

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL/MAY 2025

Second Semester

Civil Engineering

GE3251/UGET24201-Engineering Graphics
(Common to Information Technology, Chemical
Engineering & Artificial Intelligence and data science)

Regulations – 2021/2024

Duration: 3 Hrs

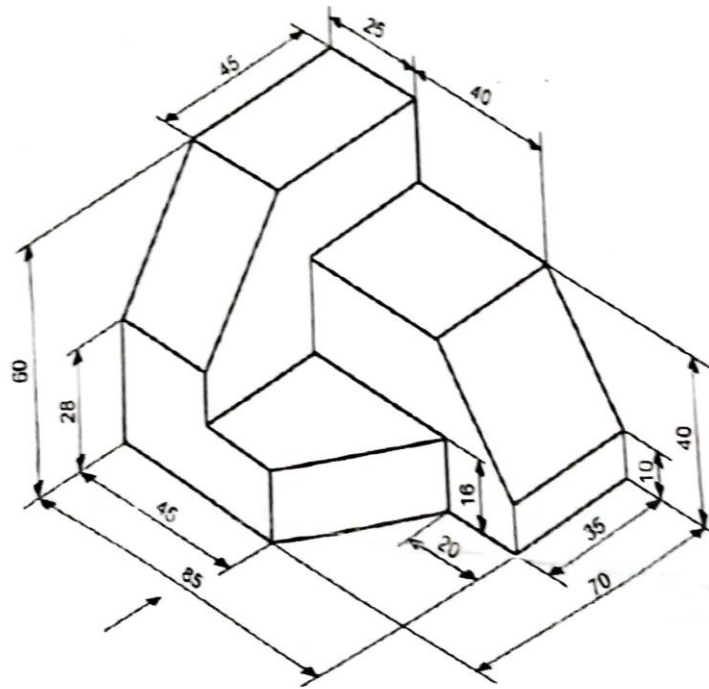
Maximum: 100 Marks

ANSWER ALL QUESTIONS (Marks 5*20 = 100)

Q.No	Questions	BLT	CO	Marks
1.	a Draw a hyperbola when the distance between its focus and directrix is 50 mm and eccentricity is $3/2$. Also draw the tangent and normal at a distance of 25 mm from directrix.	L3	1	20
	Or			
	b Draw the involute of a circle of diameter 50 mm and draw the tangent and normal to the involute at any point on the curve.	L3	1	20
2.	a A straight line PQ of 85 mm long is inclined at 30° to the HP and 45° to the VP. The end P is 20 mm in front of VP and 15 mm above HP. Draw the projections of the line.	L3	2	20
	Or			
	b A hexagonal plate of 40 mm side. The plane stands on one of its corners on the HP and plane inclined 30° to VP and 35° inclined to HP. Draw its projections.	L3	2	20
3.	a A hexagonal prism of side of base 30 mm and axis 70 mm rest on a corner of its base in HP with the axis of the prism inclined at 35° to HP and parallel to VP. Draw its projections.	L3	3	20

Or

- b Sketch by free hand, the following views of the object shown in figure. L3 3 20
The dimensioning is also to be marked by free hand. a) The front view in the direction of the arrow b) Top view c) Side view.



4. a A cone diameter of base 50 mm and axis 70 mm long is cut by a section plane perpendicular to VP and parallel to 7 mm away from one of its generators. Draw its front view, sectional top view and true shape of the section. L3 4 20

Or

- b A cylinder of diameter 60 mm and axis height 90 mm is cut by a plane perpendicular to VP and inclined at 60° to the HP and bisecting the axis. Draw the lateral development of the surfaces. L3 4 20
5. a A frustum of square pyramid of bottom edge 50 mm, top edge 30 mm and height 60 mm. Draw the isometric view of the frustum in this position. L3 5 20

Or

- b A pentagonal pyramid of 40 mm base side and axis height 60 mm is standing on its base on the ground plane with a base parallel to and 30 mm behind PP. The central plane is 35 mm to the left of the apex and the station point is 45 mm in front of PP and 25 mm above the ground plane. Draw the perspective view of the pyramid. L3 5 20