CLASS
7

SOF OLYMPIADS

SAMPLE PAPER
2025-26

IMO
SOF INTERNATIONAL MATHEMATICS OLYMPIAD

Total Questions : 50 Time : 1 hr.

PATTERN & MARKING SCHEME				
Section	(1) Logical Reasoning	(2) Mathematical Reasoning	(3) Everyday Mathematics	(4) Achievers Section
No. of Questions	15	20	10	5
Marks per Ques.	1	1	1	3

SYLLABUS

Section – 1 : Verbal and Non-Verbal Reasoning.

Section – 2 : Integers, Fractions and Decimals, Exponents and Powers, Algebraic Expressions, Simple Equations, Lines and Angles, Comparing Quantities, The Triangle and its Properties, Symmetry, Rational Numbers, Perimeter and Area, Data Handling, Visualising Solid Shapes.

Section – 3 : Syllabus as per Section – 2.

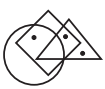
Section – 4 : Higher Order Thinking Questions - Syllabus as per Section – 2.

LOGICAL REASONING

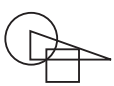
1. In a certain code language, if 'ELECTIONS' is written as COCFTGRLV, then how will 'CANDIDATE' be written in the same code language?

(A) HRDBIGLDA (B) EDPGIFDVH (C) ADLGIBDRH (D) HVDFIGPDE

2. Which of the following options satisfies the same conditions of placement of dots as in the given figure?



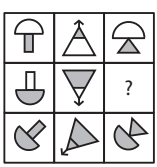
(A) 

(B) 

(C) 

(D) 

3. Which of the following options will complete the given figure matrix?



(A) 

(B) 

(C) 

(D) 

MATHEMATICAL REASONING

4. The value of $\frac{3^4}{2^3}+\frac{\left(\frac{1}{9}\times 4\right)^2}{\left(\frac{-1}{3}\right)^3\div\left(\frac{1}{-2}\right)^3}$ is

(A) $\frac{81}{24}$ (B) $\frac{259}{24}$ (C) $\frac{81}{8}$ (D) $\frac{259}{8}$

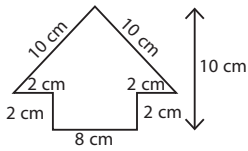
5. Compare and fill the box using >, < or =.

$$1507 + 1719 - 2305 \square 806 - 967 + 1103$$

(A) >
(B) <
(C) =
(D) Can't be determined

6. Find the area of the given figure (not drawn to scale).

(A) 38 cm^2
(B) 45 cm^2
(C) 52 cm^2
(D) None of these



EVERYDAY MATHEMATICS

7. Raghav had 147 old stamps. He lost $\frac{3}{7}$ of stamps and gave $\frac{2}{7}$ of stamps to his brother. How many stamps are left with him now?

(A) 42 (B) 49 (C) 52 (D) 59

8. Mitansh put ₹ 350 in his piggy bank on Monday, took out ₹ 175 on Tuesday, put in ₹ 210 on Wednesday and took out ₹ 150 on Thursday. If he had ₹ 1250 already in piggy bank, then how much total money he has now in his piggy bank?

(A) ₹ 1800 (B) ₹ 1710 (C) ₹ 1485 (D) None of these

ACHIEVERS SECTION

9. Fill in the blanks and select the CORRECT option.

(i) The value of the expression $7x^3 + 9x^2y + 5xy - 6y^3$ when $x = 2$ and $y = -1$, is __P__.

(ii) If $a = 0$, $b = 2$ and $c = -3$, then the value of $\left(\frac{3}{5}a + b\right)\left(\frac{4}{3}b + c\right)$ is __Q__.

(iii) If $X = 4p + 2q$ and $Y = 7q - 2p$, then the value of $X + Y$ at $p = -2$ and $q = 1$, is __R__.

	P	Q	R
(A)	10	−2/3	−5
(B)	10	2/3	3
(C)	16	−1/3	−3
(D)	16	−2/3	5

10. Which of the following is INCORRECT?

(A) A circle and a rectangle have the same perimeter. If the sides of the rectangle are 14 cm and 8 cm, then the area of the circle is 154 cm^2.

(B) If the height of a triangle is increased by 10% and its base is increased by 20%, then its new area will be increased by 32%.

(C) The adjacent sides of a parallelogram are 24 m and 12 m. If the length of altitude on the side 12 m is 18 m, then the length of the altitude on the side 24 m is 6 m.

(D) None of these

ANSWER KEY

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