
	<b>Selvam College Of Technology, Namakkal (Autonomous) IT Support &amp; Development Training Programme (ISDTP)</b>		
<b>Worksheet -10 (Volume and Surface)</b>			
<b>Bundle &amp; Subject Name</b>	Advanced Bundle V2 (2025) – Aptitude (Level-4)	<b>Semester</b>	VI

### Answer Key

1. The dimensions of a cuboid are 16 cm, 18 cm and 24 cm. Find its volume

A) 5912 cm<sup>3</sup>                      B) 6923 cm<sup>3</sup>  
C) 6912 cm<sup>3</sup>                      D) 4912 cm<sup>3</sup>

**Ans: C) 6912 cm<sup>3</sup>**

2. A brick measures 20 cm × 10 cm × 7.5 cm. How many bricks will be required for a wall whose dimension is 20 m × 2 m × 0.75 m?

A) 22,000                      B) 30,000  
C) 25,000                      D) 20,000

**Ans: D) 20,000**

3. A cylindrical piece of metal of radius 2 cm and height 6 cm is shaped into a cone of same radius. The height of the cone is \_\_\_\_.

A) 18 cm                      B) 36 cm  
C) 27 cm                      D) 9 cm

**Ans: A) 18 cm**

4. Find the volume of an iron rod that is 7 cm long and whose diameter is 1 cm.

A) 4.5 cm<sup>3</sup>                      B) 6.5 cm<sup>3</sup>  
C) 5 cm<sup>3</sup>                      D) 5.5 cm<sup>3</sup>

**Ans: D) 5.5 cm<sup>3</sup>**

5. As air is pumped into a spherical balloon the radius increases from 6cm to 12cm. The ratio between volume of the balloon in the beginning and the end is \_\_\_\_.

A) 1:8                              B) 2:7  
C) 8:1                              D) 2:3

**Ans: A) 1:8**

6. How many right circular cones having the same diameter and height as those of the right circular cylinder will be needed to store that water?

A) 1                              B) 2  
C) 3                              D) 4

**Ans: C) 3**

7. If the heights of two cones are in the ratio 1: 4 and their diameters in the ratio 4: 5. What is the ratio of their volumes?

A) 4:25                              B) 9:25  
C) 16:25                              D) 1:25

**Ans: A) 4:25**

8. A cone, a hemisphere and a cylinder stand on equal base and have the same height then the ratio of their volume is \_\_\_\_.

A) 2:3:4                              B) 1:2:3  
C) 3:4:5                              D) 1:2:4

**Ans: B) 1:2:3**

9. If a cone's height and base radius are both increased by 100%, the cone's volume will change by \_\_\_\_.

A) 800%                              B) 700%  
C) 500%                              D) 400%

**Ans: B) 700%**

10. The curved surface area of hemisphere is 2772 cm<sup>2</sup>. Then the total surface area of hemisphere is \_\_\_\_.

A) 4158 cm<sup>2</sup>                              B) 3172 cm<sup>2</sup>  
C) 3882 cm<sup>2</sup>                              D) 4258 cm<sup>2</sup>

**Ans: A) 4158 cm<sup>2</sup>**