

**I B. Tech II Semester Supplementary Examinations, July/August- 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. Draw the isometric view of a hexagonal prism, with side of base 30mm and length of axis 60mm, when its axis is i. Vertical and ii. Horizontal. (14M)

**PART -B**

2. a) Construct a diagonal scale of R.F=1/4000 to show metres and long enough to measure upto 500 metres. Mark a length of 352 meters on it. (7M)  
b) Construct an ellipse when its major axis is 120mm and the distance between the foci is 110mm by arcs of circles method. Determine the length of the minor axis. (7M)
3. a) A point G is 10 mm above HP and 15 mm in front of VP and 12 mm in front of Profile plane. Draw front view, top view and left side view of the point. (6M)  
b) Draw the projections of a 75 mm long line in the following positions. (8M)  
(i) Perpendicular to VP, 25 mm above HP, and its one end is in VP  
(ii) Perpendicular to HP, in VP and its one end is in HP.
4. A line EF of length 70 mm has its end 25 mm above HP and 20 mm in front of VP and its end D is 70 mm above HP and 40 mm in front of VP. Draw its projections and locate the traces. Determine its inclinations with the two planes. (14M)
5. A pentagonal lamina of edges 25mm is resting on HP with one of its corners such that the edge opposite to this corner is 20mm above HP and makes an angle of  $45^{\circ}$  with VP. Draw the top and front views of the lamina in this position. Determine the inclination of the lamina with HP. (14M)
6. Draw the projections of a cone, base 75 mm diameter and axis 100 mm long, lying on the H.P. on one of its generators with the axis parallel to the V.P. (14M)

7. Draw the isometric view of orthographic drawing shown below. (14M)

