SRM Institute of Science and Technology College of Engineering and Technology Department of Mechanical Engineering

18MES101L - Engineering Graphics and Design

| Reg. No | Ex. No | 6 |
|---------------------|-----------------------|--------------------------|
| Name of the student | Week. No | 7 |
| Department | Title of the exercise | Projection of Solids - 2 |
| Section | Date | |

Regular class problems

- 1. Draw the projections of the cylinder diameter 50 mm and axis length 80 mm when it is lying on the ground with its axis inclined at 45° to the wall and parallel to the ground. Draw its top, front and isometric views (2 Marks).
- **2.** Draw the front, top and right side views of a cone of base diameter 40 mm and altitude 45 mm when its base kept parallel to the wall (**2 Marks**).
- **3.** A pentagonal pyramid of base edge 25 mm and axis length 60 mm rests on one of its base edges on ground such that the highest base corner 20 mm above ground. Its axis is parallel to the wall. Draw its top, front and isometric views (**2 Marks**).
- **4.** Two equal spheres of diameter 30 mm resting on the ground touching each other. Draw their projections when i) the line joining their centers is parallel to the both the wall and the floor. ii) The line of the centers is parallel to the floor and inclined at 30° to the wall (2 Marks).

Extra problems for practice

- **1.** A hexagonal pyramid of base edge 40 mm and altitude 80 mm rests on one of its base edges on the floor with its axis inclined at 30^{0} to the floor and parallel to the Wall. Draw its projections.
- **2.** Draw the Projections of a right circular cylinder of base diameter 30 mm and the axis length 45 mm when its rests on wall on its base.
- **3.** Draw the projection of torus diameter 40 mm resting on the ground. The tube radius of the torus is 5 mm.
- **4.** Draw the torus diameter 40 mm resting on the ground. The tube radius of the torus is 5 mm. Sphere of diameter 20 mm is kept inside the torus and the axis of the both in same line and parallel to the wall.