ASSIGNMENT-3.1

PROJECTION OF PLANES

1. A Square Plane ABCD of side 30mm is Parallel to H.P and 20mm away from it. Draw the projections of the plane when one of its sides is Perpendicular to V.P.

2. A Square Plane ABCD of side 30mm is Parallel to H.P and 20mm away from it. Draw the projections of the plane when one of its sides Inclined at 30^0 to V.P.

3. A Rectangular Plane ABCD of 50 x 30 mm is Parallel to H.P and 20 mm away from it. Draw the projections of the plane, when one of its
   i. Longer side is perpendicular to V.P
   ii. Longer side is Parallel to V.P
   iii. Longer side is inclined at 30^0 to V.P
   iv. Shorter side is inclined at 30^0 to V.P

4. A Regular pentagon of 25mm side is parallel to H.P and Perpendicular to V.P. The plane is 15 mm above H.P and an edge of it lies on V.P. Draw its projections.

5. An Equilateral triangular plane ABC of side 40 mm has its plane parallel to V.P and 20mm away from it. Draw the projections of the plane when one of its sides is
   i. Perpendicular to H.P
   ii. Parallel to H.P
   iii. Inclined at 45^0 to H.P

6. A Rectangle ABCD of side 40 x 25 mm has a corner A 10 mm above H.P and 15 mm infront of V.P, All the sides of Rectangle are equally inclined to H.P and Parallel to V.P. Draw its projections.

7. An Equilateral Triangle ABC of 40 mm side is parallel to and 30mm infront of V, P. Its base AB is parallel to and 65mm above H.P. Draw the projections of the triangle when the corner C is nearer to the H.P.

8. A regular pentagon of 25 mm side has one side on the ground. Its plane is inclined 45^0 to the H.P and perpendicular to the V.P Draw its projections.

9. A regular Hexagon of 25 mm side has one corner on the ground. Its plane is inclined 45^0 to the H.P and perpendicular to the V.P. Draw its projections.

10. Draw the projections of a circle of 5cm diameter having its plane vertical and inclined at 30^0 to V.P. Its centre is 3 cm above Hp and 2 cm infront of V.P.

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 square ABCD of 50mm 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.

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. Draw the projections of a regular hexagon of 25mm side having one of its sides in the V.P and inclined at 45^0 to H.P and its surface making an angle of 30^0 with V.P.