Code: R7100208

R7

B.Tech I Year (R07) Supplementary Examinations, December 2012

ENGINEERING DRAWING

(Common to EEE, ECE, CSE, EIE, IT, E.Con.E, ECC, CSS and BT)

Time: 3 hours Max Marks: 80

Answer any FIVE questions

All questions carry equal marks

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1 (a) Inscribe a pentagon in a circle of 50 mm diameter.

(b) Draw a rectangle having its sides 125 mm and 75 mm long. Inscribe two parabolas in it with their axis bisecting each other.

2 A circle of 500 mm diameter rolls on the circumference of another circle of 175 mm diameter and outside it. Trace the locus of a point on the circumference of the rolling circle for one complete revolution. Name the curve. Draw a tangent and a normal to the curve at a point 125 mm from the center of the directing circle.

3 (a) A point A is 2.5 cm above the H.P. and 3 cm in front of the V.P. Draws its projections.

(b) A point A is 2 cm below the H.P. and 4 cm behind the V.P. Draw its projections.

(c) Two points A and B are in the H.P. The point A is 30 mm in front of the V.P, while B is behind the V.P. The distance between their projectors is 75 mm and the line joining their top views makes an angle of 45^0 with xy. Find the distance of the point B form the V.P.

4 The distance between the projectors of two end of straight line is 60 mm. One end is 15 mm above HP and 50 mm in front of VP. The other end is 60 mm above HP and 10 mm in front of VP. Draw the projections and find true length of the line.

5 A regular hexagon of 40 mm side has a corner in the HP. Its surface is inclined at 45^0 to HP and the top view of the diagonal through the corner which is in the HP makes an angle of 60^0 with the VP. Draw its projections.

6 (a) Draw the projections of a triangular prism, base 40 mm side and axis 50 mm long, resting on one of its bases on the H.P. with a vertical face perpendicular to the V.P.

(b) A cube of 50 mm long edges is resting on the H.P, with its vertical faces equally inclined to the V.P. Draw its projections.

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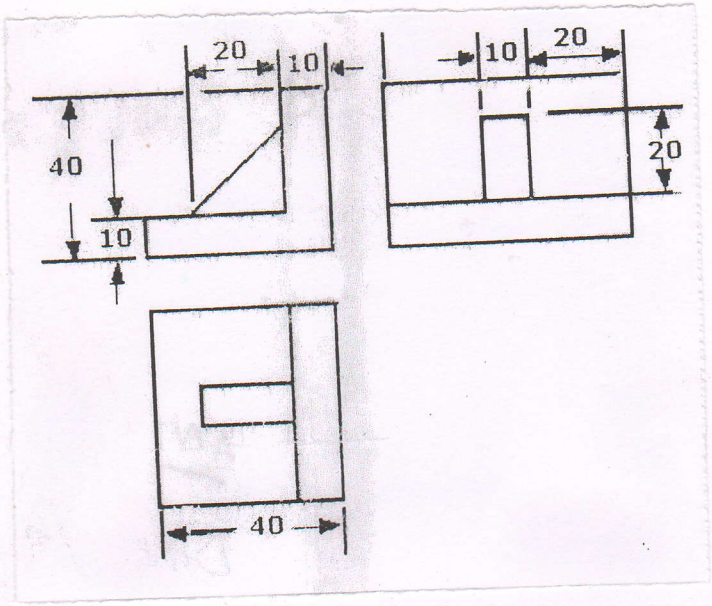
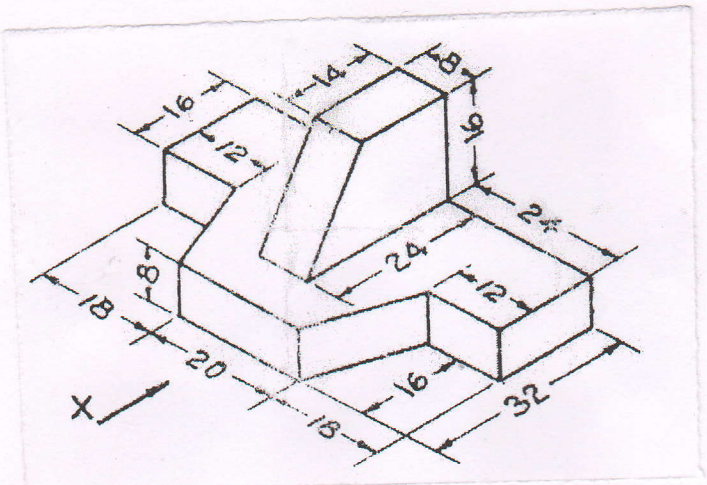
7 Draw the isometric view of the ribbed angle plate, shown in fig below (All dimensions are in mm).



8 Draw the following views of the block shown in figure. All dimensions are in mm.

(a) Front view.
(b) Top view.
(c) Both side views.



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