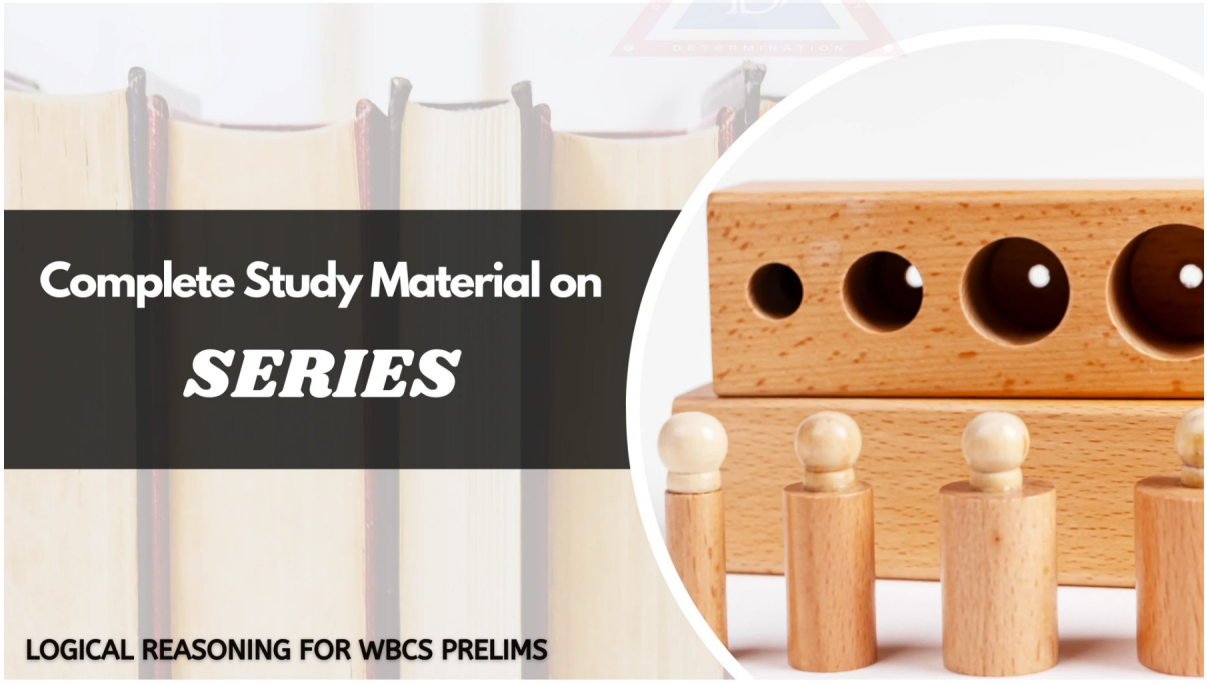
Cracking the WBCS Prelims demands a smart tackle on the Reasoning section, where the Series topic plays a starring role. Getting Series right means unlocking a door to high scores and a nod from the selectors. The knack for spotting patterns swiftly is like the secret handshake that lets you breeze through the WBCS Prelims.

Are you a WBCS aspirant? Do you struggle with the Series topic of reasoning section? Worry no more! This blog is your cheat code. We're diving deep into every nook and cranny of Series, from numbers doing the cha-cha to letters throwing a surprise party. Basic concepts? Check. Solved examples? Double-check. This isn't just theory; it's your roadmap through the Series maze. And because practice makes perfect, we've got your back with some brain-teasing practice questions. It's not just about understanding; it's about acing it.

So, buckle up, because we're turning Series from a head-scratcher to a high scorer!

What is Series in Reasoning?

Series is a chapter in Logical Reasoning, where a continuous sequence of numbers, letters, or words are obtained by some particular previously defined rule. Applying that predefined rule, it is possible to find out the next term or missing term of the series.



