

1. If the radius of cylinder is halved and height is doubled, then what will be the curved surface area?

- (a) increase by 1
- (b) the same
- (c) double
- (d) triple

2. What is the total surface area of a cone having radius $\frac{r}{2}$ and height 21?

(a) $\pi r \left(1 + \frac{r}{4} \right)$ (b) $\pi r \left(r + \frac{1}{4} \right)$ (c) $\pi r \left(1 + \frac{r}{2} \right)$ (d) $\pi r \left(4 + \frac{1}{2} \right)$

3. If a right circular cone has radius 4 cm and slant height 5 cm then what is its volume?

- (a) $16 \pi \text{ cm}^3$
- (b) $14 \pi \text{ cm}^3$
- (c) $12 \pi \text{ cm}^3$
- (d) $18 \pi \text{ cm}^3$

4. The radius of a hemisphere is r. What is its volume?

(a) $\frac{4}{3} \pi r^3$ (b) $\frac{2}{3} \pi r^3$ (c) $4 \pi r^3$ (d) $2 \pi r^3$

5. What is the total surface area of a hemisphere of radius r?

- (a) $4 \pi r^2$
- (b) πr^2
- (c) $2 \pi r^2$
- (d) $3 \pi r^2$

6. If the radius of a sphere is doubled, then what is the ratio of their surface area?

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

7. Two right circular cones of equal curved surface areas have slant heights in the ratio of 3 : 5. Find the ratio of their radii.

(a) 4 : 1

(b) 3 : 5

(c) 5 : 3

(d) 4 : 5

8. In the cylindrical container, the base radius is 8 cm. If the height of the water level is 20 cm, find the volume of the water in the container.

(a) 5.6721 l

(b) 4.0218 l

(c) 3.8925 l

(d) 4.97 l

9. A well with 10 m inside diameter is dug 14m deep. Earth taken out of it is spread all around it to make an embankment of height $4\frac{2}{3}$ m. Find the width of the embankment.

(a) 5 m

(b) 4 m

(c) 4.3 m

(d) 6 m

Answers

1. (b)	2. (a)	3. (a)	4. (b)	5. (d)
6. (c)	7. (c)	8. (b)	9. (a)	