

CHAPTER-11 | : Surface Areas and Volumes

QUIZ
PART-8

1. The radius of a sphere with surface area 154 cm^2 is:

- A. 7 cm
B. 5 cm
C. 10 cm
D. 6 cm (A)

Explanation: $r = 7 \text{ cm}$.

2. The ratio of surface areas of the Moon and Earth is:

- A. 1:16
B. 1:4
C. 4:1
D. 1:2 (A)

Explanation: Ratio is $(1/4)^2 = 1:16$.

3. A hemispherical bowl with radius 5 cm and thickness 0.25 cm has an outer curved surface area of:

- A. 100 cm^2
B. 80 cm^2
C. 85 cm^2
D. 90 cm^2 (C)

Explanation: Outer surface area is 85 cm^2 .

4. The surface area of a sphere with radius 7 cm is:

- A. 308 cm^2
B. 616 cm^2
C. 154 cm^2
D. 672 cm^2 (B)

Explanation: Surface area = 616 cm^2 .

5. The surface area of a hemisphere with radius 5 cm is:

- A. 125 cm^2
B. 120 cm^2
C. 85 cm^2
D. 100 cm^2 (B)

Explanation: Curved surface area = 120 cm^2 .

6. The volume of a hemisphere with radius 5 cm is:

- A. 130 cm^3
B. 150 cm^3
C. 200 cm^3
D. 260 cm^3 (A)

Explanation: Volume = 130 cm^3 .

7. The surface area of a cylinder enclosing a sphere is:

- A. $2\pi r^2$
B. $3\pi r^2$
C. $4\pi r^2$
D. πr^2 (A)

Explanation: Surface area = $2\pi r^2$.

8. Ratio of surface area of a sphere to curved surface area of enclosing cylinder is:

- A. 2:1
B. 1:1
C. 1:2
D. 4:1 (B)

Explanation: The ratio is 1:1.

9. The total surface area of a sphere with radius 10 cm is:

- A. 1256 cm^2
B. 314 cm^2
C. 600 cm^2
D. 1200 cm^2 (A)

Explanation: Surface area = 1256 cm^2 .

10. If the radius of a sphere is doubled, the surface area becomes:

- A. 2
B. 4
C. 8
D. 16 (B)

Explanation: Surface area increases by 4 times.