[Source: The Dhronas]

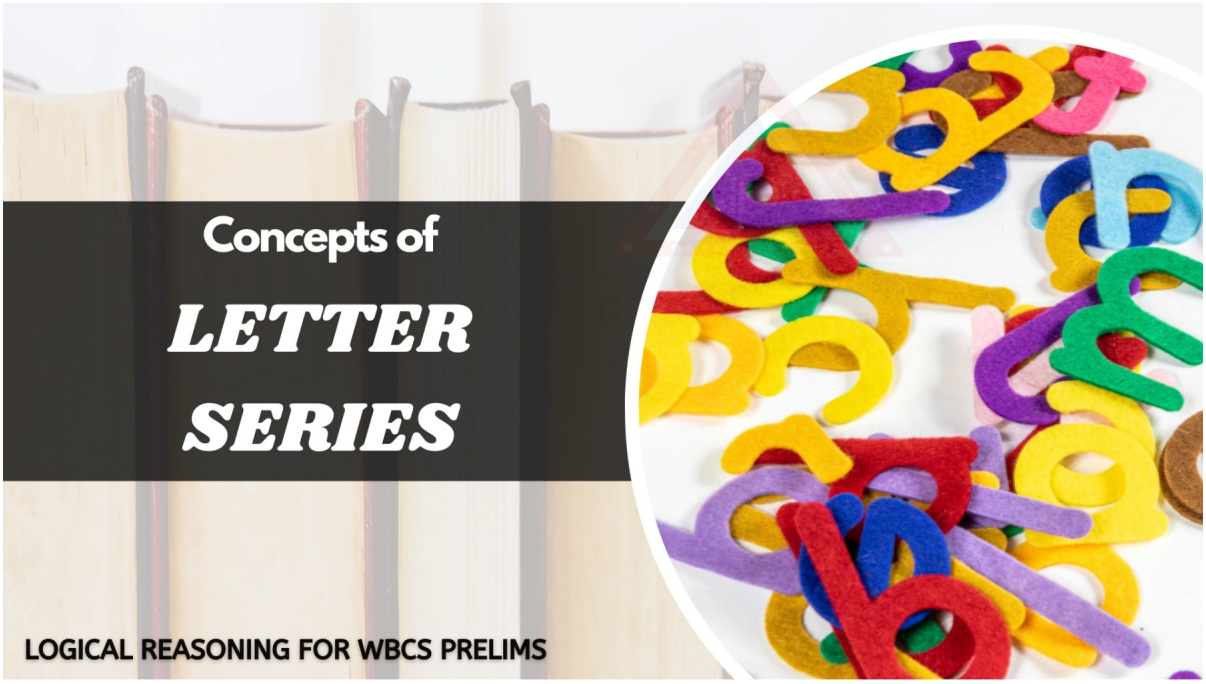
Asutosh Mukherjee Road, College Para, Hathi More, Siliguri, West Bengal
+91 - 8436586516, +91-8436900456
thedhronas@gmail.com
thedronas.com

Series is divided into five main types:

1. Letter Series
2. Repeated/Fill in the blanks Series
3. Number Series
4. Alphanumeric Series
5. Matrix or Figure Based Series

Letter Series

In letter series, the letters follow a definite order. The given series of letters can be in natural order or in reverse order or combination of both. The letters may be skipped or repeated or consecutive.



[Source: The Dhronas]

Example: Which of the given options will complete the given series?

AYBZC, DWEXF, GUHVI, JSKTK,?

1.MQORN

2.MQNRO

3.NQMOR

Asutosh Mukherjee Road, College Para, Hathi More, Siliguri, West Bengal
+91 - 8436586516, +91-8436900456
thedhronas@gmail.com
thedronas.com

4.QMONR

Solution: (2) MQNRO
The pattern which follows here is:
1st letter of each term:
A (+3) = D (+3) = G (+3) = J (+3) = M
2nd letter:
Y (-2) = W (-2) = U (-2) = S (-2) = Q
3rd letter:
B (+3) = E (+3) = H (+3) = K (+3) = N
We don't need to find out further because by these three letters we got our answer. There is only one option that has MQNRO letters in the first three places.

Wrong Letter Series

In this type of series, the students are not required to find the letter or group of letters which will complete the given series but, they have to identify the letter or group of letters which is wrong or misfit in the given series.

Example: Which letter(s) is wrong or is misfit in the series?

XW, DC, CB, NM, PQ

1.NM

2.CB

3.PQ

4. XW

Solution: (3) PQ
Here except PQ each element is in reverse series. Therefore, PQ is wrong. It should be QP, not PQ.

Repeated Series or Fill in the Blanks Series

In this type of series, small groups of alphabets or numbers are used to make a set which is repeated. The candidate has to find the set of letters or numbers which will fit the blanks left in the given series in such a manner that one set of the series is further repeated in the same manner.

