

**Code: 13ME1001****ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI  
(AUTONOMOUS)****I B. Tech I Semester Regular Examinations, February 2015****ENGINEERING DRAWING****(Common to CSE & IT)****Time: 3 hours****Max Marks: 70****PART-A****Answer all Questions****[10 X 1 = 10M]**

1.
  - a. What is Diagonal Scale
  - b. What is the importance of Engineering drawing in view of EEE and ECE
  - c. How an Isosceles triangle is formed by using conic sections.
  - d. A 90mm Line is perpendicular to V.P. and parallel to H.P. Draw its Projections.
  - e. Define eccentricity.
  - f. How the Cylinder is formed.
  - g. Define 4<sup>th</sup> Quadrant w.r.t H.P. and V.P.
  - h. What is the differences between Isometric view and Isometric Projection.
  - i. What is an Orthographic Projection
  - j. How you identify hidden edges when a solid is inclined to both the planes

**PART – B****Answer one Question from Each Unit****[5 X 12 = 60M]****Unit-I**

2. The distance between two towns is 250 km and is represented by a line of length 50mm on a map. Construct a scale to read 600 km and indicate a distance of 530 km on it.

**(OR)**

3. Construct an ellipse whose major axis is 120mm and minor axis is 80mm.

**Unit-II**

4. Draw the Projections of the Following Points

- (a) Point A is 40mm below HP and 22mm behind VP
- (b.) Point B is 35 mm below HP and in VP
- (c.) Point C is 20 mm behind VP and 20mm above HP
- (d.) Point D is in HP and VP

**(OR)**

5.
  - a. A 90mm long line parallel to and 20mm in front of VP its one end 10mm above HP and the other end 50mm above HP. Draw its projections and find its inclination with HP. 6M
  - b. The top view of 80mm long line measures 55mm. The line is in VP. Its one end is 15mm above HP. Draw its projections. 6M

## Unit-III

6. A plate is of the shape of an isosceles triangle of base 60 and altitude 80. Draw the projections of the plate, when it is placed such that the front view appears as an equilateral triangle of sides 60 each and one of the plate edges makes 30 degrees with the HP.

(OR)

7. A circle of 50mm diameter is resting on the ground on a point with its plane inclined at 30 degrees to the ground. Draw the projections of the circle when the top view of the diameter through the resting point makes an angle of 45 degrees with XY and

## Unit-IV

8. A hexagonal pyramid of 25mm side of base and 60mm axis is resting on one of its triangular faces on HP. Draw the projections of the pyramid when its edge of that base is inclined at  $60^\circ$  with VP.

(OR)

9. A cube of edge 35mm is resting on H.P on one of its corners with a solid diagonal parallel to HP perpendicular to V.P. Draw the projections of the cube..

## Unit-V

10. A cone of bottom base 40 mm diameter, is placed at the centre of the top base of a Cylinder of dia 40 mm such that the axes of both the solids are coinciding and is vertical. Axis of both Cylinder and Cone is 50 mm . Draw the Projections.

(OR)

11. Draw the Front view, Top view and Side view for the object given below.

