

**I B. Tech II Semester Supplementary Examinations, November - 2021**  
**ENGINEERING DRAWING**  
 (Com. to CE, EEE, Bio-Tech)

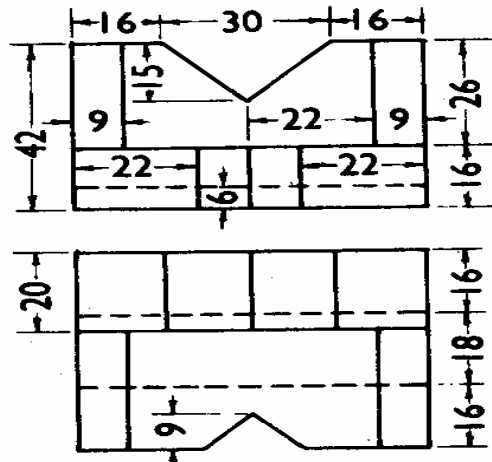
Time: 3 hours

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 **FOUR** Questions from **Part-B**

**PART - A**

1. (a) Two views of a casting are shown in figure. Draw the isometric view of the casting (10M)  
 casting (all dimensions are in mm).



- (b) To inscribe a regular pentagon of side 30mm in a circle. (4M)

**PART - B**

2. (a) Construct an ellipse when the major axis is 120 mm and the distance between the foci is 108 mm. Determine the length of the minor axis. Use arc and circles method. (7M)
- (b) On the plan of a shopping complex, a line 10cm long represents a distance of 5m. Draw a diagonal scale for the plan to read up to 6m showing meters, decimeters and centimeters. Mark the lengths 3.24m and 5.57m. (7M)
3. (a) A point A is situated in the first quadrant. Its shortest distance from the intersection point of HP; VP and auxiliary plane is 60mm and it is equidistant from the principle planes. Draw the projections of the point and determine its distance from the principle planes. (7M)
- (b) The length of the top view of a line parallel to the VP and inclined at  $45^\circ$  to the HP is 50mm. One end of the line is 12mm above the HP and 25mm in front of the VP. Draw the projections of the line and determine its true length. (7M)

4. The top view of a 75mm long line AB measures 65mm, while the length of its front view is 50mm. Its one end A is in the H.P. and 12mm in front of the V.P. Draw the projections of AB and determine its inclinations with the H.P. and the V.P. (14m)
5. A regular hexagonal lamina of 25mm side has a central hole of 20mm diameter. (14M)  
Draw the front and top views when the surface of the lamina is inclined at  $45^\circ$  to HP. A side of lamina is inclined at  $35^\circ$  to VP.
6. Draw the projection of a pentagonal prism, base 20 mm side and axis 50mm long, (14M)  
resting on one of its rectangular faces on the ground with the axis inclined at  $30^\circ$  to the VP.
7. Draw (i) Front View (ii) Side View from the right (iii) Top View as shown in (14M)  
figure.

