

PRAGATI ENGINEERING COLLEGE: SURAMPALEM
(AUTONOMOUS)
I B.Tech 1 Semester Supplementary Examinations, July– 2024

ENGINEERING DRAWING
 (Common to ME, CSE and IT)

Time: 3 hours

Max. Marks: 70

Answer ONE Question from each Unit
All Questions Carry Equal Marks

Q. No.	Questions	BTL	CO	Marks
UNIT – I				
1.	Construct an ellipse when the distance between the focus and the directrix is 35mm and the eccentricity is $\frac{3}{4}$.	K3	CO1	14M
OR				
2.	The distance between two points on a map is 15cm. The real distance between them is 20km. Draw a diagonal scale to measure up to 25km and show a distance of 13.6 km on it.	K3	CO1	14M
UNIT – II				
3.	a) Draw the projections of the following points on a common reference line. (i) P, 35mm behind the VP and 20mm below the HP (ii) Q, 40mm in front of the VP and 30mm above the HP (iii) R, 50mm behind the VP and 15mm above the HP (iv) S, 40mm below the HP and in the VP.	K3	CO2	7M
	b) A line measuring 60 mm long has one of its end 40 mm above H.P and 30 mm in front of VP. The other end is 25 mm above HP and in front VP. The front view of the line is 55 mm long. Draw the top view	K3	CO2	7M
OR				
4.	A line AB, 65mm long, has its end A 20mm above the H.P. and 25mm in front of the V.P. The end B is 40mm above the H.P. and 65mm in front of the V.P. Draw the projections of AB and show its inclinations with the H.P. and the V.P.	K3	CO2	14M
UNIT – III				
5.	A square plate with 35mm sides is inclined at 45° to the VP and perpendicular to the HP. Draw the projections of the plate if one of its corners is in the VP and the two sides containing that corner are equally inclined to the VP	K3	CO3	14M
OR				
6.	A hexagonal plane surface of 25mm sides has one of its corners on the HP, with the surface inclined at 45° to the HP and the top view of the diagonal passing through that corner is perpendicular to the VP. Draw the projections of the plate.	K3	CO3	14M
UNIT – IV				
7.	A pentagonal prism is resting on corner of its base on the ground with a longer edge containing that corner inclined at 45° to the H.P. and the axis inclined at 30° to the V.P. Draw its projections. Base 40 mm side; height 65 mm.	K3	CO4	14M
OR				

8.	A cone of base diameter 50 mm and axis 70 mm long rests with one of the points on the circumference of its base on H.P. Its axis is inclined at 35° to H.P. and 45° to V.P. Draw its projections.	K3	CO4	14M
UNIT – V				
9.	<p>Fig. below shows two views of an object. Prepare the isometric drawing of the object.</p>	K3	CO5	14M
10.	<p>Draw the elevation, top view and side view of the following machine part as shown in Fig. below. (All dimensions are in mm.)</p>	K3	CO5	14M