

I B. Tech II Semester Supplementary Examinations, April/May - 2018**ENGINEERING DRAWING**

(Com. to All Branches)

Time: 3 hours

Max. Marks: 75

Answer any **FIVE** Questions
All Questions carry **Equal** Marks

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1. a) Two points A and B are 100mm apart. A point C is 75mm from A and 60mm from B. Draw an ellipse passing through A, B and C. (8M)
- b) The distance between two fixed points is 90mm. A point P moves such that the difference of its distance from the two fixed points is always equal to 60mm. Draw the loci of P. (7M)
2. a) A point A is 20mm above H.P. and in the first quadrant. Its shortest distance from the reference line XY is 40mm. Draw the projections of the point and determine its distance from V.P. (7M)
- b) A point A is 2.5 cm above the H.P. and 3 cm in front of the V.P. Draw its Projections. (4M)
- c) A point A is 2 cm below the H.P. and 4 cm behind the V.P. Draw its Projections. (4M)
3. a) A line of 100mm long, makes an angle of  $35^{\circ}$  with H.P. and  $45^{\circ}$  with V.P. Its midpoint is 20mm above H.P. and 15mm in front of V.P. Draw the projections of the line. (8M)
- b) The length of the top view of a line is 40mm and the length of the front view is 50mm, the top view is inclined at  $30^{\circ}$  to xy. Draw the projections of the line, assuming that its one end is situated on H.P. and 25mm in front of V.P. Determine the inclinations of the line with H.P and V.P. (7M)
4. A square ABCD of 50mm side has its corner A in the H.P, its diagonal AC inclined at  $30^{\circ}$  to the H.P. and the diagonal BD inclined at  $45^{\circ}$  to the V.P. and parallel to the H.P. Draw its projections. (15M)
5. Draw the projections of a cube of 25mm long edges resting on the H.P. on one of its corners with a solid diagonal perpendicular to the V.P. (15M)
6. A regular pentagon of 30mm side, is resting on one of its edges on H.P. which is inclined at  $45^{\circ}$  to V.P. Its surface is inclined at  $30^{\circ}$  to H.P. Draw its projections. (15M)

7. Draw the isometric view of the ribbed angle plate, shown in figure 7. All (15M) dimensions are in mm.

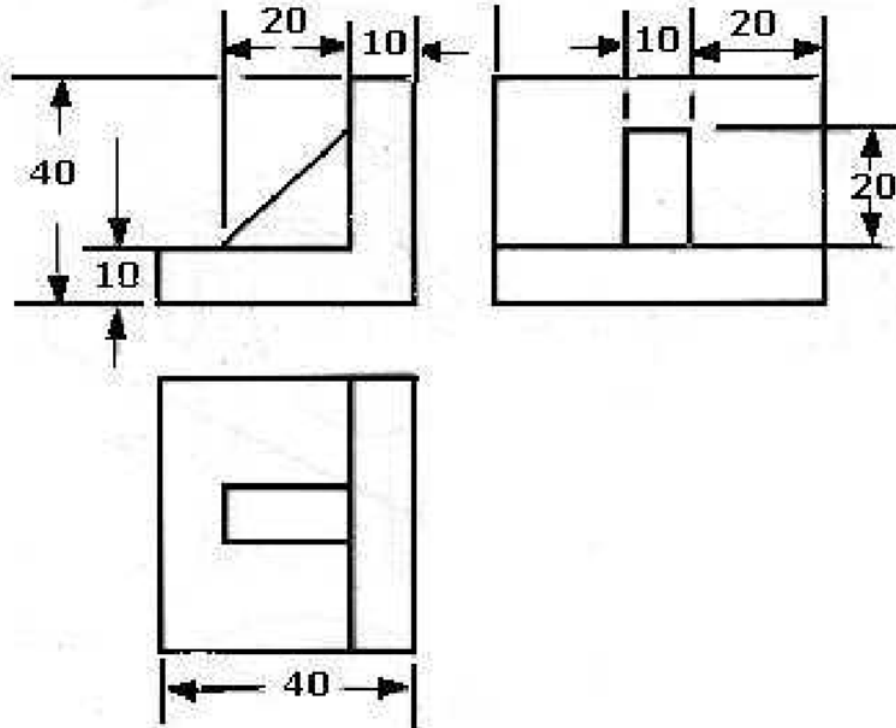


Figure-7

8. Draw the 3-orthographic views of the block shown in figure 8. All dimensions are (15M) in mm.

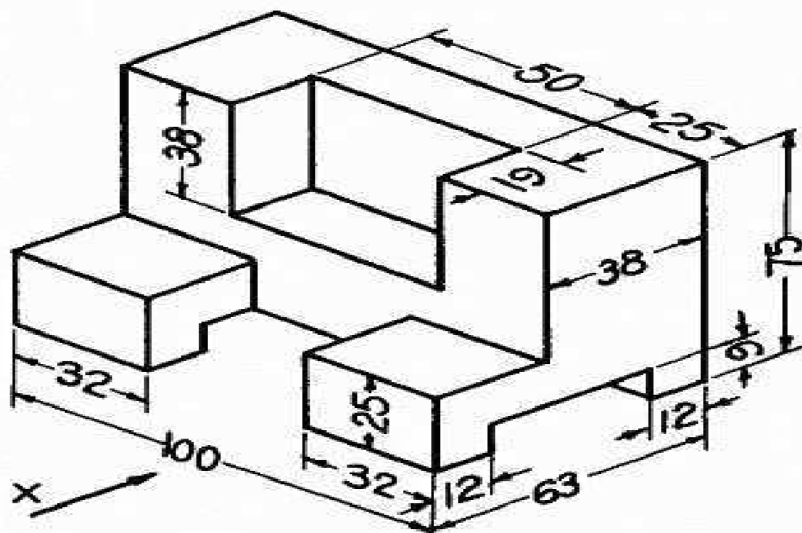


Figure-8