GEETHANJALI INSTITUTE OF SCIENCE AND TECHNOLOGY NELLORE

ENGINEERING DRAWING – UNIT 2(Projection of Planes)

1– CSE–C & CS

1	A square plane ABCD of side 30 mm is parallel to H.P and 20 mm away from it. Draw the projections of the plane, when two of its sides are (i) parallel to V.P (ii) inclined 30^0 to V.P
2	An equilateral triangle plane ABC of side 40 mm has its plane parallel to V.P and 20 mm 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 and (iii) inclined at 45^0 to H.P
3	A pentagonal plate of 35 mm side is perpendicular to V.P and parallel to H.P. One of its edges is perpendicular to V.P. Draw its projections.
4	Draw the projections of a regular pentagon of 25 mm side with its surface making an angle of 45^0 with H.P. One of the sides of the pentagon is parallel to H.P and 15 mm away from it.
5	A regular hexagonal plane of 30 mm side has a corner at 20 mm away from V.P and 50 mm from H.P. Its surface is inclined at 45^0 to to V.P and perpendicular to H.P. Draw the projections of the plane.
6	A rectangular pale of 50x25 size is perpendicular to both H.P and V.P. The longer edges are parallel to H.P and the nearest one is 20 above it. The shorter edge nearer to V.P is 15 from it. The plane is 50 mm from the profile plane. Draw the projections of the plane.
7	A rectangular ABCD of size 40 X 25, has the corner A 10 above H.P and 15 in front of V.P. All the sides of the rectangle are equally inclined to H.P. and parallel to V.P . Draw its projections
8	A regular pentagon of side 25 is parallel to H.P and perpendicular to V.P. The plane is 15 above H.P and edge of it lies on V.P. Draw its projections.
9	A regular hexagon of 25 side has its one edge on H.P. The surface of the plane is perpendicular to V.P and inclined at 40^0 to H.P. Draw the three views of the plane .
10	Draw the projections of a circle of 60 diameter resting on V.P on a point on the circumference. The plane is inclined at 45^0 to V.P and perpendicular to H.P. The centre of the plane is 40 above H.P
11	A circular plate of 60 diameter has a hexagonal hole of 20 side centrally punched. Draw the projections of the plate.resting on H.P on a point with its surface inclined at 30^0 to H.P. Any two parallel sides of the hexagonal hole are perpendicular to V.P. draw the projections of the plate.

| 12 | The top view of a plane object is a regular hexagon of side 40, with a central hole of 30 diameter an with two sides of the hexagon parallel to xy. when the surface of the object is inclined at 45^0 to H.P and with a on H.P. Determine the true shape of the object. |

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