S O F OLYMPIADS

I M O
**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 : Patterns, Analogy, Classification, Geometrical Shapes, Mirror and Water Images, Direction Sense Test, Ranking Test, Alphabet Test, Logical Sequence of Words, Puzzle Test, Coding-Decoding, Clock and Calendar.

Section – 2 : Numerals, Number Names, Number Sense (7 and 8 digit numbers), Computation Operations, Fractions and Decimals, Measurement of Length, Weight, Capacity, Time, Temperature and Money, Conversions, Angles, Perimeter of Various Shapes & Area of Rectangle and Square, Symmetry, Data Handling.

Section – 3 : Syllabus as per Section-2.

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

LOGICAL REASONING

1. Select a figure from the options which is NOT exactly embedded in the given figure as one of its parts.

(A)   (B)   (C)   (D)

2. Ansh is the father of Tarun. Tarun is the brother of Nidhi and father of Deep. How is Ansh related to Deep?

(A) Grandfather   (B) Father   (C) Grandson   (D) Uncle

3. If the given clock is 32 minutes fast, then what will be the CORRECT time?

(A) 8 : 22   (B) 7 : 18
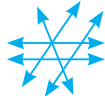(C) 7 : 28   (D) 8 : 12

MATHEMATICAL REASONING

4. How many pairs of parallel lines are there in the given figure?

(A) 2   (B) 1
(C) 3   (D) 4

5. How many parts of the given figure must be shaded so that $\frac{2}{5}$ of the figure is unshaded?

(A) 5   (B) 10
(C) 15   (D) 20

6. Which of the following is the GREATEST?
- (A) HCF of 10 and 30
- (B) LCM of 15 and 25
- (C) First common multiple of 9 and 12
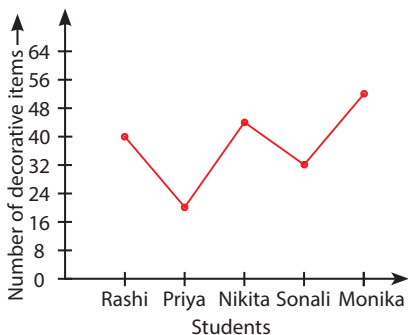- (D) Greatest prime factor of 35

EVERYDAY MATHEMATICS

7. Amit received an order of 4507890 toy cars to be manufactured in a month. Due to shortage of man power, he could deliver only 3954600 toy cars. How many toy cars has he not delivered?
- (A) 572170
- (B) 453380
- (C) 236540
- (D) 553290

8. Ritik ran along a square field and covered 576 m in 2 rounds. What was the area of that field?
- (A) 5184 sq. m
- (B) 5230 sq. m
- (C) 5146 sq. m
- (D) 5460 sq. m

ACHIEVERS SECTION

9. Read the given statements carefully and select the CORRECT option.
Statement-I : The value of 97.125 + 47.391 – 25.682 when rounded off to nearest hundredths place is 119.
Statement-II : If $a = 38.273$ and $b = 21.138$, then the sum of $a + b$ and $a - b$ is 76.546.
- (A) Both Statement-I and Statement-II are true.
- (B) Both Statement-I and Statement-II are false.
- (C) Statement-I is true but Statement-II is false.
- (D) Statement-I is false but Statement-II is true.

10. The given line graph shows the number of different types of decorative items made by five students. Study the given graph carefully and answer the following questions.

(i) How many less decorative items were made by Nikita than the total number of decorative items made by Priya and Monika together?

(ii) What fraction of decorative items were made by Rashi and Sonali together to the number of decorative items made by all the students?

	(i)	(ii)
(A)	28	13/47
(B)	30	15/31
(C)	28	18/47
(D)	30	13/31

SØF | Sample Paper | Class-5