Tomex SOCIETYFOR OLYMP IA D

LONDON - DUBAI - DELHI - SINGAPORE - NEPAL

## 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:
(A) CORRECT (D) IA (B) (C)
$\square$
$\square$
$\square$ 10 ? ar
9. Due to the increase in the price of the milk by $20 \%$, Mr Kunal's family reduces its consumption by $30 \%$. How many percent expenses does Mr Kunal's family reduce on milk?
a) $8 \%$
b) $12 \%$
c) $16 \%$
d) $20 \%$
10. The numerator of a fraction is 2 less than the denominator, if 1 is added to its denominator, it becomes $\frac{1}{2}$. Find the fraction.
a) $\frac{5}{7}$
b) $\frac{5}{3}$
c) $\frac{3}{5}$
d) $\frac{7}{5}$
11. Two cards are drawn at random from a deck of cards. What is the probability that either both are heart or both are king?
a) $\frac{11}{21}$
b) $\frac{5}{17}$
c) $\frac{13}{221}$
d) $\frac{14}{221}$
12. Find the value of $\sqrt{248+\sqrt{52+\sqrt{144}}}$.
a) 16
b) 12
c) 18
d) 14

## SECTION B : EVERYDAY MATHS

5. Three years ago Piyush ago was half of his father's age. If the ratio of their present ages is $3: 4$, what is the sum of their present age?
a) 42
b) 38
c) 32
d) 35
6. Mohit bought a toy for ₹ 120 and a watch for ₹ 400 . He sold the watch at a loss of $5 \%$ and the toy at a profit of $5 \%$. Find the total loss percent in this transaction.
a) $2 \frac{9}{13} \%$
b) $4 \frac{7}{15} \%$
c) $3 \frac{9}{15} \%$
d) $5 \frac{7}{13} \%$

## SECTION C : LOGICAL REASONING

7. Find the missing number if all three figures follow the same rule.

a) 43
b) 24
c) 32
d) 17
8. Anil ranked seventeenth from the top and thirtyseventh from the bottom in a class. How many students are there in the class?
a) 55
b) 54
c) 53
d) 51
9. In the given figure, (not drawn to the scale) ABCD is a parallelogram. Find the value of $2 x-y$.

a) 22
b) 19
c) 16
d) 14
10. All lines in the given figure meet at right angle. Find the area and perimeter of the figure respectively.

a) $2590 \mathrm{~cm}^{2}, 414 \mathrm{~cm}$
b) $2345 \mathrm{~cm}^{2}, 414 \mathrm{~cm}$
c) $2590 \mathrm{~cm}^{2}, 442 \mathrm{~cm}$
d) $2345 \mathrm{~cm}^{2}, 442 \mathrm{~cm}$

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

