INTERNATIONAL SOCIETY FOR OLYMPIAD
LONDON - DUBAI - DELHI - SINGAPORE - NEPAL

Eupheus Learning | 100 YEARS

GRADE 9

LEVEL 1

ISFO Maths Sample Paper

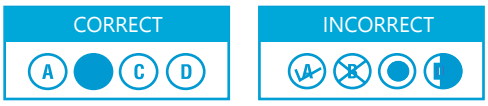
MAXIMUM TIME: 60 MINUTES **MAXIMUM MARKS: 100**

INSTRUCTIONS

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

Section A: Mathematical Reasoning	25-Questions (2 marks each)
Section B: Everyday Maths	15-Questions (1 mark each)
Section C: Logical Reasoning	5-Questions (2 marks each)
Section D: BrainBox	5-Questions (5 marks each)

3. All questions are compulsory. There is no negative marking.
4. No electronic devices capable of storing and displaying visual information such as calculator and mobile are allowed during the course of the exam.
5. Fill all your detail properly on the OMR sheet.
6. There is only ONE correct answer of each question.
7. 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.
8. Shade your answer clearly as per the given example:



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

Roll No.:

Student's Name:

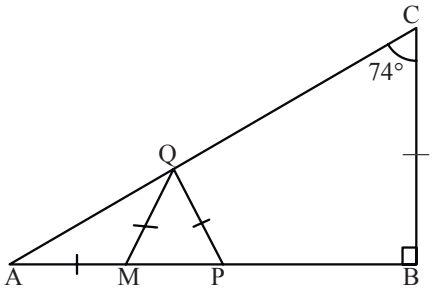
SECTION A : MATHEMATICAL REASONING

1. Simplify: $\frac{1}{3-\sqrt{8}} - \frac{1}{\sqrt{8}-\sqrt{7}} + \frac{1}{\sqrt{7}-\sqrt{6}} - \frac{1}{\sqrt{6}-\sqrt{5}} + \frac{1}{\sqrt{5}-2}$

a) 7 b) 3

c) 5 d) 6

2. In the given figure, (not drawn to scale) ABC is a right-angled triangle with right angle at B. If ∠BCA = 74°and AM = MQ = QP, then find the ∠QPB.



a) 58° b) 148°

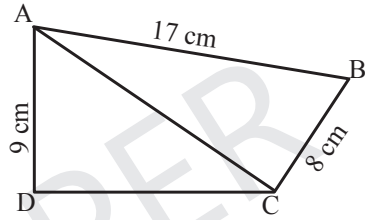
c) 128° d) 110°

3. The average score of a group of 4 friends in a Maths test is 28. Then Manoj joined their group and average score of the group became 30. Find the marks scored by Manoj.

a) 42 b) 34

c) 38 d) 36

4. A quadrilateral shaped field can be divided into two right-angle triangle. ΔACB and ΔADC as shown below. Find the area of the field.



a) 125 m^2 b) 92 m^2

c) 105 m^2 d) 114 m^2

SECTION B : EVERYDAY MATHS

5. The sides of a triangular board are 6 cm, 8 cm and 10 cm. What is the cost of painting it at the rate of 56 paise per 8 cm^2?

a) ₹1.56

b) ₹2.16

c) ₹3.00

d) ₹1.68

6. Present ages of Kiran and Sayam are in the ratio 5 : 4 respectively. Three years hence, the ratio of their ages will become 11 : 9 respectively. What is Sayam's present age?

a) 25 years b) 24 years

c) 30 years d) 32 years

SECTION C : LOGICAL REASONING

7. Starting from his home Rohit walked 12 m towards North. He turned left and walked 15 m. He then turned right and walked 20 m, after this he turned right and walked 15 m. How far and in which direction from his home?

a) 35 m, South b) 40 m, North

c) 32 m, South d) 35 m, North

8. Look at the number series given below and find the next two numbers.

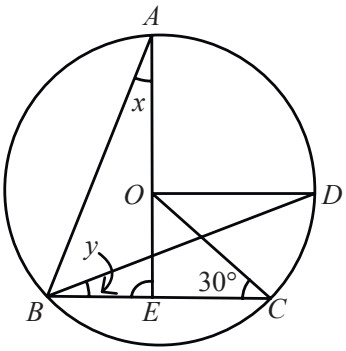
10, 34, 12, 31, 14, 28, 16, __, __

a) 26, 18 b) 25, 18

c) 24, 16 d) 27, 16

SECTION D : BRAINBOX

9. In the given figure, (not drawn to scale) O is the centre of the circle, $\angle BCO = 30°$, $\angle AEB = 90°$ and OD||BC. Find the values of x and y respectively.



a) 30°, 15°

b) 45°, 20°

c) 45°, 15°

d) 30°, 20°

10. The height of a cone is 30 cm. A small cone is cut off at the top by a plane parallel to its base. If its volume be $\frac{1}{27}$ of the volume of the given cone, at what height above the base is the section cut.

a) 10 cm

b) 15 cm

c) 20 cm

d) 25 cm

ANSWERS

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