

Satish Chandra Memorial School

Class Test on Mensuration

Class-VIII

FM-12

Time-30minutes

Answer the following questions

1. The total surface area of a cube is 864 sq cm the find its volume . (1)

2. Find the height of the trapezium whose area is 420 sq cm and the sum of the lengths of its parallel sides is 30 cm . (1)

3. The floor of a building consists of 3000 tiles which are rhombus shaped and each of the diagonals are 45 cm and 30 cm in length .Find the total cost of polishing the floor, if the cost per sq meter is Rs 4 . (2)

4. A godown is in the form of a cuboid of measures 60m ×40m×30m .How many cuboidal boxes can be stored in it if the volume of one box is 0.8 cube m ? (2)

5. If V is the volume of a cuboid of dimensions a,b,c and S is the total surface area of the cuboid the prove that

$$\frac{1}{V} = \frac{2}{S} \left(\frac{1}{a} + \frac{1}{b} + \frac{1}{c} \right) \quad (3)$$

6. In a building there are 24 cylindrical pillars .The radius of each pillar is 28 cm and height is 4m .Find the total cost of painting the curved surface area of all pillars at the rate of Rs 8 per sq m ? (3)