AR13 **Set-01**

Code: 13ME1001

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
I B. Tech I Semester Regular / Supplementary Examinations, December-2015
ENGINEERING DRAWING
(Information Technology)

Time: 3 hours **Max Marks: 70**

PART-A

Answer all questions **[10X1=10M]**

1. a) Define Representative factor?
   b) What is frustum of a solid?
   c) Define oblique cylinder.
   d) What are the different types of engineering scales?
   e) What is directrix?
   f) Differentiate between isometric view and isometric projection.
   g) What is orthographic projection?
   h) What are the different methods of drawing an ellipse?
   i) How will be the invisible features are indicated in orthographic projections?
   j) Differentiate between first and third angle projection.

PART- B

Answer one question from each unit **[5X12=60M]**

Unit - I

2. On a building plan, a line 20 cm long represents a distance of 10 m. Devise a diagonal scale for the plan to read upto 12 m, showing meters, decimeters and centimeters. Show on your scale the lengths 6.48 m and 11 .14 m.

(OR)

3. Draw an ellipse with its major axis equal to 100 mm and the minor axis equal to 70 mm. Use oblong method.

Unit - II

4. The top view of a 75 mm long line measures 55 mm. The line is in the V.P., its one end being 25 mm above the H.P. Draw its projections.

(OR)

5. A vertical line *AB,* 75 mm long, has its end *A* in the H.P. and 25 mm in front of the V.P. A line *AC,* 100 mm long, is in the H.P and parallel to the V.P. Draw the projections of the line joining *B* and *C*, and determine its inclination with the H.P.

Unit - III

6. A regular hexagon of 40 mm side has a corner in the H.P. Its surface is inclinedat 45^0 to the H.P. and the top view of the diagonal through the corner which is in the H.P. makes an angle of 60^0 with the V.P. Draw its projections.

(OR)

7. A plate having shape of an isosceles triangle has base 50 mm long and altitude 70 mm. It is so placed that in the front view it is seen as an equilateral triangle of 50 mm sides and one side inclined at 45^0 to xy. Draw its top view.

Unit – IV

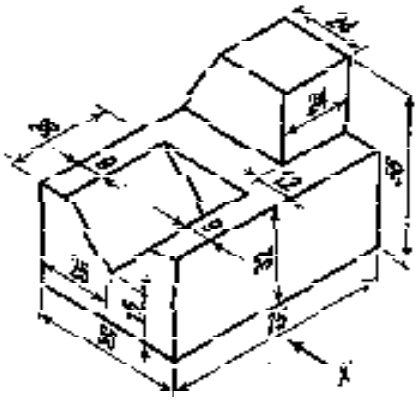
8. A square prism, base on the H.P., a side of the base inclined at 30^0 to the V.P. and the axis 50 mm in front of the V.P.

(OR)

9. A cylinder, axis perpendicular to the V.P. and 40 mm above the H.P., one end 20 mm in front of the V.P.

Unit - V

10. Draw the front view, top view and left hand side view of the block shown in figure shown below.



(OR)

11. Draw the isometric projection of the block whose orthographic projections are shown in figure below.