

## Class 10 Maths Chapter 13 Surface Areas and Volumes MCQs For Practice

**1. A funnel is the combination of**

- (a) a cone and a cylinder
- (b) frustum of a cone and a cylinder
- (c) a hemisphere and a cylinder
- (d) a hemisphere and a cone

**2. A Surahi is the combination of**

- (a) a sphere and a cylinder
- (b) a hemisphere and a cylinder
- (c) two hemispheres
- (d) a cylinder and a cone

**3. A metallic spherical shell of internal and external diameters 4 cm and 8 cm, respectively is melted and recast into the form a cone of base diameter 8cm. The height of the cone is**

- (a) 12 cm
- (b) 14 cm
- (c) 15 cm
- (d) 18 cm

**4. A mason constructs a wall of dimensions 270 cm × 300 cm × 350 cm with the bricks each of size 22.5 cm × 11.25 cm × 8.75 cm and it is assumed that 1/8 space is covered by the mortar. Then the number of bricks used to construct the wall is**

- (a) 11100
- (b) 11200
- (c) 11000
- (d) 11300

**5. The radii of the top and bottom of a bucket of slant height 45 cm are 28 cm and 7 cm, respectively. The curved surface area of the bucket is**

- (a) 4953 cm<sup>2</sup>
- (b) 4951 cm<sup>2</sup>
- (c) 4952 cm<sup>2</sup>
- (d) 4950 cm<sup>2</sup>

**6. 12 solid spheres of the same size are made by melting a solid metallic cylinder of base diameter 2 cm and height 16 cm. The radius of each sphere is**

- (a) 2 cm
- (b) 1.5 cm
- (c) 1 cm
- (d) 3 cm

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

- (a)  $4\pi r^2$
- (b)  $6\pi r^2$
- (c)  $3\pi r^2$

(d)  $8\pi^2$

**8. During conversion of a solid from one shape to another, the volume of the new shape will**

- (a) increase
- (b) decrease
- (c) remain unaltered
- (d) be doubled

**9. Volumes of two spheres are in the ratio 64:27. The ratio of their surface areas is**

- (a) 3 : 4**
- (b) 4 : 3
- (c) 9 : 16
- (d) 16 : 9

**10. A medicine-capsule is in the shape of a cylinder of diameter 0.5 cm with two hemispheres stuck to each of its ends. The length of entire capsule is 2 cm. The capacity of the capsule is**

- (a)  $0.36 \text{ cm}^3$
- (b)  $0.35 \text{ cm}^3$
- (c)  $0.34 \text{ cm}^3$
- (d)  $0.33 \text{ cm}^3$

\*\*\*\*\* ANSWER KEY \*\*\*\*\*

- |         |         |         |         |          |
|---------|---------|---------|---------|----------|
| 1 - (b) | 2 - (a) | 3 - (b) | 4 - (b) | 5 - (d)  |
| 6 - (c) | 7 - (a) | 8 - (c) | 9 - (d) | 10 - (a) |