SOF
SCIENCE OLYMPIAD FOUNDATION

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SOF INTERNATIONAL MATHEMATICS OLYMPIAD

Total Questions : 35   Time : 1 hr.

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

SYLLABUS

Section – 1 : Patterns, Analogy and Classification, Alphabet Test, Coding-Decoding, Ranking Test, Grouping of Figures and Figure Matrix, Mirror Images, Geometrical Shapes, Embedded Figures, Days and Dates & Possible Combinations.

Section – 2 : Numerals, Number names and Number Sense (4-digit numbers), Computation Operations, Fractions, Length, Weight, Capacity, Temperature, Time, Money, Geometry, Data Handling.

Section – 3 : The Syllabus of this section will be based on the Syllabus of Mathematical Reasoning.

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

LOGICAL REASONING

1. Observe the given figure carefully and answer the questions based on it.

   1   2   3   4   5   6   7   8   9

If one more ball is added on the left of ball 1, then how many balls are on the left of Ball 6?

(A) 6   (B) 5   (C) 7   (D) 4

2. If Pawan has baseball practice every fourth day in the month of March, starting with March 1, then what date will be his last day of practice for the month?

(A) March 28

(B) March 29

(C) March 30

(D) March 31

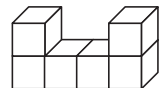| MARCH						
S	M	T	W	Th	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

3. Komal built a birdhouse at summer camp. What shape is the piece of wood that was cut out to make the door of her birdhouse?

(A) Triangle   (B) Square

(C) Circle   (D) Rectangle
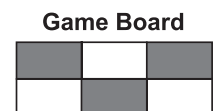
4. How many cubes are there in the given figure?

(A) 6   (B) 5

(C) 7   (D) 4

MATHEMATICAL REASONING

5. Tina shades in 3 parts on a game board. What fraction of the game board is shaded?

(A) 3/6   (B) 3/5

(C) 3/3   (D) 6/3

Game Board

6. What is the standard form of 7,000 + 800 + 20 + 5?

(A) 7,285   (B) 7,825   (C) 7,852   (D) 7,528

7. 8 × 9 = __?__ + 9 + 9. The missing number is ___.
(A) 54　　　　　(B) 45　　　　　(C) 43　　　　　(D) 34

8. Tanya started watching television at 8 : 47 p.m. She decided to go to bed 1 hr 40 mins later. At what time did she go to bed?
(A) 10 : 27 p.m.　(B) 10 : 17 a.m.　(C) 9 : 27 p.m.　(D) 9 : 27 a.m.

9. The product of a number and 6 is 240. The number is _____.
(A) 40　　　　　(B) 80　　　　　(C) 144　　　　　(D) 1440

EVERYDAY MATHEMATICS

10. Sara and 3 of her friends together made a poster. They drew 8 rows of squares with 6 squares in each row. How many squares did Sara and her friends draw on the poster?
(A) 48　　　　　(B) 42　　　　　(C) 40　　　　　(D) 17

11. Class-3 students went to a theatre in 8 buses. Each bus took 45 students. How many students went to the theatre?
(A) 320　　　　　(B) 360　　　　　(C) 380　　　　　(D) 3240

12. Some friends collected seven hundred fourteen stamps. Which of the following options represents the number of stamps?
(A) 704　　　　　(B) 714　　　　　(C) 740　　　　　(D) 741

13. If Rizvan sells 479 eggs each day, then how many eggs will he sell in a week?
(A) 486　　　　　(B) 2833　　　　　(C) 2838　　　　　(D) 3353

ACHIEVERS SECTION

14. Look at the given number bond.
Q is 1 more than P.
Then, P + Q = _____.
(A) 1　　　　　(B) 5　　　　　(C) 6　　　　　(D) 9

$$\left.\begin{array}{c} 3 \times 5 \\ + \\ 6 \times P \\ + \\ Q \times 5 \end{array}\right\} \rightarrow 64$$

15. Find the value of ★.

■ + ■ = 12; ● + ■ = 17; ● – ☾ = 9; ★ = ☾ × ● – ■

(A) 11　　　　　(B) 16　　　　　(C) 20　　　　　(D) 14

SPACE FOR ROUGH WORK

ANSWERS

1. (A)　2. (B)　3. (C)　4. (A)　5. (A)　6. (B)　7. (A)　8. (A)　9. (A)　10. (A)　11. (B)　12. (B)　13. (D)　14. (D)　15. (B)