

IX/ MCQ/ VOLUME & SURFACE AREA

1. The number of surfaces of a cone has, is
 - (a) 1
 - (b) 2
 - (c) 3
 - (d) 4
2. The area of the curved surface of a cone of radius $2r$ and slant height l , is
 - (a) πrl
 - (b) $2\pi rl$
 - (c) $12\pi rl$
 - (d) $\pi(r + l)r$
3. The total surface area of a cone of radius r and length $2l$, is
 - (a) $2\pi r(l + r)$
 - (b) $\pi rl + r^2$
 - (c) $\pi r(l + r)$
 - (d) $2\pi rl$
4. A solid cylinder is melted and cast into a cone of same radius. The heights of the cone and cylinder are in the ratio
 - (a) 9 : 1
 - (b) 1 : 9
 - (c) 3 : 1
 - (d) 1 : 3
5. If the radius of the base of a right circular cone is $3r$ and its height is equal to the radius of the base, then its volume is
 - (a) $13\pi r^3$
 - (b) $23\pi r^3$
 - (c) $3\pi r^3$
 - (d) $9\pi r^3$
6. If the volumes of two cones are in the ratio 1 : 4 and their diameters are in the ratio 4 : 5, then the ratio of their heights, is
 - (a) 1 : 5
 - (b) 5 : 4
 - (c) 5 : 16
 - (d) 25 : 64
7. If the heights of two cones are in the ratio of 1 : 4 and the radii of their bases are in the ratio 4 : 1, then the ratio of their volumes is

- (a) 1 : 2
- (b) 2 : 3
- (c) 3 : 4
- (d) 4 : 1

8. A right circular cone with a radius of 5 cm and a slant height of 13 cm has the height:

- (a) 9 cm
- (b) 12 cm
- (c) 16 cm
- (d) 14 cm

9. The surface area of a sphere of radius 21 cm is: (Assume $\pi = 22/7$)

- (a) 1386 sq.cm
- (b) 1400 sq.cm
- (c) 5544 sq.cm
- (d) 2000 sq.cm

10. Total surface area of a hemisphere is 4158cm^2 , the diameter of the hemisphere is equal to _____ cm. (Take $\pi = 22/7$)

- a) 40
- b) 20
- c) 21
- d) 42