



Series

A series is a set or sequence of related terms coming one after another by following a particular rule or pattern. The candidate is required to identify the pattern involved in the series and accordingly find the missing terms. The questions from this chapter can be classified in following types.

Number Series

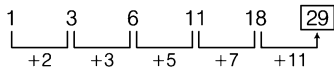
Number series is a logical sequence of numbers that are following a logical rule based on some basic arithmetic operations like addition, subtraction, multiplication, division, square/cube roots, etc. You are required to identify the set pattern and then find the next/missing term.

Choose the number from the given alternatives which will complete the below series.

Example 1 1, 3, 6, 11, 18, ?

- (a) 25 (b) 29 (c) 32 (d) 35

Sol. (b) The series is following the below pattern,



The sequence consists of a pattern of addition of consecutive prime numbers.

Letter Series

In this type, the letters of English alphabet are arranged in a certain order by following some rule like addition or subtraction in positions of

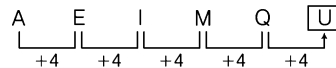
alphabets, reverse order or opposite pair of letters, vowels and consonants, etc.

Example 2 Find the next term for the given series.

A, E, I, M, Q, ?

- (a) V (b) T (c) U (d) W

Sol. (c) The pattern of the series is as follows



Alpha-Numeric Series

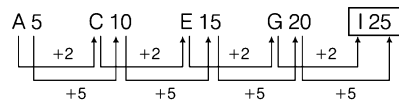
In this type of series, the pattern is based on the combination of both numbers and letters. You are required to identify the pattern and accordingly find the missing term.

Example 3 Find the missing term for the given series.

A5, C10, E15, G20, ?

- (a) H30
(b) I30
(c) I25
(d) H25

Sol. (c) The pattern of the series is as follows



Practice Exercise

Directions (Q. Nos. 1-20) *What should come in place of question mark (?) in the following series.*

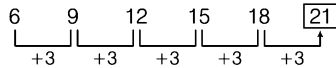
1. 6, 9, 12, 15, 18, ?
(a) 21 (b) 20
(c) 19 (d) 22
2. 4, 5, 7, 10, 14, 19, ?
(a) 28 (b) 23
(c) 22 (d) 25
3. 4, 8, 16, 32, ?
(a) 54 (b) 128
(c) 23 (d) 64
4. 4, 9, 16, 25, 36, ?
(a) 64 (b) 49
(c) 45 (d) 81
5. 0, 1, 8, 27, ?
(a) 64 (b) 121
(c) 36 (d) 49
6. 2, 3, 7, 16, 32, ?
(a) 57 (b) 37
(c) 48 (d) 58
7. 216, 108, 36, 18, 6, ?
(a) 2 (b) 3 (c) 6 (d) 1
8. 5, 11, 23, 47, 95, ?
(a) 198 (b) 194
(c) 191 (d) 195
9. 24, 35, 20, 31, 16, 27, ?, ?
(a) 5, 30 (b) 12, 23
(c) 8, 25 (d) 9, 9
10. B, C, E, H, L, ?
(a) M (b) N
(c) P (d) Q
11. CD, HI, MN, ?
(a) QS (b) OP
(c) PQ (d) RS
12. AT, BS, CR, DQ, ?
(a) EP (b) FP
(c) ED (d) EN
13. YW, US, ?, MK
(a) RP (b) BD
(c) FH (d) QO
14. POQ, SRT, VUW, ?
(a) XYZ (b) XZY
(c) YZY (d) YXZ
15. DKY, FJW, HIU, JHS, ?
(a) LQF (b) LGQ
(c) KGR (d) KFR
16. BMW, DNV, FOU, ?
(a) GHO (b) GPS
(c) HPS (d) HPT
17. 2B, 4C, 8E, 14 H, ?
(a) 20L (b) 16 K
(c) 24 L (d) 22 L
18. 3F, 6G, 11I, 18 L, ?
(a) 27 P (b) 25 N
(c) 27 Q (d) 10 O
19. P3C, R5F, T8I, V12L?
(a) X16O
(b) Y17O
(c) X17 M
(d) X17O
20. 1CV, 5FU, 9IT, ?
(a) 11LS (b) 14 JS
(c) 15 JS (d) 13 LS

Answers

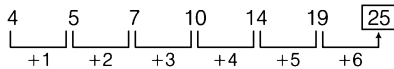
1	(a)	2	(d)	3	(d)	4	(b)	5	(a)	6	(a)	7	(b)	8	(c)	9	(b)	10	(d)
11	(d)	12	(a)	13	(d)	14	(d)	15	(b)	16	(d)	17	(d)	18	(a)	19	(d)	20	(d)

Hints & Solutions

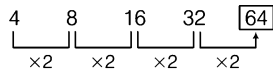
1. (a) The Pattern is as follows



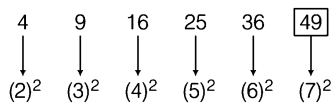
2. (d) The pattern is as follows



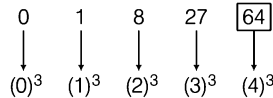
3. (d) The pattern is as follows



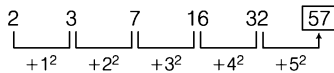
4. (b) The Pattern is as follows



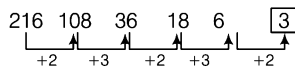
5. (a) The pattern is as follows



6. (a) The Pattern is as follows



7. (b) The Pattern is as follows



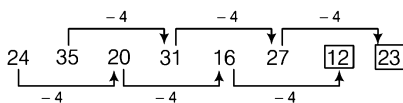
Here, the term is divided by 2 and 3 alternately.

So, the missing number will be $\frac{6}{2} = 3$.

8. (c) The Pattern is as follows

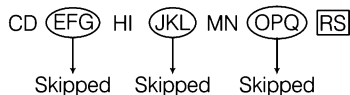


9. (b) The Pattern is as follows

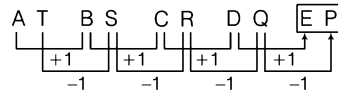


10. (d) B, C, E, H, L, Q. Arrows between terms are labeled +1, +2, +3, +4, +5.

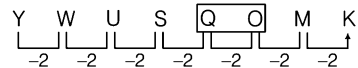
11. (d) Three letters are skipped between each terms of the series



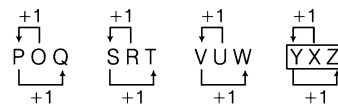
12. (a) The Pattern is as follows



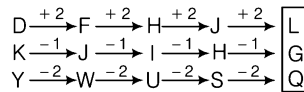
13. (d) The pattern is as follows



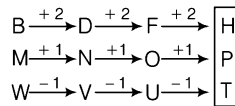
14. (d) The Pattern is as follows



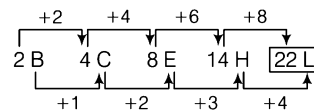
15. (b) The Pattern is as follows



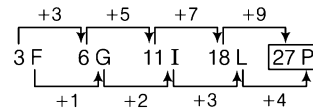
16. (d) The Pattern is as follows



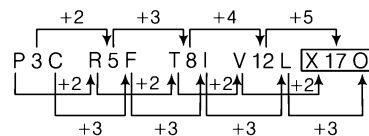
17. (d) The Pattern is as follows



18. (a) The Pattern is as follows



19. (d) The Pattern is as follows



20. (d) The pattern is as follows

