

Code: 4G513

B.Tech. I Year Supplementary Examinations August 2021

Engineering Drawing

(Common to EEE, ECE, CSE & IT)

Max. Marks: 70

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 14 = 70 Marks)

UNIT-I

1. The distance between two fixed points is 100mm. a point moves in a plane through these two points, such that the sum of its distances from these two fixed points is always 140mm. Trace the path of the point. Draw a tangent and a normal to the curve at a point on it at a distance of 45mm from one of the fixed points.

OR

2. Draw an epicycloid when the directing and generating circles are each 50mm dia. Draw a tangent and a normal to the curve at a point on it 60mm. from the centre of the directing circle.

UNIT-II

3. One end of a line 75mm long is 20mm above H.P. and 25mm in front of V.P. The line is inclined at 30° to H.P. and the top view makes an angle of 45° with XY. Draw the projections of the line and find its true inclination with V.P.

OR

4. A line AB is 75mm long. A is 50mm in front of V.P. and 15mm above H.P. B is 15mm in front of V.P. Top view of AB is 50mm long. Draw its projections and determine its inclinations with reference planes.

UNIT-III

5. Draw the projections of a regular hexagon of 30mm side, having one of its sides in the H.P. but inclined at 60° to V.P., and its surface making an angle of 45° with H.P.

OR

6. The top view of a plate, the surface of which is perpendicular to V.P. and inclined at 60° to H.P., is a circle of 60mm dia. Determine its true shape.

UNIT-IV

7. A hexagonal prism, base 35mm side and axis 60mm long is resting on one of its base edges in the H.P., inclined at 30° to V.P. and the axis inclined at 45° to H.P. Draw its projections.

OR

8. Draw the projections of a cone, 50mm base dia and 60mm long axis, having one of its generators in the V.P. inclined at 30° to H.P., the apex being in H.P.

UNIT-V

9. Draw the isometric view of the frustum of the hexagonal pyramid, base 50mm long edges, top 25mm long edges & height 50mm.

OR

10. Draw the front view, side view and top view of the figure.


