

I B. Tech II Semester Supplementary Examinations, Nov/Dec - 2019

ENGINEERING DRAWING
(Com. to CE, ME and Textile Engg)

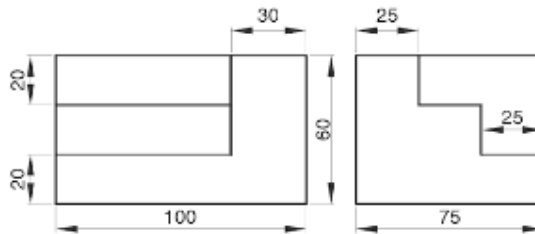
Time: 3 hours

Max. Marks: 70

- Note: 1. Question paper consists of two parts (**Part-A** and **Part-B**)
2. Answering the question in **Part-A** is Compulsory
3. Answer any **THREE** Questions from **Part-B**

PART -A

1. a) Draw a pentagon of 30 mm side such that one of its edges is vertical. (4M)
b) Construct the isometric view from given orthographic views. (10M)



- c) A Pentagon of side 30mm, has one corner on HP. Its plane is inclined at 65° to VP (8M)
and perpendicular to HP. Draw its projections.

PART -B

2. a) Construct a vernier scale of 1:40,000 showing kilometers, hectometers and decameters and long enough to measure 5 km. Mark distances of 2.31 km and 3.92 km on the scale. (8M)
b) An elliptical fish pond of largest size is to be constructed inside a rectangular plot of 150 m \times 70 m. Draw the boundary of the fish pond. (8M)
3. a) A point M is lying in the fourth quadrant. The shortest distance of the point from intersection of HP and VP is 55 mm. If the point is 30mm behind VP, draw the front and top views of the point M. (8M)
b) A line of 90 mm long is parallel to 25 mm above HP. Its two ends are 25 and 50mm in front of VP respectively. Find its inclination with VP. (8M)
4. A 120 mm long line PQ is inclined at 45° to the HP and 30° to the VP. A point m on the line is at a distance of 40 mm from P and its front view is 50 mm above the xy line and the top view is 35 mm below the xy line, Draw its projection. Locate the traces. (16M)
5. A hexagonal lamina of 30 mm side rests with one of its corners on HP, such that the two edges passing through the corner make equal inclinations with HP. The surface of the lamina is inclined at 30° to HP. The diagonal passing through the corner on which the lamina rests, appears to be inclined at 45° to VP. Draw the front and top views of the lamina in its final position. Also determine the true inclination of the diagonal with VP. (16M)

6. Draw projections of the following solids, taking the side of base 35mm and 70mm long: (16M)
(i) A Triangular pyramid base on HP and an edge of the base inclined at 45° to VP and the apex 40 mm from VP.
(ii) A Hexagonal pyramid, base on the HP and a side of the base parallel to and 20mm from VP.
7. Draw the front view, top view and left side view of the block shown in Figure 1. (16M)
All dimensions are in mm.

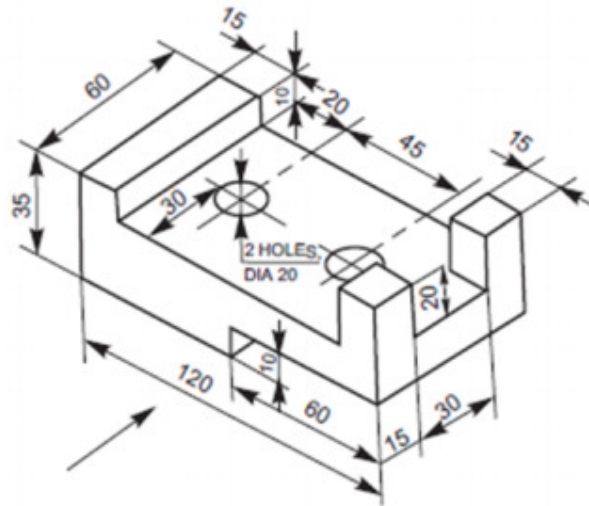


Figure.1