

## Section A (10 Marks)

1. Define the following terms:
  - a) Perimeter
  - b) Area
  - c) Volume
  - d) Curved Surface Area
  - e) Total Surface Area
2. Find the area of a circle with radius 7 cm.
3. Find the volume of a cube with side 5 cm.
4. The radius and height of a cylinder are 7 cm and 10 cm respectively. Find its curved surface area.
5. Find the total surface area of a sphere with radius 3.5 cm.

## Section B (10 Marks)

6. A cylindrical tank of radius 7 m and height 24 m is full of water. The water is emptied into a rectangular tank of length 28 m and breadth 22 m. Find the height of the water level in the rectangular tank.
7. A conical tent is 10 m high and the radius of its base is 24 m. Find the slant height of the tent.
8. A spherical ball of radius 21 cm is melted and recast into smaller spherical balls of diameter 7 cm. How many smaller balls can be made?
9. A metallic sphere of radius 4.2 cm is melted and recast into the shape of a right circular cone of height 8 cm. Find the radius of the base of the cone.
10. A cylindrical bucket of height 32 cm and base radius 18 cm is filled with sand. This bucket is emptied on the ground and a conical heap of sand is formed. If the height of the conical heap is 24 cm, find the radius and slant height of the heap.