# LOGICAL THINKING



## HSEM1BTECHSTANDARD0719

What number is code for 'deep'?

#### Statements:

- I. '481' means 'sky is blue' and '246' means 'sea is deep'.
- II. '698' means 'sea looks blue'.

## LOGICAL REASONING

#### SESSION - 6

## **& NUMBER SERIES**

Type 1: It is a sequence of numerical digits where each term is obtained according to certain rule or pattern.

#### (a) Inserting the missing number

Under this type, a series of numbers is given with one number or term missing from its place. You have to identify the pattern followed in the formation of the series and then find out the missing term accordingly.

## (b) Finding the wrong term

In the questions under this type, one of the terms in the given series does not fit in with the pattern of the series and is, therefore, termed as wrong. The candidate is to find out that wrong number after identifying the specific pattern of the series.

Directions for Q1 to Q8: Find the missing number in the following series.

- 1. 1, 5, 12, \_\_\_, 35, 51, 70
  - (a) 23 (b) 24
- (c) 22
- (d) 27

- 2. 2, 5, 9, 19, 37, \_\_
  - (a) 73
- (b) 75
- (c)83
- (d) 85

- 3. 4, 8, 28, 80, 244, \_
  - (a) 278
- (b) 428
- (c) 628
- (d) 728

- 4, 5, 12, 39, 160,
  - (a) 225
- (b) 695
- (c) 805
- 10,000, 11,000, 9900, 10896, 9801,
  - (a) 10,241
- (b) 10,423
- (c) 10,781
- (d) 10,521
- 6. 3, 4, 8, 17, 33,
  - (a) 57
- (c)48
- (d) 47
- 1, 4, 27, 16, 125, 36, 343, 49, 7.
- (a) 719
- (b) 729

(b) 58

- (c)739
- (d) 749
- 8. 3, 15, 5, 35, 7, 63, 9, \_
  - (a) 97
- (b) 89
- (c) 109
- (d) 99

Directions for Q9 to Q16: Find the wrong number in the following.

- 9 69, 55, 26, 13, 5
  - (a) 5
- (b) 13
- (c) 26
- (d) 55
- 4, 19, 49, 93, 154, 229
  - (a) 93
- (b) 229
- (c) 319
- (d) 19
- 80, 42, 24, 13.5, 8.75, 6.375
  - (a) 8.75
- (b) 13.5
- (c) 24
- (d) 6.375
- 12. 64, 71, 80, 91, 104, 119, 135, 155
  - (a) 71
- (b) 80
- (d) 104
- 13. 823, 734, 645, 556, 476, 378, 289
  - (a) 645
- (b) 476
- (c) 378

(c) 135

- (d) 289
- 14. 895, 870, 821, 740, 619, 445, 225
  - (a) 445
- (b) 821
- (c) 619
- (d) 225
- 19, 26, 33, 46, 59, 74, 91 15.
  - (a) 26
- (b) 33
- (c)46
- (d) 74
- 16. 32, 36, 41, 61, 86, 122, 171, 235
  - (a) 41
- (b) 61
- (c) 86
- (d) 122

Directions for Q17 to Q21: What is the next number in the series?

- 2, 6, 12, 20, 30, 42, 56
  - (a) 60
- (b) 64
- (c)72
- (d) 70
- 165, 195, 255, 285, 345 18.
  - (a) 375
- (b) 420
- (c)435
- (d) 390
- 5, 10, 13, 26, 29, 58, 61 19.
  - (a) 122
- (b) 64
- (c) 125
- (d) 128
- 51975, 9450, 2100, 600, 240, 160
  - (a) 80
- (b) 120
- (c) 320
- (d) 240
- 444, 467, 513, 582, 674, 789
- (b) 904
- (c) 927
- (d) 984

Directions for Q22 to Q25: Find the number in the place of the question mark.

- 22. 15, 25, 40, 130, (?), 2560
  - (a) 500
- (b) 520
- (c)510
- (d) 480
- 6, 42, (?), 1260, 5040, 15120, 30240 23.
  - (a) 546
- (b) 424
- (c) 252
- (d) 328
- 24. 282, 286, 302, (?), 402, 502
  - (a) 366
- (b) 318
- (c) 326
- (d) 338
- 6, 4, 8, 23, (?), 385.25
  - (a) 84.5
- (b) 73
- (c) 78.5
- (d) 82