

Register No : _____

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)
UG/PG DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2026
Second Semester
Civil Engineering
GE3251 / UGET24201 - ENGINEERING GRAPHICS
(Common To BE- BIOMEDICAL / BE-CSE / BE-ECE / BE-EEE / BE-MECH /
B-TECH AGRI/ B-TECH AIDS/ B-TECH IT & CHEMICAL)
Regulations – 2021/2024

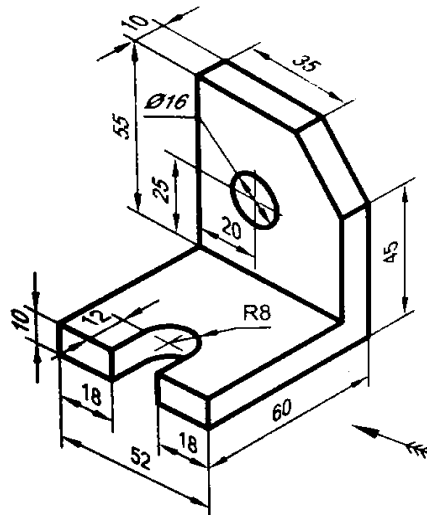
Duration: 3 Hrs.

Maximum: 100 Marks

ANSWER ALL QUESTIONS (Marks 5*20 = 100)

Q.No	Questions	BTL	CO	Marks
1.	a Draw an ellipse when the eccentricity is $2/3$ and the distance of the focus from the directrix is equal to 50 mm. Also draw a normal and tangent to a point on the ellipse which is at a distance of 70 mm from the directrix. Or	K3	1	20
	b Draw an involute of a circle of 50 mm diameter. Also, draw a tangent and normal line at any point on the curve.	K3	1	20
2.	a A straight line 85 mm long has one end 15 mm in front of VP and 10 mm above HP. While the other end is 50 mm in front of VP and 45 mm above HP. Draw the plan and elevation of the line. Determine the inclinations of the line to HP and VP. Or	K3	2	20
	b A regular pentagonal lamina of 30 mm sides has one edge in HP and inclined at an angle of 30 degree to VP. Draw each projection when its surface is inclined at 45 degree to HP.	K3	2	20
3.	a Draw the projections of a cone, base 30 mm diameter and axis 50 mm long, resting on HP on a point of its base circle with the axis making an angle of 45° with HP and parallel to VP. Or	K3	3	20

- b Draw the free hand sketching of orthographic Projection from the given isometric view. K3 3 20



4. a A hexagonal pyramid, side of base 25 mm and axis 50 mm long, rests with its base on HP and an edge of its base is perpendicular to VP. It is cut by a section plane perpendicular to VP, inclined at 30° to HP and passing through a point on the axis 20 mm below the apex. Draw the sectional top view. K3 4 20

Or

- b A pentagonal pyramid, side of base 30 mm and height 52 mm. stands with its base on HP and an edge of the base is parallel to VP and nearer to it. It is cut by a plane perpendicular to VP, inclined at 40° to HP and passing through a point on the axis. 32 mm above the base. Draw the sectional top view. Develop the lateral surface of the truncated pyramid. K3 4 20

5. a A hexagonal prism, side of base 25 mm and height 50 mm rests on HP and one of the edges of its base is parallel to VP. A section plane perpendicular to VP and inclined at 50° to HP bisects the axis of the prism. Draw the isometric projection of the truncated prism, showing the cut surface. K3 5 20

Or

- b A square prism, side of base 40 mm and height 60 mm rests with its base on the ground such that one of its rectangular faces is parallel to and 10 mm behind the picture plane. The station point is 30 mm in front of PP, 80 mm above the ground plane and lies in a central plane 45 mm to the right of the center of the prism. Draw the perspective projection of the square prism. K3 5 20
