AR13

Code: 13ME1001 **SET-2**

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

ENGINEERING DRAWING
(Computer Science Engineering)

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

PART-A

Answer all questions **[10 x 1=10M]**

1. a) What do you understand by vernier scale?
   b) List out the methods available for the construction of hyperbola.
   c) What is the difference between first angle projection and third angle projection?
   d) Discuss the significance of projections.
   e) How will you classify engineering scales.
   f) Define oblique projection?
   g) Compare the frustum of solid with that of truncated solid?
   h) Define solid of revolution.
   i) What is orthographic projection and why it is called so?
   j) What is the different between isometric view and isometric projection.

PART- B

Answer one question from each unit **[5 x 12=60M]**

UNIT – I

2. a) Draw in 7mm height the alphabets in lower case letters in single stroke vertical and sloping style.
   b) Construct a regular pentagon about a circle of 100 mm diameter.

(OR)

3. Draw the ellipse by using concentric circle method of major axis is 120mm and minor axis is 80mm.

UNIT - II

4. The distance between the end projectors of two points P and Q is 80mm. The point P is 20mm above the HP and 35mm behind the VP. Point Q is 40mm below the HP and 20mm in front of the VP. Draw the lines joining their top views and front views.

(OR)

5. The end A of an 80mm long line AB is 10mm away from both the reference planes and lies in the first quadrant. AB is inclined at 60^o with the HP while its top view makes an angle of 45^o with the HP. Draw its projections if the end B lies in the third quadrant. Also, determine the inclination of the line with the VP.

UNIT - III

6. A thin hexagonal piece of metal sheet with a 40mm side has a hole with a 40mm diameter punched centrally. It is placed on a corner in the HP. Its surface is inclined at 30^o to the HP and the top view of the diagonal through the corner in the HP makes an angle 45^o with the VP. Draw its projections.

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7. Draw the projections of a regular hexagon of 25mm side, having one of its sides in the H.P. and inclined at 60^o to the V.P, and its surface making an angle of 45^o with the H.P.

UNIT - IV

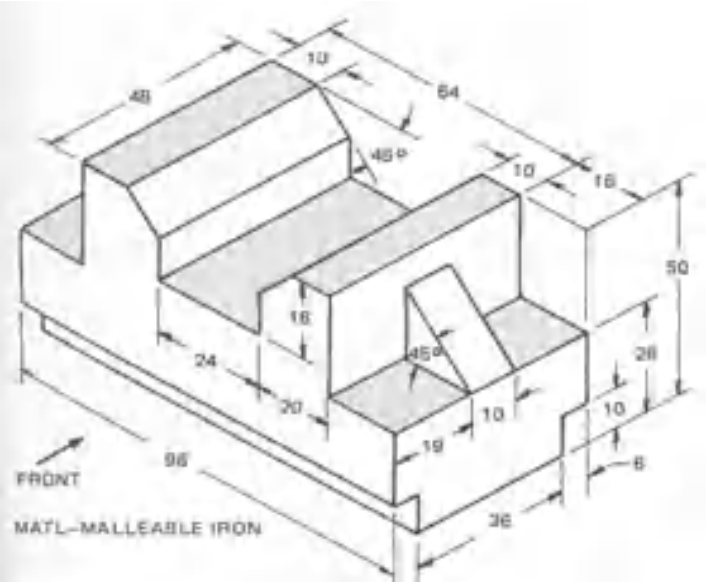
8. Draw the projections of the cone, base 50 mm diameter and axis 75 mm long, when the axis is parallel to VP and resting on a generator in HP.

(OR)

9. One of the body diagonals of a cube of 45 mm edge is parallel to the H.P. and inclined at 45^o to the V.P. Draw the front view and the top view of the cube

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.