Register No : _____

THE KAVERY ENGINEERING COLLEGE

(An Autonomous Institution)

UG/PG DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL/MAY 2026

Second Semester

Common to all Branches

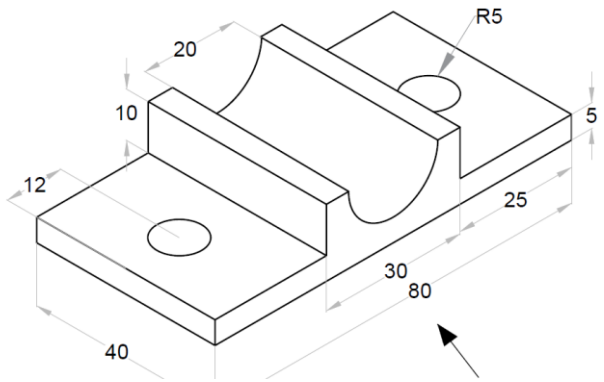
GE3251 / UGET24201 - Engineering Graphics

Regulations – 2021 & 2024

Duration : 3 Hrs *Maximum : 100 Marks*

*ANSWER ALL QUESTIONS (Marks 5*20 = 100)*

Q.No		*Questions*	*BLT*	*CO*	*Marks*
1.	a	Construct an ellipse using the eccentricity method, given that the eccentricity is 2/3 and the distance between the focus and directrix is 40 mm. Also, draw the normal and tangent at any point on the ellipse.	L2	1	20
		Or			
	b	Draw the path traced by a point on the circumference of a rolling circle 60 mm diameter for one revolution. Also, draw the normal and tangent at any point on the ellipse.	L2	1	20
2.	a	A line PQ 90 mm long is inclined at 40° to the HP and 30° to the VP. The end P is 20 mm above HP and 25 mm in front of VP. Draw the projections of the line and determine its apparent length and inclinations using the rotating line method.	L2	2	20
		Or			
	b	A hexagonal lamina of 30 mm side rests on the HP on one of its sides with its surface inclined at 45° to HP and one of its diagonals inclined at 30° to VP. Draw the projections of the lamina using the rotating object method.	L3	2	20
3.	a	A pentagonal pyramid with a base side of 25 mm and height 55 mm rests on HP on one of its base edges. Its axis is inclined at 35° to HP and parallel to VP. Draw the projections and mark the visible edges.	L4	3	20
		Or			
	b	For below isometric view of a component, sketch the front, top, and left-side orthographic views using freehand. Include all hidden lines.	L4	3	20



4.	a	A cone of diameter 60 mm and height 75 mm is resting on its base on HP. It is sectioned by a plane perpendicular to VP and inclined at 50° to HP and bisecting the axis. Draw the sectional top view and true shape of the section.	L3	4	20
		Or			
	b	A pentagonal prism (base 25 mm, height 60 mm) is resting on its base on HP with one base edge perpendicular to VP. A section plane cuts the prism inclined at 45° to HP and passing through the axis midpoint. Draw the development of the lateral surface of the truncated prism.	L3	4	20
5.	a	A frustum of a cone has base diameter 60 mm, top diameter 30 mm and height 60 mm. Draw the isometric projection of the frustum.	L3	5	20
		Or			
	b	A square prism of base 25 x 25 mm and height 40 mm rests on the GP on one of its ends with a rectangular face receding away from the PP towards right making 60° with PP. The corner nearest to the PP is 40 mm to the left of the station point and 20 mm behind the PP. The station point is 60 mm above the GP and 50 mm in front of the PP. Draw the perspective view of the prism by visual ray method. Use the top view and the front view.	L3	5	20