

Class-6

MAT

1.(B) The given sequence is combination of three series :

(1) 1st, 3rd, 5th, 9th terms i.e, 2, 4, 6, 8, ?

(2) 2nd, 4th, 6th, 8th terms i.e., 1, 4, 7, 10

Clearly, I consists of consecutive even number.

So the missing term is 10.

2.(D) The person who know all the three languages are represented by the reign which is common to all the three circles. So, number of such persons = 100

The person who don't know. Sanskrit are represented by region outside circles. So, number of such persons = (200 + 120 + 220) = 500

$$\therefore \text{Required ratio} = \frac{100}{540} = \frac{5}{27}$$

3.(B)

	Delhi	Banglore	Tall	Short	Girls	Boys
A	✓			✓	✓	
B	✓			✓		✓
C		✓		✓	✓	
D		✓	✓		✓	
E		✓		✓		✓
F		✓	✓			✓

Clearly, D is the tall girl from Banglore.

4.(C) The pattern is :

$$\frac{\sqrt{25} + \sqrt{100} + \sqrt{25} + \sqrt{100}}{5} = \frac{5+10+5+10}{5} = 6$$

$$\frac{\sqrt{25} + \sqrt{81} + \sqrt{36} + \sqrt{25}}{5} = \frac{5+9+6+5}{5} = 5$$

$$\frac{\sqrt{25} + \sqrt{25} + \sqrt{25} + \sqrt{25}}{5} = \frac{20}{5} = 4$$

$$\frac{\sqrt{49} + \sqrt{9} + \sqrt{16} + \sqrt{36}}{5} = \frac{7+3+4+6}{5} = 4$$

5.(D) None of these.

In the dial of a telephone, due to zero Ans becomes zero.

MATHS

1.(C) Meena have 'x' amount of money

$$\text{She spent half of her money on toy} = \frac{x}{2}$$

$$\text{Money she left in } x - \frac{x}{2} = \frac{x}{2}$$

$$\text{She spent half of this money} = \frac{\frac{x}{2}}{2} = \frac{x}{4}$$

$$\begin{aligned} \text{So the money she have now is} &= \frac{x}{2} - \frac{x}{4} \\ &= \frac{x}{4} \\ &= 0.25x \end{aligned}$$

Cube (1) → 5 Faces visible

Cube (2) → 4 Faces visible

2.(D)

Cube (3) → 5 Faces visible

Total → 14 Face visible

3.(B) $\frac{R + S + M}{3} = 48$

$$R + S + M = 144$$

$$\frac{S + M}{2} = 56 \Rightarrow S + M = 112$$

$$R + S + M = 144$$

$$\underline{- S + M = 112}$$

$$R = 32$$

Ram has 32 chocolates

Physics

1.(C) As both the benches are exposed to the same environmental conditions for a long time, they would be at the same temperature. Heat flows from steel to Jitin relatively faster as steel is a better thermal conductor (conductor of heat) than wood. So he feels hotter when he sits on the iron bench.

2.(B) Aluminium foil floats when spread out and sinks when it is pressed tightly into a ball.

Chemistry

1.(B) In warm water sugar dissolve faster than cold water.

2.(B) Milk, Sugar and Salt mix completely in water. One cannot observe both. Milk and water separately in mixture same is the case with sugar and salt.