

### ASSIGNMENT - 4 - PROJECTION OF PLANE

1. An elliptical plane with major axis 70 mm and minor axis 50 mm is inclined to HP, such that the top plan of the plane is a circle. Draw the projections of the plane when the major axis is inclined at  $30^\circ$  to the VP. Find the inclination of the plane with the HP. Use the concentric circle method to draw the top plan of the plane in the initial stage.
2. ABCD is a rhombus of diagonal  $AC = 100$  mm and  $BD = 70$  mm. its corner A is in the HP and the plane is inclined to the HP such that the plan appears to be a square and the plan of the diagonal AC makes an angle of  $20^\circ$  to the VP. Draw the projections of the plane and find its inclination with the HP.
3. ABCDE is a regular pentagonal plate of 40 mm sides, has its corner A on the HP the plate is inclined at  $30^\circ$  to the HP such that the side CD is parallel to both the reference planes. Draw the projections of plane.
4. A regular hexagonal plane of 30 mm sides has one of its corner on the HP. The surface of the plane is inclined at  $30^\circ$  to the HP. Draw the projection of the plane when diagonal passing through the corner on HP makes an angle of  $45^\circ$  to the VP.

