SAMPLE PAPER SYLLABUS 2022-23


## SYLLABUS

Section - 1 : Verbal and Non-Verbal Reasoning.
Section - 2 : Knowing our Numbers, Whole Numbers, Playing with Numbers, Basic Geometrical Ideas, Understanding Elementary Shapes, Integers, Fractions, Decimals, Data Handling, Mensuration, Algebra, Ratio and Proportion, Symmetry, Practical Geometry.
Section - 3 : Syllabus as per Section - 2.
Section - 4 : Higher Order Thinking Questions - Syllabus as per Section - 2.

## LOGICAL REASONING

1. Find the next term in the series given below.
(C) 14

3F, 6G, 11I, 18L, ?
(A) 210
(B) 25 N
(C) 27 P
(D) 27Q
2. Find the minimum number of straight lines required to draw the given figure.

(A) 15
(B) 16
(C) 5
(D) 6
(D) 17
3. How many dots lie opposite to the face having four dots, when the given net of cube is folded?

(A) 2
(B) 1

## MATHEMATICAL REASONING

4. The given table shows the temperature of a city for 7 consecutive hours.

| Hour | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Temperature <br> $\left({ }^{\circ} \mathrm{C}\right)$ | -6 | 15 | -2 | 23 | 12 | 0 | -4 |

Calculate the difference between the highest and the lowest temperature of the city over the 7 hour period.
(A) $17^{\circ} \mathrm{C}$
(B) $29^{\circ} \mathrm{C}$
(C) $21^{\circ} \mathrm{C}$
(D) $25^{\circ} \mathrm{C}$
5. To balance the scale, find the missing fraction.

(A) $\frac{11}{24}$
(B) $\frac{10}{24}$
(C) $\frac{5}{24}$
(D) $\frac{1}{24}$
6. Evaluate :
$-1+55-(-29)+(-1)-(-82)+(-3)$
(A) 161
(B) -161
(C) 158
(D) -158

## EVERYDAY MATHEMATICS

7. On a hill, the temperature at 8 p.m. was $2^{\circ} \mathrm{C}$ but at the mid-night of the same day, it fell down to $-3^{\circ} \mathrm{C}$. By how many degrees did the temperature fall?
(A) $6^{\circ} \mathrm{C}$
(B) $5^{\circ} \mathrm{C}$
(C) $2^{\circ} \mathrm{C}$
(D) $3^{\circ} \mathrm{C}$
8. Vishal jogged around a rectangular field 4 times. If the rectangular field was 135 m long and 78 m wide, then how far did Vishal jog?
(A) 426 m
(B) 852 m
(C) 1278 m
(D) 1704 m

## ACHIEVERS SECTION

9. Figure P is made up of six identical squares. Two squares were removed from figure $P$ to form figure $Q$. The perimeter of figure $P$ is 240 cm . What is the perimeter of figure Q?
(A) 220 cm
(B) 180 cm
(C) 200 cm
(D) 160 cm


10. Find the value of $\left(\frac{P+Q}{R}\right) \times S$.
(i) 100 lakhs = $\qquad$ millions
(ii) $\quad R$ crores $=100$ millions
(iii) 100 thousands = $\qquad$ lakhs
(iv) 10 crores $=S$ millions
(A) 10
(B) 100
(C) 110
(D) 1
