

I B. Tech II Semester Supplementary Examinations, December - 2020
ENGINEERING DRAWING

(Com. to CE, ME, CSE, PCE, IT, Chem E, Aero E, Auto E, Min E, Pet E, Metal E & 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) Divide a 110 mm long straight line into 8 equal parts. (4M)
- b) A square lamina 30 mm sides has one of its corner on VP. Draw its projections when surface is vertical and makes angle 30° with the VP. (8M)
- c) A Cone is placed centrally on the top of a cube with 40mm side which is placed centrally over a cylindrical block. The cone has base diameter 30mm and axis length 40mm. The cylindrical block has 80mm base diameter and 10mm thickness. Draw the isometric projection. (10M)

PART -B

2. a) Two fixed points M and N are 100 mm apart. Trace the complete path of the point P moving in such a way that the sum of its distance from M and N is always the same and equal to 130 mm. name the traced curve. (8M)
- b) A room of 1728m^3 volume is shown by a cube of 4cm side. Find R.F and construct a scale to a measure up to 60m. Also indicate a distance of 47.6 m on a scale. (8M)
3. a) A point is lying on HP, 20 mm behind VP and 25 mm in front of Right Profile Plane. Draw its projections and name the side view. (8M)
- b) A line MN 65 mm long, 30 mm above HP, on VP and the end M being 30 mm in front of the left profile plane. Draw its projections. (8M)
4. A line AB of length 58 mm is inclined at 23° to HP, the end A being 30 mm above HP. The HT and VT are 15 mm and 20 mm below the reference line (xy line), respectively, and the distance between the projectors of HT and VT is 30 mm apart. Draw the projections of the line and find the inclination of the line with the HP. (16M)
5. A triangular plane is in the form of an isosceles triangle having base with a 30mm side and an altitude of 40mm. it is kept in the first quadrant such that the surface is perpendicular to both H.P and V.P. draw its projections when the base is parallel to the V.P. (16M)
6. Draw the projections of a cylinder of 45 mm diameter and 65 mm long axis when it is lying on HP. With axis inclined at 45° to HP and parallel to VP. (16M)

7. Draw (i) top view (ii) front view & (iii) right side view of the object in the figure (16M) shown below. All dimensions are in mm.

