GEETHANJALI INSTITUTE OF SCIENCE AND TECHNOLOGY NELLORE

ENGINEERING DRAWING – UNIT 3 (Projection of Solids)

1CSE–C & CS

Axis inclined to both the reference planes

1	A square prism, base 40 mm side and height 65 mm has its axis inclined at 45^0 to the H.P and the base on which it rests is inclined at 30^0 to the V.P. Draw its projections
2	Draw the projections of a cone of a base 50 mm diameter and axis 60 mm long, when it is resting on the ground on a point on its base with (a) the axis making an angle of 30^0 with the H.P and 45^0 with the V.P. (b) the axis making an angle of 30^0 with the H.P and its top view making 45^0 with the V.P
3	A pentagonal pyramid base 25 mm side and axis 50 mm long has one of it' s triangular face in the V.P and the edge of the base contained by that face makes an angle of 30^0 with the H.P. Draw it' s projections.
4	Draw the projections of the cube of 25 mm long edges resting on the H.P on one of its corners with a solid diagonal perpendicular to the V.P.
5	A pentagonal prism is resting on one of the corners of its base on the H.P. The longer edge containing that corner is inclined at 45^0 to the H.P. The axis of the prism makes an angle of 30^0 to the V.P. Draw the projection of the solid. Also draw the projections of the solid when the plan of axis is inclined 30^0 to XY. Take side of the base 45 mm and height 70 mm.
6	A square pyramid of 50 mm side of base and 50 mm long axis is resting on one of its triangular faces on H.P having a slant edge containing that face parallel to the V.P. Draw the projections of the pyramid.