ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
I B. Tech II Semester Regular / Supplementary Examinations, July, 2015
ENGINEERING DRAWING
(Electrical & Electronics Engineering)

Time: 3 hours Max Marks: 70

PART- A

Answer all questions [10 x 1=10M]

1. a) What is meant by eccentricity?
   b) What is the proportions of an arrow head----
   c) The angle at any corner of a pentagon is -------
   d) When measurements are desired in three units ----- scale is used.
   e) Name the solids of revolution.
   f) Draw the symbol for first angle projection.
   g) A point 30 mm above xy line is the top view of point P. The front view 10 mm below the top view state in which quadrant the point is.
   h) If the surface of the plane is inclined to the VP. And an edge is parallel to VP, what is its initial position--------
   i) In a right regular prisms, the lateral faces are------
   j) Isometric lengths are ----- that of the true length.

PART – B

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

UNIT – I

2. On a map, the distance between two is 15 cm. the real distance between then is 20 km. draw a diagonal scale of this map and shown on it, a distance of 16.7 km.

(OR)

3. The foci of an ellipse are 80mm apart and the minor axis is 55mm long. Determine the length of the major axis and draw the ellipse by concentric-circle method. Draw a curve parallel to the ellipse and 20mm away from it.

UNIT - II

4. a) The point A is on the HP and 40 mm in front of VP. another point B is on the VP and below HP. The line joining their front views makes an angle of 45^0 with xy. While the line joining their top views makes an angle of 30^0. Fine the distance of point B from the HP.

b) A point P is 15 mm above the H.P. and 20 mm in front of the V.P. Another point Q is 25 mm behind the V.P. and 40 mm below the H.P. draw projections of P and Q keeping the distance between their projectors equal to 90 mm. Draw straight lines joining (i) their top views and (ii) their front views

(OR)

5. a) A line PQ, 90 mm long, is in the HP. And makes an angle of 30^0 with the VP. Its end P is 25 mm in front of the VP. Draw its projections.

   b) The length of the top view of a line parallel to the V.P. and inclined at 45^0 to the H.P. is 5 cm. One end of the line is 1.2 cm above the H.P. and 2.5 cm in front of the V.P. Draw the projections of the line and determines its true length.

UNIT-III

6. a) A square ABCD of 40 mm side has a corner on the HP and 20 mm in front of the VP. All the sides of the square are equally inclined to the HP. And parallel to the VP. Draw its projections.

   b) Draw the projections of a circle of 5cm diameter, having its plane vertical and inclined at 30^0 to the V.P. its center is 3cm above the H.P and 2cm in front of the V.P.

(OR)

7. A thin 30^0-60^0 set square has its longest edge (60 mm) in V.P. and inclined at 30^0 to the HP. Its surface makes an angle of 45^0 with the V.P. Draw its projections.

UNIT – IV

8. Draw the projections of a cylinder 75 mm diameter and 100 mm long, lying on the ground with its axis inclined at 30^0 to the VP. and parallel to the ground

