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. Meena made this pattern with balls:

Which of the following uses a rule most different from Meena's pattern?

(A)   (B)

(C)   (D)

2. If Pawan has baseball practice every fourth day in the month of March, starting with March 1, what date will be his last day of practice for the month?
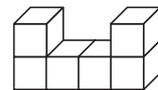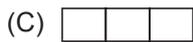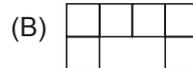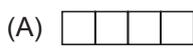
(A) March 28

(B) March 29

(C) March 30

(D) March 31

MARCH						
S	M	T	W	Th	F	S
				①1	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) Diamond
(C) Circle   (D) Pentagon

4. How would the given block model look from the top?

(A)   (B)

(C)   (D)

MATHEMATICAL REASONING

5. Tina shades in 3 spaces 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. $8 \times 9 =$ ___ $+ 9 + 9$. 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. Third-grade 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. A class collected seven hundred fourteen box tops. Which number represents seven hundred fourteen?
    (A) 704   (B) 714   (C) 740   (D) 741

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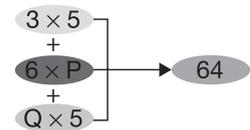   (A) 486   (B) 2833   (C) 2838   (D) 3353

ACHIEVERS SECTION

14. Look at the given number bond.
Q is 1 more than P.
Then, P + Q = _____.

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

    (A) 1   (B) 5   (C) 6   (D) 9

15. Find the value of ★.
■ + ■ = 12; ● + ■ = 17; ● − ☾ = 9; ★ = ☾ × ● − ■ = ?
    (A) 11   (B) 16   (C) 20   (D) 14

SPACE FOR ROUGH WORK