

I B. Tech I Semester Supplementary Examinations, December- 2021
ENGINEERING DRAWING

(Com. to EEE, ECE, EIE, Bio-Tech, E Com E, Agri E)

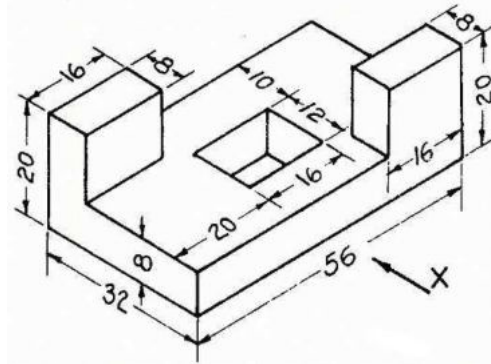
Time: 3 hours

Max. Marks: 70

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

PART -A

1. a) Construct a diagonal scale of RF = 1/50, to read metres, decimetres and centimetres. Mark a distance of 3.85 km on it. (10M)
- b) Draw the Front View, Top view & Both side views of the figures shown below. (12M)
 All dimensions are in mm.



PART -B

2. a) Construct an ellipse by arcs of circles. The major axis of the ellipse is 120mm and the distance between the foci is 108mm. Determine the length of the minor axis. Draw another curve parallel to and 25 mm away from this curve. (10M)
- b) Construct a regular Octagon of side 35mm. (6M)
3. a) Two points A and B are on the H.P. The point A is 30mm in front of the VP, while B is behind the VP The distance between their projectors is 75mm and the line joining their top views makes an angle of 45° with xy. Find the distance of the point B form the VP. (6M)
- b) A line AB is 30 mm long and inclined at 30° to VP and parallel to HP. The end A of the line is 15 mm above HP and 20mm in front of VP. Draw the projections. (5M)
- c) Draw the projections of a 60mm long straight line inclined at 45° to the V.P, in the H.P. and its one end in the V.P (5M)
4. A line AB, 90 mm long, is inclined at 45° to the HP and its top view makes an angle of 60° with the VP. The end A is in the HP and 12 mm in front of the VP. Draw its front view and find its true inclination with the VP. (16M)

5. Draw the projections of a regular hexagon of 25 mm side, having one of its sides in the HP and inclined at 60° to the VP, and its surface making an angle of 45° with the HP. (16M)
6. a) Draw the projections of a cone of base 60 mm diameter and axis 90mm long lying on the HP on one of its generators with the axis parallel to the VP. (10M)
- b) Draw the projections of a triangular prism of base 40 mm side and axis 60 mm long resting on one of its bases on VP with a rectangular face perpendicular to HP. (6M)
7. Two views of a casting are shown in figure. Draw its isometric view. (16M)

