

**18MES101L - Engineering Graphics and Design**

Reg. No		Ex. No	5
Name of the student		Week. No	6
Department		Title of the exercise	<b>Projection of Solids - 1</b>
Section		Date	

**Regular class problems**

1. A cube of side 40 mm rests on the ground on one of its faces with a vertical face inclined at  $40^\circ$  to the wall. Draw its projections (2 Marks – Level 1).
2. A square prism of base side 35 mm and axis length 60 mm lies on the ground on one of its longer edges with its faces parallel to the wall. Draw the projections (2 Marks – Level 2).
3. A hexagonal prism of base of side 30mm and axis 60mm rests on the ground on its base with a base side parallel to wall. Draw the projections of the prism and determine the true length of its longest diagonal (2 Marks – Level 2).
4. Draw the front, top and right side views of a pentagonal prism of base side of 20 mm axis 35 mm when it is resting on the floor on its base with one of the edges of the base inclined at  $30^\circ$  to the wall (2 Marks – Level 2).

**Extra problems for practice**

1. A right rectangular prism of side 35 X 20 mm and axis length 60 mm lies on the ground on its base with a longer base edge parallel to wall. Draw the projections.
2. A cube of side 40mm rests on the ground on one of its faces with a vertical face equally inclined to the wall. Draw its projections.
3. A square prism of base side 35 mm and axis length 60 mm lies on the ground on one of its longer edges with its faces equally inclined to the wall. Draw the projections when its axis is inclined at  $30^\circ$  to the wall.