve in a logical interpretation of the same and finding the answer. Questions like

finishing a specific sequence by finding the missing piece and adding to it are the most common type of logical reasoning questions seen.

There are two different types of logical reasoning questions:

Verbal Reasoning:

As the title mentions, verbal reasoning measures the ability to solve the problem expressed in words and letters. These questions vary in range from completing sequences to comprehensive paragraphs. Verbal reasoning tries to test a person's power to curate answers from information provided in a sentence.

Non- Verbal Reasoning:

Non-verbal reasoning helps measure the ability to analyze and solve problems expressed in non-verbal sequences like numbers, letters, figures, etc. This method involves understanding the induction and deduction of logic in a given problem and extracting relevant information.

Tips to Solve Logical Reasoning

Logical reasoning could be a tricky topic for some. Therefore, to solve them, students need to have deep thinking, precision, and utmost focus. The logical reasoning questions can be difficult to crack as they generally contain diagrams and other graphical representations of symbols and shapes.

You will be asked to analyze the current pattern given, and likewise, you will be asked to complete or find the missing piece. With the timely application of correct and systematic methods, you can solve logical reasoning questions. Here are some useful tips for solving logical reasoning questions:

Practice consistently

There are several types of logical reasoning questions which can be solved by a particular method or pattern. These types of questions test our logical reasoning capacity, and it can be hard to come up with a certain formula for each question type. These methods of analysis can only be understood with thorough practice.

Patterns, shapes, and charts are arranged in a particular order to solve them; you will be asked to complete the pattern within a short time. This can only be achieved by practicing a similar type of question and thus familiarising yourself with the methods of answering.

Device a method

Finding a method or a system to tackle the question effectively. Concentrate on the sequence occurring in the question and figure out a connection between each item. Treat them as individual patterns and later establish a connection between them, while noticing the changes occurring to each piece throughout the sequence.

A clear understanding of the question can help in finding a system to solve any question. Time is another important factor that one should focus on. Try finding a method for the logical reasoning question and answer within the given time.

Manage time

Understand the question clearly before looking out for the given options. Time management is an inevitable skill for a student to crack logical reasoning questions. Managing your time efficiently is essential while attending a question.

Firstly, understand the question and try figuring out a formula for finding the answer by looking at the change in the given sequence. Try not to distract yourself with the options. Time constraints are common in such examinations; it is up to the student to manage it effectively.

Develop thinking habits

The logical reasoning question involves analytical thinking. A student who can think more logically can crack logical reasoning questions with greater ease. You can also practice developing logical thinking by engaging in other activities like crosswords, puzzles, Sudoku, etc.

It is also helpful while answering the questions. Think twice before you choose your options. Evaluate your choices before answering.

A thorough reading of the question with utmost attention is necessary to understand the concept and device a method. Think logically while you approach similar questions. Choose and compare the options provided and later, with a systematic approach and proper analysis, come to the correct option. Deep focus and attention are necessary for such tests.

The next section includes some samples of logical reasoning questions to help you practice. There are examples of both verbal reasoning and non-verbal reasoning questions in the following. Practice can only help you in mastering these topics.

Sample Questions of Logical Reasoning

1. 'Bank' is related to 'Money' in the same way as 'Transport' is related to

- A) Goods C) Road
B) Movement D) Traffic

Answer:

Goods

2. Water: Ocean:: Sand:?

- A) Engine C) Waves
B) River D) Desert

Answer:

Desert

3. Statements

1. All bats are mammals.
2. No birds are bats.

Conclusions

- a) No birds are mammals.
- b) Some birds are not mammals.
- c) No bats are birds.
- d) All mammals are bats.

- A. a and b only
B. c only
C. c and d only.
D. a only

Answer:

C only

4. Consider the following Inferences.

1. Tom is a rational animal.
2. All men are rational animals.
3. Tom is such a man.
4. Because Tom is a man.
5. Therefore, Tom is a rational animal.

The correct sequence of the statements are:

- A. 1 4 2 3 5 C. 4 1 2 5 3
B. 2 4 3 5 1 D. 1 3 4 5 2

Answer:

1 4 2 3 5

5. Assertion: (A) A saltwater fish drinks seawater whereas a freshwater fish never drinks water.

Reason: (R) A saltwater fish is hypertonic to its environment while a freshwater fish is not hypertonic to its environment.

- a) If both (A) and (R) are true and (R) is the correct explanation of (A).
- b) If both (A) and (R) are true and (R) is not the correct explanation of (A).
- c) If (A) is true, but (R) is false.
- d) If (A) is false, but (R) is true.

Answer:

If both (A) and (R) are true and (R) is the correct explanation of (A)

6. Statement: Keeping in consideration the longevity life in India, should the age limit for

Retirement in government jobs be increased?

Arguments:

1. Yes, other countries have decided so long before.
 2. Yes, it is the actual demand of lakh of employees.
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- A. If only argument 1 is strong.
 - B. If only argument 2 is strong.
 - C. If either 1 or 2 is strong.
 - D. If neither 1 nor 2 is strong.
 - E. If both arguments 1 and 2 are strong.

Answer:

If only argument 2 is strong

7. 100: 121 :: 144: ?

- A. 160 B. 93 C. 169 D. 426

Answer:

169

8. In the following questions, choose that set of numbers from the alternatives, which is similar to the given set.

(3, 5, 7)

- A. (2, 3, 7)
- B. (37, 41, 43)
- C. (4, 7, 9)
- D. (11, 15, 16)

Answer:

(37, 41, 43)

9. Pointing to a woman in the photograph, Rajesh said, "The only daughter of her grandfather is my Wife". How is Rajesh related to that woman?

- A. Uncle
- B. Father

- C. Maternal uncle
- D. Brother

Answer:

Father

10. Statement: Almost 90% of the flights of one private airline company were canceled for the 4th Consecutive day as the pilots refused to join their duties in protest against sacking two of their colleagues by the airline management.

Courses of action

- I. The management of the airline company should be ordered by the Government to reinstate the sacked pilots to end the crisis immediately.
- II. The Government should immediately take steps to end the impasse between the management and the pilots to help the helpless passengers.

- A. If only I follows.
- B. If only II follows.
- C. If either I or II follows.
- D. If neither I nor II follows.
- E. If both I and II follow.

Answer:

If only II follows