Series

Series is a set of characters that follow a specific pattern.

It is important for candidates to know the **types of questions asked with regards to series in the logical reasoning section**. A series is a specified pattern of sequentially arranged numbers or symbols. Aspirants must either find a missing or incorrect term in the sequence. The key elements in series include arranging numbers in ascending or descending order, adding or subtracting a number to advance the series, and multiplying or dividing by a number, including squares and cubes.

Types Of Series

The types of series are classified based on the terms in the series. These can be numeric or number series, alphabet series, symbol series, or a combination of any of these three. Candidates can also check the **types of questions asked with regards to series in the logical reasoning section** to get a better idea. Let us understand each type of series one by one:

Number Series

A series with numbers arranged in a particular order with a specific relation of one with respect to another is a number series. **For example:** 2, 3, 4, 5, 6 is a number series in an ascending order. We can also say that in this series, each number is one unit ahead of its predecessor.

Alphabet Series

An alphabet series has a set of alphabets such that all the letters follow a specific pattern. For example: B, D, F, H, J is an alphabet series where each element of the series is written by skipping the alphabet between them.

Alphanumeric Series

As the name suggests, an alphanumeric series has elements in the form of numbers and alphabets. For example: a2b, b3c, c4d, d5e, e6f is an alphanumeric series. In this series, each element has two consecutive alphabets with a digit in between them. The series follows an ascending order of numbers and continuous alphabets in order.

Solved Examples Of Series Based Questions

The best way to prepare for the logical reasoning section, especially the series topic, is through solved examples. Here are some **solved examples of series based questions:**

1. **What is the next number in the series?**

   5, 10, 20, 40, 80, __

Answer: In the given series, each number is double its previous number. So, as 10 is twice of 5, 20 is twice of 10, and 40 is twice of 20, we find the next number following this trend. The next number in the series would be twice its previous number, i.e., twice of 80. So, the last element of the series is 160.

1. **Find the missing term in the series: A, D, __, J, M**

Answer: We first carefully examine the alphabetical series. Here, the series begins with the first alphabet A, then skips two places, and the next alphabet is D. Also, in the end, we see that M occurs after skipping two places of alphabets from J. So, we can deduce that each alphabet occurs after skipping two places of its previous letter in the given series. Thus, the missing alphabet would be G, which is in third place from D in the English alphabet sequence.

1. **What is the last element of the given series?**

B1D, C2E, D3F, E4G, F5H, __

Answer: The given series is an alphanumeric series containing both numbers and alphabets. The series has alphabet sets with one letter skipped between them. The void is filled with a numeral starting from 1 to 5. In this order, we can see the next number to be 6. Now, the next alphabets following this pattern would be G and I. So, the last term becomes G6I.

Sample Questions To Practice For Series

Although it may appear to be simple, discovering the explanation behind the pattern might be difficult. The easiest strategy to tackle series questions is to carefully examine the series terms to identify their relationship. Once we've identified the series' basis, we can simply identify the missing word, as requested.

After learning about the series through solved examples, aspirants can check their understanding through **sample questions to practice for the series**. Here are a few such series questions:

Find the next term in the series given below:

1. **4, 6, 8, 10, 12**
2. **2, 4, 8, 16, 32**
3. **19, 16, 13, 10**
4. **8, 27, 64, 125**
5. **Z, X, V, T, R**
6. **DE, GH, JK, MN, PQ**

Answers: 14, 64, 7, 216, P, ST

Significance Of Series In Logical Reasoning

A series is just a succession of characters ordered logically. This topic consists of a group of characters linked by a certain arrangement. You must recognise the pattern and find the missing number, or you may be asked to select the character that does not fit the pattern.

EXERCISE

1. What will come at the place of question mark?

1, 9, 25, 49, ?, 121.

A. 100

B. 91

C. 64

D. 81

2. What will come at the place of question mark?

4, 7, 12, 19, 28, ?

A. 49

B. 36

C. 30

D. 39

3. What will come at the place of question mark?

6, 11, 21, 36, 56, ?

A. 91

B. 51

C. 81

D. 42

4. What will come at the place of question mark?

10, 100, 200, 310, ?

A. 430

B. 420

C. 410

D. 400

5. What will come at the place of question mark?

8, 28, 116, 584, ?

A. 1752

B. 3504

C. 3508

D. 3502

Answer Key

1. D

2. D

3. C

4. A

5. C