1. The volume of a cone with radius 7 cm and height 14 cm is:
A. 2310 cm^3
B. 2500 cm^3
C. 2464 cm^3
D. 4664 cm^3 (A)
Explanation: The volume of a cone is given by $(1/3)\pi r^2 h$. Using the given values, the volume is 2310 cm^3.

2. A cone has slant height 5 cm and height 4 cm. Its volume is:
A. 38.71 cm^3
B. 36.50 cm^3
C. 37.00 cm^3
D. 37.71 cm^3 (A)
Explanation: Using the formula for volume, the volume comes out to be 38.71 cm^3.

3. The radius of a sphere is 10 cm. The surface area of the sphere is:
A. 314 cm^2
B. 3140 cm^2
C. 400 cm^2
D. 500 cm^2 (A)
Explanation: Surface area = $4\pi r^2 = 4 \times 3.14 \times 10^2 = 314$ cm^2.

4. The total surface area of a hemisphere with radius 7 cm is:
A. 308 cm^2
B. 400 cm^2
C. 154 cm^2
D. 220 cm^2 (A)
Explanation: Total surface area = $3\pi r^2 = 3 \times 3.14 \times 7^2 = 308$ cm^2.

5. The volume of a hemisphere is:
A. $1/2 \times \pi r^3$
B. $1/3 \times \pi r^2 h$
C. $2/3 \times \pi r^3$
D. $4/3 \times \pi r^3$ (C)
Explanation: Volume of a hemisphere = $2/3 \times \pi r^3$.

6. The volume of a cone is 1500 cm^3. If the radius is 5 cm, what is the height?
A. 18 cm
B. 12 cm
C. 10 cm
D. 20 cm (B)
Explanation: Using the formula, height = (3 × Volume) / (πr^2), we get the height as 12 cm.

7. The slant height of a cone with radius 8 cm and height 15 cm is:
A. 12 cm
B. 16 cm
C. 17 cm
D. 14 cm (C)
Explanation: Using Pythagoras' theorem, slant height = $\sqrt{(r^2 + h^2)} = \sqrt{(8^2 + 15^2)} = 17$ cm.

8. Monica's canvas area is 551 m^2. If she uses it to make a conical tent with a base radius of 7 m, the volume of the tent is:
A. 2310 m^3
B. 1800 m^3
C. 2540 m^3
D. 2750 m^3 (A)
Explanation: The volume is calculated based on the surface area of the cone and its radius.

9. The total surface area of a cone with radius 9 cm and slant height 12 cm is:
A. 339 cm^2
B. 350 cm^2
C. 405 cm^2
D. 450 cm^2 (B)
Explanation: Using the formula for surface area, the total surface area is 350 cm^2.

10. The volume of a right circular cone is given by:
A. $\pi r^2 h$
B. $1/3 \times \pi r^2 h$
C. $1/2 \times \pi r^2 h$
D. $2\pi r^2 h$
Answer: (B)
Explanation: The correct formula for the volume of a cone is $1/3 \times \pi r^2 h$.