Exercise 7.5

Multiple choice questions

1. The curved surface area of a right circular cone of height 15 cm and base diameter 16 cm is

   (1) 60π cm^2 (2) 68π cm^2 (3) c) 120π cm^2 (4) 136π cm^2

2. If two solid hemispheres of same base radius r units are joined together along their bases, then curved surface area of this new solid is

   (1) $4\pi r^2$ sq. units (2) $6\pi r^2$ sq. units (3) $3\pi r^2$ sq. units (4) $8\pi r^2$ sq. units

3. The height of a right circular cone whose radius is 5 cm and slant height is 13 cm will be

   (1) 12 cm (2) 10 cm (3) 13 cm (4) 5 cm

4. If the radius of the base of a right circular cylinder is halved keeping the same height, then the ratio of the volume of the cylinder thus obtained to the volume of original cylinder is

   (1) 1:2 (2) 1:4 (3) 1:6 (4) 1:8

5. The total surface area of a cylinder whose radius is $\frac{1}{3}$ of its height is

   (1) $\frac{9\pi h^2}{8}$ sq.units (2) $24\pi h^2$ sq.units

   (3) $\frac{8\pi h^2}{9}$ sq.units (4) $\frac{56\pi h^2}{9}$ sq.units

6. In a hollow cylinder, the sum of the external and internal radii is 14 cm and the width is 4 cm. If its height is 20 cm, the volume of the material in it is

   (1) 5600π cm^3 (2) 11200π cm^3 (3) 56π cm^3 (4) 3600π cm^3

7. If the radius of the base of a cone is tripled and the height is doubled then the volume is

   (1) made 6 times (2) made 18 times (3) made 12 times (4) unchanged

8. The total surface area of a hemi-sphere is how much times the square of its radius.

   (1) π (2) 4π (3) 3π (4) 2π