R25 Regulation *Subject code:5ES2AD*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech II Semester Regular Examinations, June 2026

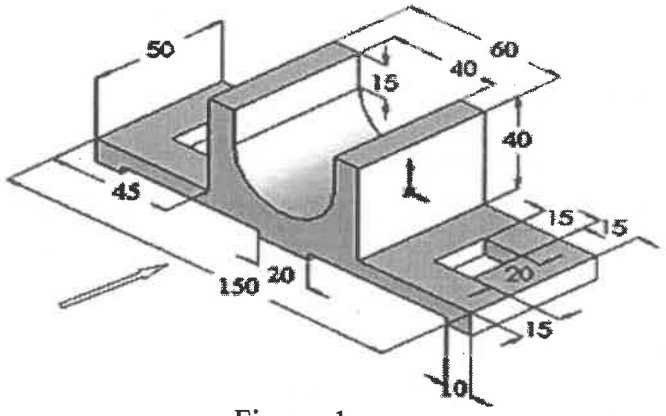
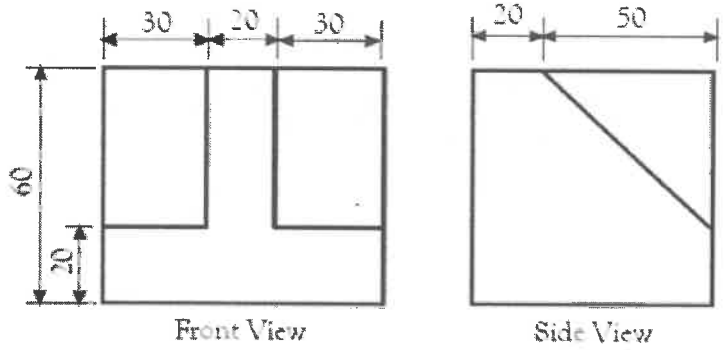
ENGINEERING DRAWING AND COMPUTER AIDED DRAFTING

(CE)

Maximum Marks: 60 Date:19.06.2026 **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	A. Construct a scale to be used with a map, the scale of which is 1cm = 500 m. The maximum length to be read is 5km. Mark on the scale a distance of 3.85 km. B. Construct a hyperbola with its foci 70 mm apart and the major axis as 40 mm. Draw a tangent to the curve at a point 20 mm from the focus.	6M 6M	1	3
	OR			
2	A point P of hyperbola is situated at a distance of 35mm and 50mm from the pair of asymptotes. The asymptotes are perpendicular to each other. Draw a hyperbola using orthogonal asymptotes method.	12M	1	2
3	A hexagonal plane of side 30 mm has an edge on the HP. Its surface is inclined at 45° to the HP and the edge on which the plane rests is inclined at 30° to the VP. Draw its projections.	12M	2	2
	OR			
4	A line AB, 65 mm long, has its end A 20 mm above the H.P. and 25 mm in front of the V.P. The end B is 40 mm above the H.P. and 65 mm in front of the V.P. Draw the projections of AB and shows its inclinations with the H.P. and the V.P.	12M	2	4
5	A square prism having a base of 35 mm and axis 60 mm is resting on an edge of its base on the HP and the axis inclined at 45° to the HP. If the edge resting on the HP is inclined at 30° to the VP. Draw its projections.	12M	3	2
	OR			
6	A cylinder of 40 mm diameter, 60 mm height and having its axis vertical, is cut by a section plane, perpendicular to the V.P., inclined at 45° to the H.P. and intersecting the axis 32 mm above the base. Draw its front view, sectional top view, sectional side.	12M	3	2
7	A rectangular pyramid, side of base 30 mm × 40 mm and axis 50 mm long, stands with its base on the HP and a diagonal of its base parallel to the VP. It is cut by a section plane perpendicular to the VP, inclined at 45° to the HP	12M	4	3

	and intersecting the axis at a point 20 mm distant from the vertex. Draw the development of the lateral surface of the truncated pyramid.			
	OR			
8	Draw the development of the lower portion of a cylinder, diameter of 50 mm and axis 75 mm, when it is cut by a plane perpendicular to the VP, inclined at 45° to the HP and passing through the mid-point of the axis.	12M	4	3
9	Draw the front view, top view and any one side view of the block shown in figure 1. All dimensions are in mm. The arrow indicates the front view.  Figure: 1	12M	5	4
	OR			
10	Draw the Isometric Projections for the following figures.  Figure: 2	12M	5	4