Example: Which of the following groups of letters will com- plete the given series?

c_bbb_ _ abbbb_ abbb_

Asutosh Mukherjee Road, College Para, Hathi More, Siliguri, West Bengal
+91 - 8436586516, +91-8436900456
thedhronas@gmail.com
thedronas.com

1.aabcb

2.abccb

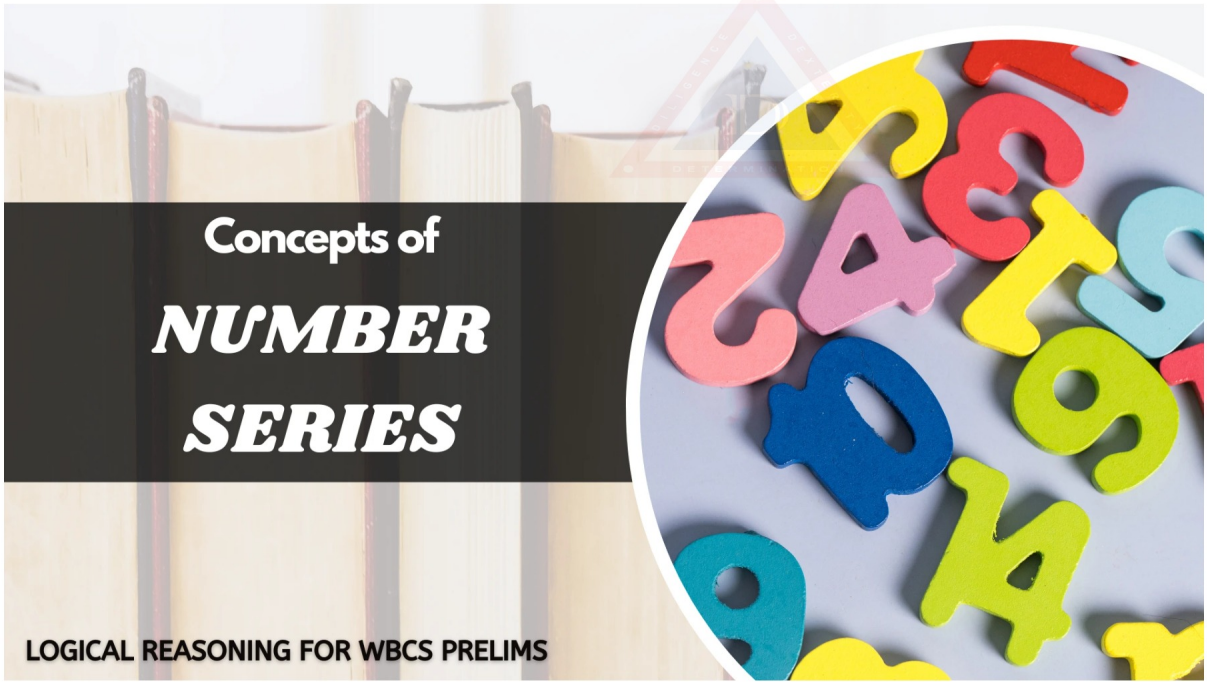
3.abacb

4.baebb

Solution: (2) abccb
Here the series is cabbbb/cabbbb/cabbbb. Thus, the pattern 'cabbbb' is repeated.

Number Series

In this type of series, we have a set of given numbers in a series that are related to one another in a particular pattern or manner.



[Source: The Dhronas]

Asutosh Mukherjee Road, College Para, Hathi More, Siliguri, West Bengal
+91 - 8436586516, +91-8436900456
thedhronas@gmail.com
thedronas.com

The relationship between the numbers may be:
1. Consecutive odd/even/prime numbers.
2. Squares/cubes of some numbers with/without variation of addition or subtraction of some number.
3. Sum/product/difference of preceding/succeeding numbers.
4. Addition/subtraction/multiplication/division by some number.

And many more combinations of the relationships given above.

Example: Complete the given series: 2, 14, 98, 686, …?

1.1976

2.2548

3.980

4.4802

Solution: (4) 4802
We can clearly identify the pattern of multiplication here. The numbers are multiplied by 7 to obtain the next numbers. 2 × 7 = 14
14 × 7 = 98
98 × 7 = 686
686 × 7 = 4802

Wrong Number Series

In this topic, we have to identify the number which is wrongin the sequential pattern of that series or does not fit in it.

Example: In the given series find the number which is wrong.

