

### **ASSIGNMENT-3**

#### **PROJECTION OF PLANES**

##### **CASE NO-VI: Plane Inclined to both H.P & V.P**

1. Draw the projections of a regular hexagon of 25 mm side having one of its sides in the H.P and inclined at  $60^0$  to V.P and its surface making an angle of  $45^0$  with H.P.
2. A square ABCD of 50 mm side has its corner A in the H.P. its diagonal AC is inclined at  $30^0$  to the H.P and the diagonal BD inclined at  $45^0$  to the VP and parallel to H.P. Draw its projections.
3. Draw the projections of a circle of 50 mm diameter resting in the H.P and a point A on the circumference. Its plane is inclined at  $45^0$  to the Hp and the top view-of the diameter AB making an angle of  $30^0$  with the V.P.
4. A rectangular plane of edges 35 mm and 70 mm is resting on an edge in the H.P. The surface is inclined to the H.P. such that the top view appears as a square. Draw its projections when the edge resting on the H.P. is inclined at  $30^0$  to the V.P.
5. Draw the projections of a regular hexagon of 25mm side having one of its sides in the H.P and inclined at  $60^0$  to V.P and its surface making an angle of  $45^0$  with H.P.
6. A pentagonal plane of side 30 mm is resting on a corner in the H.P. The side opposite to the corner in the H.P. is parallel to and 35 mm above H.P. and inclined at  $45^0$  to the V.P. Draw its three principal views.