

REVISION ASSIGNMENT

SURFACE AREAS AND VOLUMES

- Q.1. Find the length of the longest pole that can be put in a room of dimensions 10 m x 10 m x 5 m.
- Q.2. The volume of a solid hemisphere is $1152 \pi \text{ cm}^3$. Find its curved surface area.
- Q.3. A rectangular piece of paper is 22 cm long and 10 cm wide. A cylinder is formed by rolling the paper along its length. Find the volume of the cylinder.
- Q.4. If a wooden box of dimensions 8 m x 7 m x 6 m is to carry boxes of dimensions 8 cm x 7 cm x 6 cm, then find the maximum number of boxes that can be carried in the wooden box.
- Q.5. The volume of cylindrical pipe is 748 cm. Its length is 0.14 m and its internal radius is 0.09 m. Find thickness of pipe.
- Q.6. A right-angled $\triangle ABC$ with sides 3 cm, 4 cm and 5 cm is revolved about the fixed side of 4 cm. Find the volume of the solid generated. Also, find the total surface area of the solid.
- Q.7. Each edge of a cube is increased by 50%. Find the percentage increase in the surface area of the cube.
- Q.8. Two cones have their base radii in ratio of 3 : 1 and the ratio of their heights as 1 : 3. Find the ratio of their volumes.
- Q.9. A metallic sphere is of radius 4.9 cm. If the density of the metal is 7.8 g/cm^2 , find the mass of the sphere.
- Q.10. Curved surface area of cylindrical reservoir 12 m deep is plastered from inside with concrete mixture at the rate of Rs 15 per m^2 . If the total payment made is of Rs 5652, then find the capacity of this reservoir in litres.