121, 143, 165, 186, 209

1.143

2.165

3.186

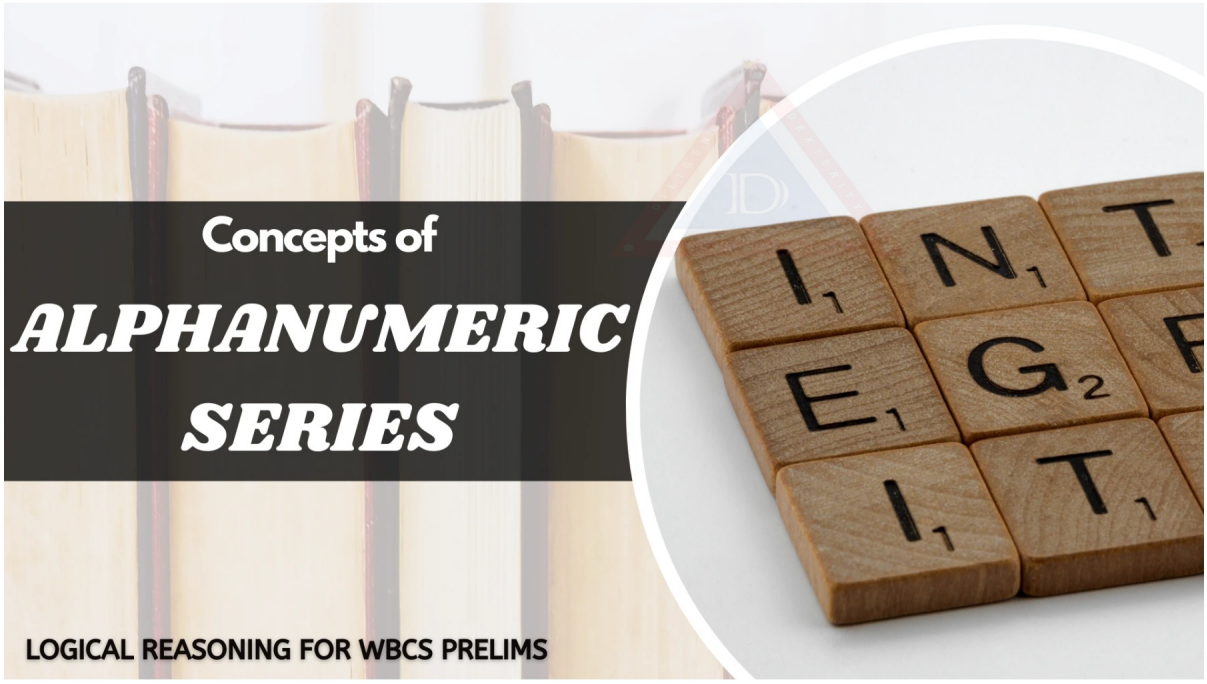
4.209

Asutosh Mukherjee Road, College Para, Hathi More, Siliguri, West Bengal
+91 - 8436586516, +91-8436900456
thedhronas@gmail.com
thedronas.com

Solution: (3) 186.
It can be observed that each term in this series is obtained by adding number 22 to the preceding term.
121 + 22 = 143
143 + 22 = 165
165 + 22 = 187
So, 186 is wrong and must be replaced by 187.

Alphanumeric Series

Alphanumeric series comprises the combination of letters, numbers and symbols. In this type of series, the letters and numbers may have a common sequential pattern or may have separate sequential order.



[Source: The Dhronas]

Example: What should come in the place of the question mark in the following letter - number combination?

F6, H8, J10, L12, ...?

1.N15

2.O14

3.N14

Asutosh Mukherjee Road, College Para, Hathi More, Siliguri, West Bengal
+91 - 8436586516, +91-8436900456
thedhronas@gmail.com
thedronas.com

4.013

Solution: (3) N14.
Here, the letters are moving two steps forward with the number or we can also say that the number indicates the position of the letter in the alphabet series.
F6 (+2) = H8 (+2) = J10 (+2) = L12 (+2) = N14

Matrix or Figure Based Series

Under this type of series, there are different figures in which some elements (numbers/letters) are given and one element is missing. Students have to find out the logic from one figure and that same logic in another figure to find the missing element.

[Source: The Dhronas]

Missing Number Matrix consists of different types of Figures in it, but the most popular ones are mentioned below:
1. Table Based
2. Circle Based
3. Triangle Based
4. Miscellaneous (Pentagon, Hexagon, other, etc).

Asutosh Mukherjee Road, College Para, Hathi More, Siliguri, West Bengal
+91 - 8436586516, +91-8436900456
thedhronas@gmail.com
thedronas.com

In such type of questions, numbers are written in different rows or columns of the table or given in different way in other figure and then in one cell "?" is given which means you need to find the number of this cell.

