Surface Areas and Volumes : Worksheet -5

1. Height (h) slant height(s) and radius 'r' are in the relation

(a) $\sqrt{h^2+r^2}=s^2$ (b) $h^2+r^2=s^2$ (c) $\sqrt{h^2-r^2}=s^2$ (d) $h^2-r^2=s^2$

2. L.S.A. of a right circular cone is _ _ _ _ _ _ _ _ _ _ _ _ _ ( )

(a) $2\pi rh$ (b) πrs (c) $2h(l+b)$ (d) $4a^2$

3. Volume of a cone is _ _ _ _ _ _ _ _ _ _ _ _ _ ( )

(a) $\frac{1}{3}\pi r^2h$ (b) $\frac{1}{2}\pi r^2h$ (c) $\frac{2}{3}\pi r^2h$ (d) πr^2h

4. Area of the base of the cone is _ _ _ _ _ _ _ _ _ _ _ _ _ ( )

(a) πr^2 (b) 2 πr (c) $2\pi rh$ (d) side^2

5. If a sector is converted into a cone, then the radius of the sector is changed as _ _ _ _ _ _ _ _ _ _ _ _ _ ( )

(a) radius of the cone (b) height of the cone

(c) slant height of the cone (d) None

6. A cone and cylinder have equal bases and height. Their volumes are in the Ratio ( )

(a) 3 : 2 (b) 2 : 3 (c) 3 : 1 (d) 1 : 3

7. If radius and height of a cone are 3 cm and 4 cm. Then its slant is equal to _ _ _ _ _ _ _ _ _ _ _ _ _ ( )

(a) 3 cm (b) 4 cm (c) 5 cm (d) 6 cm

8. If radius of a cone is 1 m, then its L.S.A. is equal to _ _ _ _ _ ( )

(a) 'Πs' (b) 2s (c) 3s (d) 4s

9. If radius of a cone is 7 cm and slant height is 5 cm then its L.S.A. = _ _ _ _ _ _ _ _ _ _ _ _ _ ( )

(a) 110 sq. cm. (b) 110 sq.m.(c) 110 sq.km. (d) None of the above.

10. If height of the cone is 3 cm and its radius is 7 cm then its volume is _ _ _ _ _ _ _ _ _ _ _ _ _ ( )

(a) 154 cm (b) 154 sq.cm (c) 154 c.c. (d) 154 mts