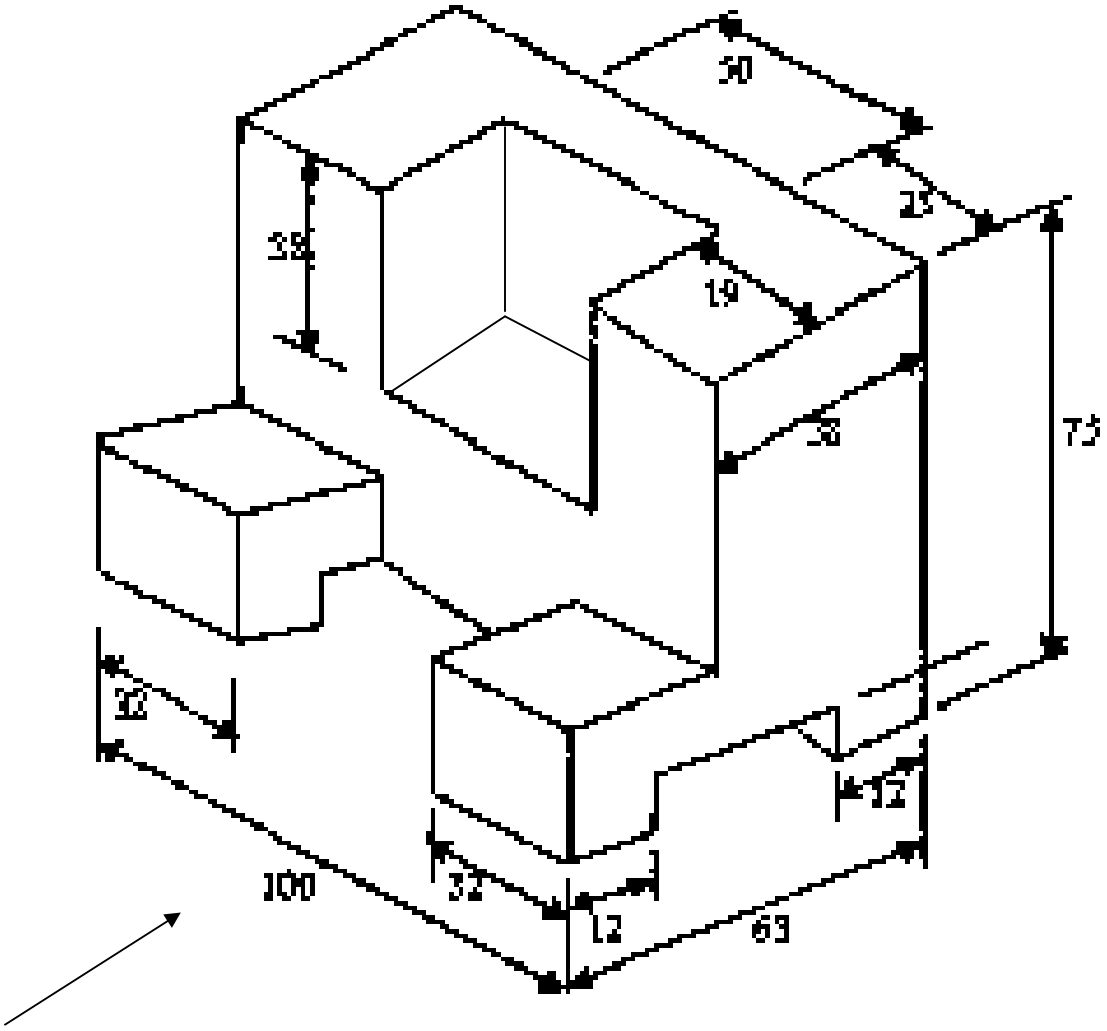
(OR)

9. A hexagonal pyramid, base 25 mm side and axis 50 mm long, has an edge of its base on the ground. Its axis is inclined at 30^0 to the ground and parallel to the VP. Draw its projections.

2-4

UNIT – V

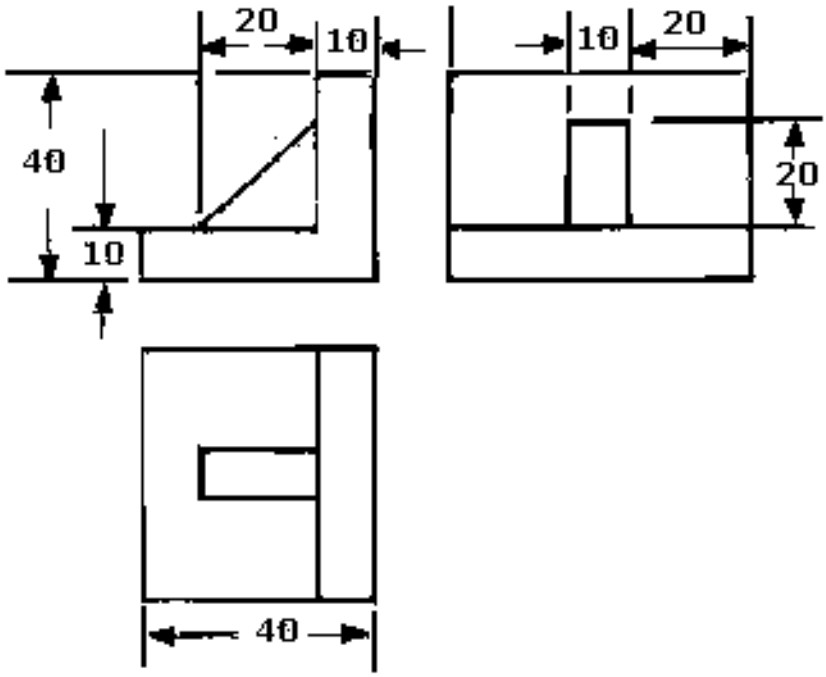
10. Draw the front view, top view and side view of the block shown in figure below



(OR)

3-4

11. Draw the isometric view of the ribbed angle plate, Shown in figure All dimensions are in mm..



4-4

*****