

## CHAPTER-11 | : Surface Areas and Volumes

QUIZ  
PART-11

**Q1. The volume of a cone with radius 7 cm and height 14 cm is:**

- A. 2310 cm<sup>3</sup>  
B. 2500 cm<sup>3</sup>  
C. 2464 cm<sup>3</sup>  
D. 4664 cm<sup>3</sup> (A)

**Explanation:** Volume =  $\frac{1}{3}\pi r^2 h$

**2. The slant height of a cone with radius 14 cm and height 24 cm is:**

- A. 25 cm  
B. 26 cm  
C. 30 cm  
D. 28 cm (A)

**Explanation:** Use Pythagoras' theorem.

**3. The curved surface area of a cone with radius 7 cm and slant height 25 cm is:**

- A. 245 cm<sup>2</sup>  
B. 280 cm<sup>2</sup>  
C. 350 cm<sup>2</sup>  
D. 375 cm<sup>2</sup> (B)

**Explanation:** Curved surface area =  $\pi r l$

**4. The volume of a cone with height 9 cm and radius 4 cm is:**

- A. 150 cm<sup>3</sup>  
B. 200 cm<sup>3</sup>  
C. 250 cm<sup>3</sup>  
D. 300 cm<sup>3</sup> (A)

**Explanation:** Volume =  $\frac{1}{3}\pi r^2 h$

**5. The volume of a cone with radius 6 cm and height 7 cm is:**

- A. 252 cm<sup>3</sup>  
B. 276 cm<sup>3</sup>  
C. 324 cm<sup>3</sup>  
D. 378 cm<sup>3</sup> (A)

**Explanation:** Volume =  $\frac{1}{3}\pi r^2 h$

**6. A right triangle with sides 5 cm, 12 cm, and 13 cm is revolved about the side 12 cm. The volume of the solid is:**

- A. 150 cm<sup>3</sup>  
B. 200 cm<sup>3</sup>  
C. 300 cm<sup>3</sup>  
D. 350 cm<sup>3</sup> (A)

**Explanation:** Revolving gives a cone-shaped solid.

**7. The volume of a solid obtained by revolving a triangle around a side of 5 cm is:**

- A. 150 cm<sup>3</sup>  
B. 200 cm<sup>3</sup>  
C. 250 cm<sup>3</sup>  
D. 300 cm<sup>3</sup> (B)

**Explanation:** Revolving the triangle gives a cone.

**8. The total surface area of a cone with radius 9 cm and slant height 12 cm is:**

- A. 339 cm<sup>2</sup>  
B. 350 cm<sup>2</sup>  
C. 405 cm<sup>2</sup>  
D. 450 cm<sup>2</sup> (B)

**Explanation:** Total surface area =  $\pi r (l + r)$

**9. The volume of a conical tank with radius 7 m and height 24 m is:**

- A. 1150 m<sup>3</sup>  
B. 1225 m<sup>3</sup>  
C. 1500 m<sup>3</sup>  
D. 2000 m<sup>3</sup> (C)

**Explanation:** Volume =  $\frac{1}{3}\pi r^2 h$

**10. The volume of a conical tank with radius 10 cm and height 15 cm is:**

- A. 500 cm<sup>3</sup>  
B. 700 cm<sup>3</sup>  
C. 800 cm<sup>3</sup>  
D. 1000 cm<sup>3</sup> (B)

**Explanation:** Volume =  $\frac{1}{3}\pi r^2 h$