R20 Regulation *Subject code:3E1AE*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech I Semester Supplementary Examinations, July 2025

ENGINEERING GRAPHICS

(Common to CE, ME, CSE, CSE(AI&ML), CSE(DS) & IT)

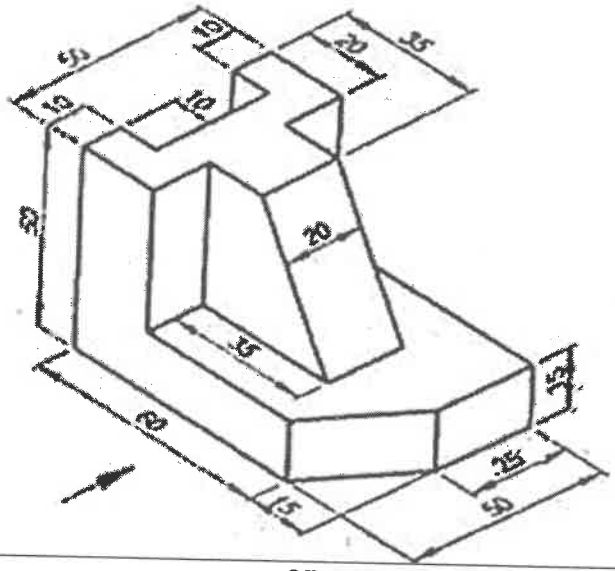
Maximum Marks: 70 Date: 18.07.2025 Duration: 3 hours

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

Part-A

Answer **ANY FIVE QUESTIONS** **(10MX7=70Marks)**

1	A fixed point is at a distance of 55mm from fixed straight line. Name the curve, Trace the path of the curve if e =1.
	OR
2	A point P of hyperbola is situated at a distance of 35mm and 50mm from the pair of axis. The asymptotes are perpendicular to each other. Draw a hyperbola using rectangular method.
3	Draw the projections of the following points on the same ground line, keeping the projectors 25mm apart. i. On the H.P & 20mm behind the V.P ii. 40mm above the H.P & 25mm in front of the V.P iii. On V.P & 40mm above H.P iv. 25mm below the H.P & 25mm behind the V.P v. 15mm above H.P & 50mm behind the V.P vi. 40mm below the H.P & 25mm in front of V.P vii. Situated on both planes
	OR
4	A 60mm long line PQ has its end P 20mm above H.P. the line is perpendicular to the H.P. and 40mm in front of the V.P. Draw its projections.
5	Hexagonal Prism has 1 of its rectangular face parallel to HP, Its axis is perpendicular to VP and 35mm above the ground, Draw its projections when the nearer end of the prism is 20mm in front of VP. Consider side as 30mm, axis 50mm.Draw its views.
	OR
6	A hexagonal pyramid base 30mm axis 60mm is resting on its base on H.P. with 2 edges of base parallel to V.P. It is cut by a sectional plane perpendicular to V.P. and inclined at 45° to H.P. and intersecting axis at a point of 25mm above the ground.
	OR
7	Draw the Ortho projection of given objects in 3 views (FV, TV, SV Respectively).

	
	OR
8	A circle of 50 mm diameter rolls on another circle of radius 60mm for one revolution. Trace the path of the curve.
9	A line AB 100mm long has its front view inclined at an angle of 45 ° to XY. The point A is in the V.P. and 25mm above the H.P. The length of the front view is 60mm. Draw The top view of the line and measure its length also find its inclination of AB with H.P. and V.P.
	OR
10	Draw the Isometric Projections for the following figures.