

**Chapter: 9**

**Q.1 Choose the correct alternative. (3)**

- 1) Volume of sphere of radius 7 cm.  
a.  $1347.33 \text{ cm}^3$       b.  $1437.33 \text{ cm}^3$       c.  $1743.33 \text{ cm}^3$       d.  $1473.33 \text{ cm}^3$
- 2) Find slant height of right circular cone with radius 6 cm and height 8 cm.  
a. 9 cm      b. 5 cm      c. 10 cm      d. None of these
- 3) The surface area of a box whose length, breadth and height are 16 cm, 8 cm, and 6 cm respectively.  
a.  $445 \text{ cm}^2$       b.  $454 \text{ cm}^2$       c.  $544 \text{ cm}^2$       d. None of there

**Q.2 Solve the following questions. (Any three) (9)**

- 1) Find the volume of a sphere whose surface area is  $154 \text{ cm}^2$ .
- 2) A Jocker's cap is in the form of a right circular cone of base radius 7 cm and height 24 cm. Find the area of the cloth required to make 10 such caps.
- 3) Total surface area of a cone is  $616 \text{ sq.cm}$ . If the slant height of the cone is three times the radius of its base, find its slant height.
- 4) A school provides milk to the students daily in cylindrical glasses of diameter 7 cm. If the glass is filled with milk upto height of 12 cm, find how many litres of milk is needed to serve 1600 students.

**Q.3 Solve the following questions. (Any two) (8)**

- 1) The curved surface area of a cone is  $2200 \text{ sq.cm}$  and its slant height is 50 cm. Find the total surface area and volume of cone. ( $\pi = \frac{22}{7}$ )
- 2) To make an open fish tank, a glass sheet of 2 mm gauge is used. The outer length, breadth and height of the tank are 60.4 cm, 40.4 cm and 40.2 cm respectively. How much maximum volume of water will be contained in it ?
- 3) Curved surface area of a cone is  $251.2 \text{ cm}^2$  and radius of its base is 8 cm. Find its slant height and perpendicular height. ( $\pi = 3.14$ )