

ENGINEERING DRAWING

(EEE)

Time: 3 hours

Max Marks: 70

Answer all **five** units (5 x 14 = 70 Marks)

UNIT-I

1. Construct a Parabola where the distance of the focus from the directrix is 60 mm. Give any two applications of Parabola.

OR

2. Draw an epi-cycloid, given the radius 'r' of the generating circle = 30 mm and the radius 'R' of the directing circle = 100 mm.

UNIT-II

3. (a) Point A is 40 mm above HP and 60 mm in front of VP. Draw its front and top view.
(b) A Point B is 30 mm above HP and 40 mm behind VP. Draw its projection.

OR

4. Line AB 40 mm long is parallel to VP and inclined at an angle of 30° to HP. The end A is 15 mm above HP and 20 mm in front of VP. Draw the projections of the line.

UNIT-III

5. Draw the front view, top view and side view of a square lamina of side 40mm. The surface of the lamina is inclined at 30° to HP and perpendicular to VP.

OR

6. Draw the projections for hexagonal plane of side 30mm its surface is inclined at 45° to VP and perpendicular to HP, with the edge parallel to HP.

UNIT-IV

7. An equilateral triangular prism 20 mm side of base and 50 mm long rests with one of its shorter edges on HP such that the rectangular face containing the edge on which the prism rests is inclined at 30° to HP. The edge on which prism rests is perpendicular to VP. Draw its projections.

OR

8. Draw the top and front views of a rectangular pyramid of sides of base 40x 50 mm and height 70 mm when it lies on one of its larger triangular faces on HP

UNIT-V

9. Draw the isometric view of a pentagonal prism of base 60 mm side, axis 100 mm long and resting on its base with a vertical face perpendicular to VP.

OR

10. Draw the isometric view of square prism with a side of base 30 mm and axis 50 mm long when the axis is (a) vertical and (b) horizontal