NUMBER SERIES

What is meant by Number Series?

In this question, a series of numbers or letters, following a specific pattern will be given. But a number or letter at some position will be missing or wrongly marked. Candidates have to identify that number and fill the gap or identify the wrong number. For the same, the simplification part has to be strong and should be able to guess the pattern from the numbers.

The series can be of differences, addition, product, squares and cubes, miscellaneous series. Also, series can be like even number, an odd number, prime number series. Squares and cubes are easily identifiable and scorable among the series. The combination of all these can also be expected. For letter series, candidates should know the order and rank or position values of each alphabet, which will surely help to solve the series. One can solve the problem from either left to right or vice-versa.

Let us practice questions with an example each.

Example #1

What would be the missing term replaces in the question mark?
1, 9, 25, 49, 81, ?

Each term is increases sequentially square
1^2, 3^2, 5^2, 7^2, 9^2, 11^2.
So, missing term is $11^2 = 121$.

Example #2

What would be the missing term replaces in the question mark?
1, 7, 15, 25, 37, ?

Each term obtain with +6, +8, +10, +12, +14 ….onward.
So, missing term is 37 + 14 = 51.

Example #3

What would be the missing term replaces in the question mark?
0, 2, 6, 12, 20, ?

Each term obtain $1^2 - 1 = 0$, $2^2 - 2 = 2$, $3^2 - 3 = 6$ ….onward.
So, missing term is $6^2 - 6 = 30$

Example #4

What would be the missing term replaces in the question mark?
13, 17, 25, 41, 73, ?

Each term obtain with $+2^2$, $+2^3$,$+2^4$,$+2^5$…. onward.
So, missing term is$+2^6 = 137$.

Example #5

What would be the missing term replaces in the question mark?
6, 18, 38, ? , 102

Each term obtain with $+2^2 + 2 = 6$, $+4^2 + 2 = 18$, $+6^2 + 2$ …onward.
So, missing term is $8^2+2 = 66$.

Example #6

What would be the missing term replaces in the question mark?
2, 24, 68, 134, 222, ?

Each term obtain with +(11 x 2), +(11 x 4),+(11 x 6), +(11 x 8) ….onward.
So, missing term is 332.

Example #7

What would be the missing term replaces in the question mark?
5, 20, 45, 80, ?

Each term obtain with 5×1^2, 5×2^2, 5×3^2 ….onward.
So, missing term is 125.

Example #8

What would be the missing term replaces in the question mark?
7, 25, 61, 121, 211, ?

Each term obtain with $2^3 - 1$, $3^3 - 2$, $4^3 - 3$ ……onward.
So, missing term is 337.

Example #9

What would be the missing term replaces in the question mark?
1, 3, 2, 6, 5, 15, ?

Each term obtain with x3, -1, x3, -1 ….onward.
So, missing term is 14.

Example #10

What would be the missing term replaces in the question mark?
36, ? , 64, 81, 100, 121

Each term obtain with 6^2, 7^2, 8^2, 9^2 ….onward
So, missing term is $7^2 = 49$