

Code: EC2T6

**I B. Tech - II Semester – Regular Examinations - April 2016**

**ENGINEERING DRAWING  
(ELECTRONICS & COMMUNICATION ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

Answer any *FIVE* questions. All questions carry equal marks

$$5 \times 14 = 70 \text{ M}$$

1.

a) Construct a diagonal scale of R.F. = 1 : 32,00,000 to show kilometers and long enough to measure up to 400 km. Show distances of 257 km and 333 km on your scale. 7 M

b) A plot of ground is in the shape of a rectangle 110 m x 50 m. Inscribe an elliptical lawn in it. 7 M

2. The asymptotes of a hyperbola make  $80^\circ$  with each other. A point P on curve is at a distance of 30 mm from the horizontal asymptote and 45 mm from the inclined asymptote when measured horizontally. Plot the hyperbola. Draw a tangent and normal at any point R on the curve.

14 M

3.

a) A line MN 55 mm long lies in the H.P. and 48 mm in front of V.P. Draw its projections. 4 M

- b) A line CD 58 mm long is lying on both H.P. and V.P. Draw its projections. 4 M
- c) A line CD 25 mm long is parallel to V.P. and perpendicular to H.P. Point C is 45 mm above H.P. and 15 mm in front of V.P. Draw its projections. 6 M
4. Draw the projections of a regular hexagon of 25mm side, having one of its sides in the H.P & inclined at  $60^{\circ}$  to the V.P, & its surface making an angle of  $45^{\circ}$  with the H.P. 14 M
5. A hexagonal prism, base 30mm side & axis 75mm long, has an edge of the base parallel to the HP and inclined at  $45^{\circ}$  to the V.P. Its axis makes an angle of  $60^{\circ}$  with the H.P. Draw its projections. 14 M
6. A pentagonal pyramid has its base on the H.P & the edge of the base nearer the V.P, parallel to it. A vertical section plane, inclined at  $45^{\circ}$  to V.P, cuts the pyramid at a distance of 6mm from the axis. Draw the top view, sectional front view. Base of the pyramid 30mm side, axis 50mm long. 14 M
7. A cylindrical block of base, 60mm diameter & height 80mm, standing on the H.P with its axis perpendicular to the H.P. Draw its isometric view. 14 M

8. Draw the orthographic projections for the given isometric view in below figure. All dimensions are in mm. 14 M

