I/IV B.E./B.Tech. DEGREE EXAMINATION

First and Second Semester

ENGINEERING GRAPHICS-2-2012

(Common to all branches)

(Effective from the admitted batch of 2006-2007)

Time: Three hours Maximum 70 marks

1. Part A is compulsory, answer any FOUR questions from Part B.
2. Part A is to be answered on the main answer book and Part B on the drawing sheet.
3. All questions carry equal marks.
4. Assume the missing data if any, suitably.

PART - A

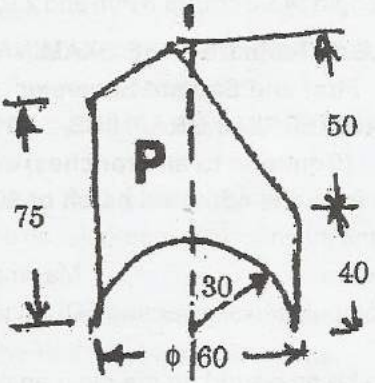
1. a) What is R.F. ? Explain.
   b) What is cycloid? Explain.
   c) What is conic section?
   d) Draw the projections of point D, 25 mm below the H.P. and 25 mm behind the V.P.
   e) List-out the six possible orthographic projections that may be obtained for an object in space, specifying their relative positions.
   f) What is the difference between on isometric scale and an isometric view ?
   g) What is perspective projection?

PART - B

2. Draw a diagonal scale of RF = 3/100. Showing metres, decimeters and centimeters and to measure upto 5 metres. Show the length of 3.69 meters on it.
3. Draw an involute of a hexagon of side 25 mm.
4. A pentagonal prism of base side 30 mm in front of V.P. Its top view is 75 mm long and front view is 60 mm long. Draw the projections of the line and determine its inclination with H.P. and V.P. and find traces.
5. A pentagonal prism of base side 30 mm and axial height 60 mm has one of its rectangular faces in the H.P. with the axis inclined at 45o to the V.P. Draw the projections of the solid.
6. A cone has a base of 50 mm diameter and its axis is 70 mm long. It is resting on its base on H.P. It is cut by two section planes.
   a) One section plane inclined at 45o to H.P. and perpendicular to V.P.
   b) Another section plane parallel to H.P. and perpendicular to V.P.

   Both the section planes passes through the midpoint of the axis of cone. Draw the sectional plan, elevation and true shape of the sections adjoining each other.

7. figure 1 shows front view of cut cylinder with base diameter 60 mm, with its axis parallel to V.P. and perpendicular to H.P. Draw the development of the lateral surface of the part P of the cylinder.



8. Draw the Front View and Top View of the block shown in Fig. 2. All dimensions are in mm.

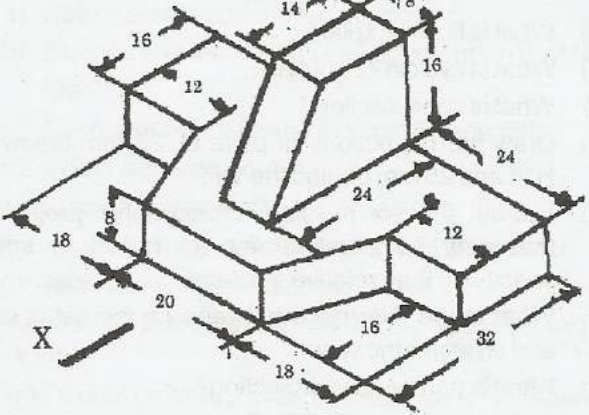


Fig. 2