

# ISFO Maths Sample Paper

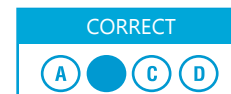
**MAXIMUM TIME: 60 MINUTES**

**MAXIMUM MARKS: 100**

## INSTRUCTIONS

- Please DO NOT OPEN the contest booklet until you are asked to do so.
- The question paper comprises of 4 sections (Total 50 questions):
 

<b>Section A: Mathematical Reasoning</b>	25-Questions (2 mark each)
<b>Section B: Everyday Maths</b>	15-Questions (1 mark each)
<b>Section C: Logical Reasoning</b>	5-Questions (2 mark each)
<b>Section D: BrainBox</b>	5-Questions (5 mark each)
- All questions are compulsory. There is no negative marking.
- No electronic devices capable of storing and displaying visual information such as calculator and mobile are allowed during the course of the exam.
- Fill all your detail properly on the OMR sheet.
- There is only ONE correct answer of each question.
- To mark your choice of answers by darkening the circles on the OMR Sheet, use an HB Pencil or a Blue/Black Ball Point Pen only.
- Shade your answer clearly as per the given example:



DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

**Roll No.:**

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**Student's Name:**

## SECTION A: MATHEMATICAL REASONING

1. If P, Q, and R are distinct whole numbers from 1 to 9, and

$$\begin{array}{r} P\ Q\ R \\ P\ Q\ R \\ +\ P\ Q\ R \\ \hline R\ R\ R \end{array}$$

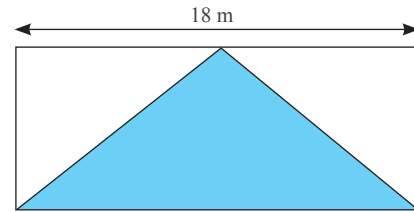
Determine the value of  $Q - (P + R)$ .

- a) 1                                      b) 2  
c) 3                                      d) 4

2. Average of marks obtained by Kavita, Raman and Ahmad in a Maths test is 37. If Kavita's score is 30 and Raman's score is  $\frac{4}{5}$  of Ahmad's score, determine the marks obtained by Ahmad.

- a) 42                                      b) 48  
c) 45                                      d) 60

3. The breadth of the rectangle shown in the figure is  $\frac{2}{3}$  of its length. What is the area of the shaded region?



- a)  $216\text{ m}^2$                               b)  $108\text{ m}^2$   
c)  $72\text{ m}^2$                                 d)  $118\text{ m}^2$

4. If each side of a right triangle is increased by 10%, its area will be increased by \_\_\_\_\_.

- a) 10%                                      b) 20%  
c) 21%                                      d) 30%

## SECTION B: EVERYDAY MATHS

5. Mohit starts saving money in his piggy bank. He puts ₹2 on the first day, ₹4 on the second day, ₹6 on the third day and so forth. In how many days he will save ₹110?

- a) 8 days                                      b) 10 days  
c) 12 days                                    d) 14 days

6. When a ball bounces, it rises  $\frac{1}{4}$  less of the height from where it fell. If the ball is dropped from a height of 24m, how high will it rise at the third bounce?

- a)  $13\frac{1}{2}\text{ m}$                                       b)  $8\frac{7}{8}\text{ m}$   
c)  $7\frac{1}{8}\text{ m}$                                         d) 22 m

## SECTION C: LOGICAL REASONING

7. What is the missing term in the following series?

0, 6, 24, \_\_\_\_\_, 120, 210

- a) 48  
b) 60  
c) 96  
d) 100

8. If  $\square + \triangle = 7$

$\square - \triangle = 2$

$\square + \square = 9$

Then  $\square - \triangle = ?$

- a) 5    b) 4  
c) 3    d) 1

## SECTION D: BRAINBOX

9. In a society of 850 houses, each one has a car and no one has more than two cars. If 600 houses have small cars and 325 have SUVs. How many houses only have small cars?
- a) 525                      b) 475  
c) 385                      d) 350
10. The price of a shirt and a T-shirt are in the ratio 5 : 3. To make their price same the shopkeeper offered a discount of ₹240 on the shirt and increased the T-shirt by ₹160. What was the initial price of the T-shirt?
- a) ₹100                      b) ₹800  
c) ₹600                      d) ₹350



SAMPLE PAPER

1. (B)    2. (C)    3. (B)    4. (C)    5. (B)    6. (A)    7. (B)    8. (D)    9. (A)    10. (C)