

IBM Model Question Paper

IBM Number series Questions

1. Choose the correct alternative that will continue the same pattern and replace the question mark in the given series.

3, 10, 101, ?

A. 10101

B. 10201

C. 10202

D. 11012

Ans: C

3, 10, 101, 10202

$$10 = 3^2 + 1$$

$$101 = 10^2 + 1$$

$$10202 = 101^2 + 1$$

2. In the series 2, 6, 18, 54, what will be the 8th term ?

A. 4370

B. 4374

C. 7443

D. 7434

IBM Model Question Paper

Ans: B

$$2 \times 3 = 6, 6 \times 3 = 18, 18 \times 3 = 54$$

$$\text{So } a = 2, r = 3$$

$$\text{nth term in G.P. is } ar^{n-1} = 2 \times 2187 = 4374$$

3. Choose the correct alternative that will continue the same pattern and replace the question mark in the given series.

125, 80, 45, 20, ?

A. 5

B. 8

C. 10

D. 12

Ans: A

The pattern is -45, -35, -25, -15

$$\text{The next number} = 20 - 15 = 5$$

4. Choose the correct alternative that will continue the same pattern and replace the question mark in the given series.

6, 13, 25, 51, 101, ?

A. 201

B. 202

C. 203

D. 205

IBM Model Question Paper

Ans: C

The pattern is $x^2 + 1, x^2 - 1, x^2 + 1, x^2 - 1, \dots$

So, missing term = $101 \times 2 + 1 = 203$

5. Choose the correct alternative that will continue the same pattern and replace the question mark in the given series.

1, 3, 4, 8, 15, 27, ?

A. 37

B. 44

C. 50

D. 55

Ans: C

$$1 + 3 + 4 = 8 ;$$

$$3 + 4 + 8 = 15 ;$$

$$4 + 8 + 15 = 27 \text{ and so on.}$$

$$\text{Missing number} = 8 + 15 + 27 = 50$$

IBM Quantitative Aptitude Questions

6. If $\log 27 = 1.431$, then the value of $\log 9$ is:

A. 0.934

B. 0.945

C. 0.954

IBM Model Question Paper

D. 0.958

Ans: C

$$\log 27 = 1.431$$

$$\log 33$$

$$\log(33)$$

$$= 1.431$$

$$3 \log 3 = 1.431$$

$$\log 3 = 0.477$$

$$\log 9 = \log(3^2) = 2 \log 3 = (2 \times 0.477) = 0.954$$

7. The average of 20 numbers is zero. Of them, at the most, how many may be greater than zero?

A. 0

B. 1

C. 10

D. 19

Ans: D

Average of 20 numbers = 0.

Sum of 20 numbers = $(0 \times 20) = 0$.

It is quite possible that 19 of these numbers may be positive and if their sum is a , then the 20th number is $(-a)$.

IBM Model Question Paper

8. A student has gotten the following grades on his tests: 87, 95, 76, and 88. He wants an 85 or better overall. What is the minimum grade he must get on the last test in order to achieve that average?

A. 78

B. 79

C. 80

D. 81

E. 82

Solution:

Use a variable to stand for this unknown value: x . Then computation to find the desired average is: <https://www.freshersnow.com/placement-papers-download/>

$$(87 + 95 + 76 + 88 + x) / 5 = 85$$

Multiplying through by 5 and simplifying, I get:

$$87 + 95 + 76 + 88 + x = 425$$

$$346 + x = 425$$

$$x = 79$$

He needs to get at least a 79 on the last test.

IBM Verbal Section Questions

Find the active voice sentence below.

1. Who is creating this mess?

IBM Model Question Paper

- A. Who has been created this mess?
- B. By whom has this mess been created?
- C. By whom this mess is being created?
- D. By whom is this mess being created?

Ans: D

2. Darjeeling grows tea.

- A. Tea is being grown in Darjeeling
- B. Let the tea be grown in Darjeeling.
- C. Tea is grown in Darjeeling.
- D. Tea grows in Darjeeling.

Ans: C

3. The name is Roger Smith, who is also the president. What is the proper salutation?

- A. Dear Mr. Roger Smith
- B. Dear Mr. Roger
- C. Dear Mr. Smith
- D. Dear President Smith

Ans: C