BHARAT SCHOOL OF BANKING
MISSING CHARACTER

Directions: In each of the following questions, a matrix of certain characters is given. These characters follow a certain trend, row-wise or column-wise. Find out this trend and choose the missing character from the given alternatives.

Q1.

2	4	0
1	2	4
3	1	3
36	?	91

(a) 45
(b) 50
(c) 65
(d) 73

1. Ans.(d)

Sol. In the first column, $2^3 + 1^3 + 3^3 = 36$.
In the third column, $0^3 + 4^3 + 3^3 = 91$.

$\therefore$In the second column, missing number = $4^3 + 2^3 + 1^3 = (64 + 8 + 1) = 73$.

Q2.

72	24	6
96	16	12
108	?	18

(a) 12
(b) 15
(c) 17
(d) 21

Ans.(a)

Sol.

In the first row, 72÷(24/2)=6
In the second row, 96÷(16/2)=12
Let the missing number in the third row be x.
Then, 108÷(x/2)=18
108 ×(2/x)=18
⇔x=12

Q3.

28	20	7
84	35	12
45	?	9

(a) 20
(b) 19
(c) 24
(d) 25

Ans.(d)

Sol. In the first row, (28 ÷ 7) × 5 = 20;

in the second row, (84 ÷ 12) × 5 = 35.

∴ In the third row, missing number = (45 ÷ 9)× 5 = 5 × 5 = 25.

Q4.

7	4	5
8	7	6
3	3	?
29	19	31

(a) 2
(b) 6
(c) 5
(d) 7

Ans.(c)

Sol.In the first column, 29 – 8 = 7 × 3 = 21;

in the second column, 19 – 7 = 4 × 3 = 12.

Let the missing number in the third column be x

Then, 31 – 6 = 5 × x or 5x = 25 or x = 5.

Q5.

38	44	42
23	55	28
37	?	39

(a) 22
(b) 66
(c) 44
(d) 55

Ans.(a)

Sol. In the first row, (42 – 38) × 11 = 44

In the second row, (28 – 23) × 11 = 55

∴ In the row, missing number = (39 – 37) × 11 = 22.

Q6.

1	2	3
11	7	5
120	45	?

(a) 20
(b) 18
(c) 16
(d) 14

6. Ans.(c)
Sol. In the first column, $(11)^2 - 1^2 = 120$; in the second column, $7^2 - 2^2 = 45$
∴ Missing number $= 5^2 - 3^2 = (25 - 9) = 16$

Q7.

12	(47)	21
10	(52)	4
64	?	24

(a) 16
(b) 40
(c) 62
(d) 83

Ans.(d)
Sol.
In the first row, 12/4=21/7; in the second row, 10/5=4/2
Clearly, in the third row, we have 64/8=24/3
∴ Missing number = 83

Q8.

A2	C4	E6
G3	I5	?
M5	O9	Q14

(a) J8
(b) K8
(c) K10
(d) M10

Ans.(b)
Sol. The letters in each row follow the sequence + 2. So, the missing letter will be 2 steps ahead of I, which is K.
In each row, the sum of first two numbers is equal to the third number. So, missing number = 3 + 5 = 8. Hence, the missing character is K8.

Q9.

3C	27D	9E
7I	21K	3M
4D	?	7J

(a) 11F
(b) 28G
(c) 30I
(d) 40F

Ans.(b)

Sol. The letters in the first row form a series C, D, E (a series of consecutive letters). The letters in the second row from a series I, K, M (a series of alternate letters). Similarly, the letters in the third row will form the series D, G, J (a series in which each letters is 3 steps ahead of the previous one). So, the missing letter is G. Also, the number in the second column is equal to the product of the numbers in the first and third columns. So, missing number is (4 × 7) i.e. 28. Thus, the answer is 28G.

Q10. If the same functions are applied to teach the results in each of the three sets of numbers given below, then which number will replace the question mark in the third set of numbers?
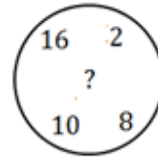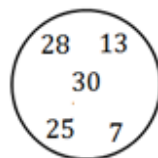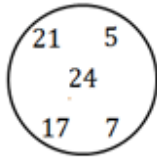
(a) 24
(b) 30
(c) 36
(d) 40

10. Ans.(b)

Sol.

In the first set, we have: (21-17)×(5 + 7)/2=24

In the second set, we have: (28-25)×(13+7)/2=30

∴ In the third set, missing number = (16 – 10) × (2+8)/2=30