

I B. Tech II Semester Supplementary Examinations, March - 2022**ENGINEERING DRAWING**

(Com. to CE, ME, CSE PCE, IT, Chem. E, Aero E, Auto E, Min E, Pet E, Metal E and Textile Engg)

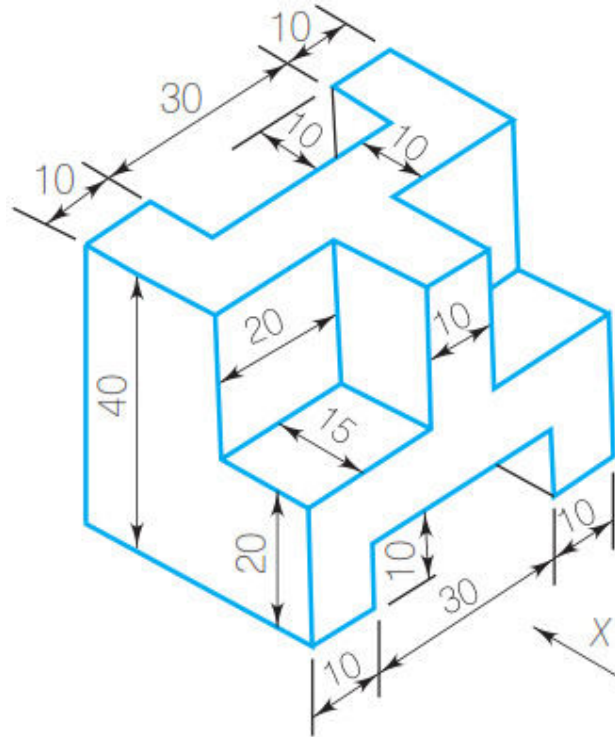
Time: 3 hours

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) Type question her Draw the front view, top view and left side views of a block (16M)
 shown in figure. All dimensions are in mm



- b) A Square of 40mm side is parallel to V.P. perpendicular to H.P. Draw its projections (6M)
 when one of the side is (i) Perpendicular to H.P. (ii) Inclined 45° to H.P.

PART -B

2. a) Draw an ellipse with the major and minor axes of lengths 90 mm and 60 mm (8M)
 respectively. Use the oblong method. Draw a tangent and normal at a point on the
 curve which is at a distance of 20 mm from major axis.
- b) Draw a vernier scale of RF equal to $1/20$ and capable of reading metres, (8M)
 decimetres and centimetres. Show on it the following lengths: i) 1.44 m ii) 2.36

- 3 a) Draw the projections of the following points on the same ground line, keeping the Projectors 25mm apart. (8M)
- (i) Point A, 20 mm above the HP, 25 mm behind the VP
 - (ii) Point B, 25 mm below the HP, 20 mm behind the VP
 - (iii) Point C, 20 mm below the HP, 30 mm in front of the VP
 - (iv) Point D, 20 mm above the HP, 25 mm in front of the VP
- b) A straight line AB of 40 mm length is perpendicular to the HP; its end point A, which is nearer to the HP, is 10 mm above the HP and 15 mm in front of the VP. Draw the projections of the line AB. (4M)
- c) Line AB 50 mm length is parallel to the HP as well as the VP, 25 mm behind the VP and 30 mm below the HP. Draw its projections. (4M)
4. A line CD 80mm long is inclined at an angle of 30° to H.P. and 45° to V.P. The point C is 20mm above H.P. and 30mm in front of V.P. Draw the projections of the straight line. Locate the traces of the line. (16M)
5. A circle of diameter 60 mm has a point A on its circumference on the ground; the diameter AB makes 50° with the HP and 30° with the VP. Draw the projections. (16M)
6. a) Draw the projections of a pentagonal prism, base 25mm side and axis 50mm long, resting on one of its rectangular faces on the H.P., with the axis inclined at 60° to the V.P. (10M)
- b) A triangular pyramid with the edge of the base 30 mm and the length of the axis 35 mm is resting on its base. It also has an edge of the base parallel to the VP and 20 mm from it. Draw the projections of the pyramid, if the base is 20 mm above the HP. (6M)
- 7 Draw the isometric view of the orthographic projections given below (16M)