There are no limits of the logics and pattern which could be followed in this section, but the most important part is to find the inter relation between the given numbers.

The four basic operations used:

1.Addition

2.Subtraction

3.Multiplication

4.Division

The most common pattern or logic used:
1. Square of two numbers and sum and subtraction of squares is third number.
2. Addition or Subtraction of two numbers and resultant is third number.
3. Multiplication between two numbers and resultant is third number.
4. Addition or Subtraction or Multiplication between two numbers and then division by 2, 3 or etc.
5. Cube of two numbers and sum or subtraction of cube is third number.

Let us learn to solve all kinds of Matrix and figural series by practicing some questions.

Example: Study the given pattern carefully and select the number from among the given options that can replace the question mark (?) in it.

1.58

2.67

3.76

4.82

Solution: (3) 76
The logic used here is:
Row 1: (11 × 4) - (2 × 8) = 44 - 16 = 28
Row 2: (11 × 6) - (2 × 12) = 66 - 24 = 42
Row 3: (11 × 8) - (2 × 6) = 88 - 12 = 76

Asutosh Mukherjee Road, College Para, Hathi More, Siliguri, West Bengal
+91 - 8436586516, +91-8436900456
thedhronas@gmail.com
thedronas.com

Series Practice Questions for WBCS Prelims

Q:1 Select the correct option that will complete the series: BMO, FPQ JSS,?

1.MVU

2.NVU

3.VNU

4.UNV

Q:2 Find out the wrong term in the given series: SFA, VID, QDY, XMG, OBW

1.OBW

2.XMG

3.QDY

4.VID

Q:3 Select the correct option that will complete the series: 157, 161, 170, 186, 211, ?

1.249

2.263

3.271

4.247

Q:4 Select the correct option that will complete the series: 12, 44, 79, 117, 158, ?

1.202

2.206

3.200

4.204

Q:5 Select the correct option that will complete the series: P13, R17, ?, V19, X23

1.R19

2.T19

Asutosh Mukherjee Road, College Para, Hathi More, Siliguri, West Bengal
+91 - 8436586516, +91-8436900456
thedhronas@gmail.com
thedronas.com

3.R21

4.K19

Q:6

1.293

2.303

3.410

4.505

Solutions of Series Practice Questions

Q:1 (2) B + 4 = F, F + 4 = J, J + 4 = N
M + 3 = P, P + 3 = S, S + 3 = V
O + 2 = Q, Q + 2 = S, S + 2 = U

Q:2 (2) Addition and Subtraction of odd numbers are taking place:
S + 3 = V, F + 3 = I, A + 3 = D
V - 5 =Q, I - 5 = D, D - 5 = Y
Q + 7 = X, D + 7 = K M, Y + 7 = F G

Q:3 (4) Adding the square of consecutive numbers starting from 2. $157 + 2^2 = 161$; $161 + 3^2 = 170$; $170 + 4^2 = 186$; $186 + 5^2 = 211$; $211 + 6^2 = 247$

Q:4 (1) 12 + 32 = 44, 44 + 35 = 79, 79 + 38 = 117, 117 + 41 = 158, 158 + 44 = 202

Q:5 (2) The letter is forwarded by 2: P + 2 = R, R + 2 = T, T + 2 = V, V + 2 = X. The prime numbers are being written: 13, 17, 19, 23, 29

Q:6 (1) 1st triangle: $2^2 + 3^2 + 5^2 = 38$; 2nd triangle: $4^2 + 6^2 + 8^2 = 116$; 3rd triangle: $7^2 + 10^2 + 12^2 = 293$, ? = 293

Alright, we're at the finish line! Now that we've cracked the Series code together, you're all set for the WBCS Prelims. Remember, Series isn't a tough nut; it's your ticket to scoring big. With the basics, examples, and practice questions from this blog, you're like a Series superhero. So, go ahead, practice a bit more, and step into the exam room with a smile. You've got this! Good luck on your WBCS journey.

Stay tuned, as The Dhronas promises to bring you more such informative blogs with comprehensive study material on all the topics of Logical Reasoning section. Best of luck with your exam preparations, and may you excel in your endeavors!

Asutosh Mukherjee Road, College Para, Hathi More, Siliguri, West Bengal
+91 - 8436586516, +91-8436900456
thedhronas@gmail.com
thedronas.com