

I B. Tech II Semester Supplementary Examinations, April/May - 2019
ENGINEERING DRAWING
 (Com. to CE, ME & 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**

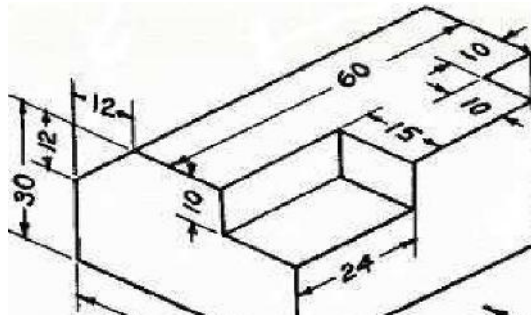
PART -A

1. a) Draw the projections of the following points on the same ground line, keeping the Projectors 20mm apart. (3M)
 (a) Point E, 15mm above the HP and 50mm behind the VP.
 (b) Point F, 40mm below the HP and 25mm in front of the VP.
- b) Construct a regular pentagon of side 30mm. (4M)
- c) Draw the projections of a 65mm long straight line, in the following position: Perpendicular to the HP in the VP and its one end in the HP. (4M)
- d) Draw the projections of a cone of base diameter 25mm and 50mm long resting on VP on its apex with axis perpendicular to and 30mm above the HP. (4M)
- e) Draw the projections of a cylinder of diameter 30mm and 50mm long resting on HP on its generator parallel to both the HP and VP and 40mm in front of the VP. (3M)
- f) An isosceles triangle of base 30mm and altitude 50mm has its base in the VP. The surface of the plane is inclined at 45° to the VP and perpendicular to HP. Draw its projections. (4M)

PART -B

2. a) Construct an ellipse of 120 mm major axis and 80 mm minor axis using concentric circle methods. (8M)
- b) Construct a diagonal scale R.F=1:32,00,000 to show kilometers and long enough to measure upto 400km. Show distance 257km on your scale. (8M)
3. a) A point P is 20mm below HP and lies in the third quadrant. Its shortest distance from xy is 40mm. Draw its projections. (8M)
- b) A line EF 40mm long is in the VP and inclined to the HP. The top view measures 30mm. The end E is 10mm above the HP. Draw the projections of the line. Determine its inclination with the HP. (8M)
4. An equilateral triangle ABC having side length as 50 mm is suspended from a point O on the side AB 15mm from A in such a way that the plane of the triangle makes an angle of 60° with the VP. The point O is 20 mm below the HP and 40 mm behind the VP. Draw the projections of the triangle. (16M)
5. A vertical cylinder of 80mm diameter is completely penetrated by another cylinder of 60mm diameter their axis bisecting each other at right angles. Draw their projections showing curves of penetration, assuming the axis of the penetrating cylinder to be parallel to the V.P. (16M)

6. Draw the front view, top view and left side view of the object shown in figure. (All dimensions are in mm). (16M)



7. Draw the perspective view of a square pyramid of base 10cm side and height of the apex 12cm. The nearest edge of the base is parallel to and 3cm behind the picture plane. The station point is situated at a distance of 30cm from the picture plane, 6cm above the ground plane, and 20cm to the right of the apex. (16M)

