

I B. Tech I Semester Supplementary Examinations, Nov/Dec - 2017**ENGINEERING DRAWING**

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

Time: 3 hours

Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)2. Answer **ALL** the question in **Part-A**3. Answer any **THREE** Questions from **Part-B****PART -A**

1. a) Divide a Straight line of 70mm into 9 equal parts. (3M)
- b) Draw the projections of the following points on the same ground line, keeping the projectors 25mm apart. (4M)
Point C, 15mm above the HP and in the VP.
Point D, 15mm above the HP and 50mm behind the VP.
- c) Draw the projections of a 70mm long straight line, when it is perpendicular to the HP, 20mm in front of the VP and its one end is 15mm above the HP. (4M)
- d) An equilateral triangle of 50mm side is parallel to V.P. perpendicular to H.P. (4M)
Draw its projections when one of the side is inclined 45° to H.P.
- e) A cube of 40mm side rests with one of its square faces on the HP. such that one of its vertical faces is equally inclined to the VP. Draw its projections. (4M)
- f) Draw the isometric view of a circle of diameter 50 mm when its surface is in vertical plane. (3M)

PART -B

2. a) The foci of an ellipse are 80mm apart and the minor axis is 55mm long. Determine the length of the major axis and draw the ellipse by arcs of circles method. (8M)
- b) Construct a diagonal scale with RF=1: 4000 showing meters, decimeters and centimeters and long enough to measure up to 500 meters. (8M)
3. a) A point 25mm above xy line is the plan view of two points P and Q. The elevation of P is 45mm above the HP, while that of the point Q is 35mm below the HP. Draw the projections of the points and states their position with reference to the principal planes and the quadrant in which they lie. (8M)
- b) A line MN 50mm long is parallel to VP and inclined at 30° to HP. The end M is 20mm above HP and 10mm in front of VP. Draw the projections of the line. (8M)
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. Indicate its traces. (16M)
5. A circular plane of 60mm diameter rests on VP on a point A on its circumference. Its plane is inclined at 45° to VP. Draw the projections of the plane when (a) The front view of the diameter AB makes 30° with HP and (b) The diameter AB itself makes 30° with HP. (16M)



6. a) Draw the projections of a hexagonal prism of base 25mm and axis 50mm long, (8M)
when it is resting on one of its corners of the base on HP. The axis of the solid is inclined at 45° to HP.
- b) A cone of base diameter 50 mm and axis 70 mm long rests with one of the points (8M)
on the circumference of its base on HP. Its axis is inclined at 35° to HP. Draw its projections.
7. Draw the Front View, Top view & Both side views of the figure shown below. All (16M)
dimensions are in mm

