



R25 Regulation

Subject code:5ES1AI

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech I Semester Regular Examinations, January 2026

**ENGINEERING DRAWING AND COMPUTER AIDED DRAFTING
(CSE)**

Maximum Marks: 60

Date: 06.01.2026

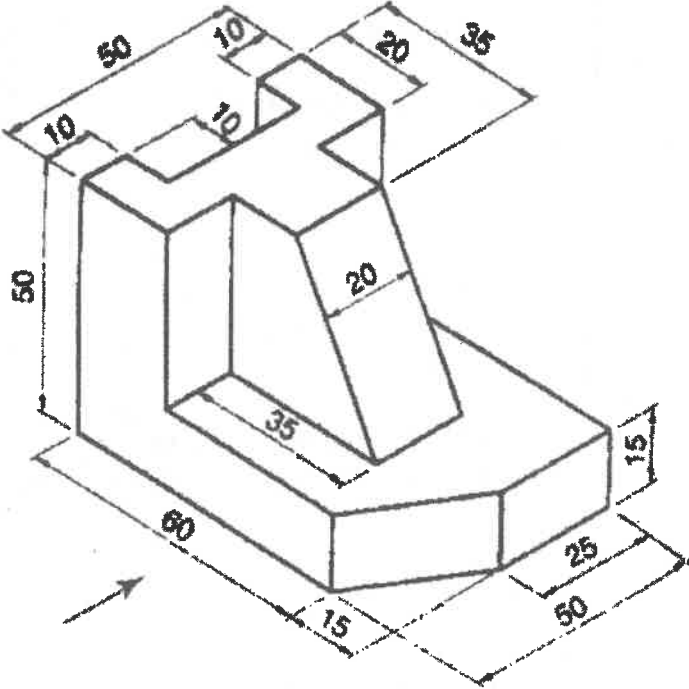
Duration: 3 Hours

Note: 1. Consists of 10 questions unit wise choice. Answer any 5 questions.
2. Each question carries equal marks.

Answer all the questions.

(5X12M=60Marks)

		Marks	CO	BTL
1	Construct an ellipse, when the distance of the focus from the directrix is equal to 50 mm and eccentricity $2/3$ and also draw the tangent and normal at any point on the curve.	12M	1	L2
	OR			
2	Draw an epi-cycloid of a circle of 40mm diameter, which rolls outside on another circle of 120mm diameter for one revolution clock-wise. Draw a tangent and a normal to it at a point 90mm from the centre of the directing circle.	12M	1	L3
3	a) Draw the project of a point A in four quadrants if 40mm from HP and 30 mm from VP. b) An 80 mm long line PQ, has its end Q both in the H.P. and the V.P. The line is inclined at 45^0 to the H.P. and 30^0 to the V.P. Draw its projections.	6M 6M	2	L2 L3
	OR			
4	A pentagonal plane with a 35 mm long side has its corner on the H.P., and the side opposite to this corner is parallel to the H.P. The plane is parallel to and 20 mm in front of the V.P. Draw its projections.	12M	2	L3
5	A hexagonal pyramid, having base with a 30 mm side and 70 mm long axis, has a triangular face on the ground and axis parallel to V.P. Draw its projections.	12M	3	L2
	OR			
6	a) Draw the projections of a pentagonal prism, base 25mm side and axis 50mm long, resting on one of its rectangular faces on the ground, with the axis inclined at 45^0 to the V.P. b) A pentagonal pyramid of 30 mm base edges and axis 70 mm long is lying on one of its triangular faces on HP. Draw its projections when the top view of the axis makes 30^0 with the VP.	6M 6M	3	L3 L3

7	A cone of base 50 mm diameter and height 65 mm rests with its base on the HP. A section plane perpendicular to VP and inclined at 30° to the HP bisects the axis of the cone. Draw the development of lateral surface of the truncated cone.	12M	4	L4
OR				
8	A pentagonal prism of 30 mm base edges and 60 mm long, is resting on its base with an edge of base inclined at 40° to the VP. The prism is cut by a section plane whose V.T. is inclined at 30° to the HP and passes through a point 25 mm from the base along its axis. Draw the sectional top view and true shape of the section.	12M	4	L3
9	A pentagonal pyramid of base of side 30 mm rests on the top of a pentagonal prism of side 30 mm, with their sides coinciding with each other. The solid stands on HP with one of the sides of the base perpendicular to the VP. The height of prism = 40 mm. The height of pyramid = 50 mm. Draw the isometric projection of the solid.	12M	5	L3
OR				
10	<p>Draw the following views for the object shown in figure. All dimensions are in mm.</p> <p>a) Front view b) Top view c) Left Side view</p> 	12M	5	L3