# SURFACE AREAS AND VOLUMES
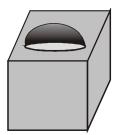
## CUBOID

## EXERCISE

Q.1     A cube with an edge of 7 cm and a cuboid measuring 7 cm × 4 cm × 8 am are kept on a table. Which shape has more volume?

Q.2     A cuboid is 9 cm long, 5 cm broad and 4 cm high and a cube has an edge of 5 cm. Which one has greater volume?

Q.3     What is the volume of a brick of ice-cream with length 25 cm, breadth 10 cm and height 8 cm?

Q.4      A brick measures 15 cm in length, 8 cm in breadth and 5 cm in height. How many bricks will be used to make a wall of length 15 m, breadth 10 m and height 8 metres?

Q.5      A pond is 50 m long, 30 m wide and 2 m deep. Find the capacity of the pond in cubic metre.

Q.6      Harry's book shelf is 40 cm long, 50 cm wide and 90 cm high. What is the volume of the book shelf?

Q.7     A roller is 150 cm long has a diameter of 70 cm. To level a play ground it takes 750 complete revolutions. Determine the cost of leveling the play ground at the rate of 75 cents per m2

Q.8     The dimensions of a room are 9 m × 8 m × 6.5 m. It has one door of dimensions

2 m × 1.5 m and two windows each of dimensions 1.5 m x 1 m. Find the cost of

white washing the walls at $6.40 per m2

Q.9     The adjoining figure shows a decorative block, which is made of two solids ––a cube
and a hemisphere. The base of the block is a cube with dege 5 cm, and hemisphere
fixed on the top has a diameter of 4.2 cm. Find the total volume and the total surface
area of the block.



Q.10    A cuboidal block of side 7 cm is surmounted by a hemisphere. What is the greatest

diameter the sphere can have ? Also find the surface area of the solid.

# Answers

1.      Cube

2.      cuboid

3.      2000 cu. cm

4.      20000

5.      3000 cu m

6.       180000 cu. Cm

9.      144.404 cm$^3$; 163.86 cm$^2$

10.    7 cm; 332.5 cm$^2$