R22 Regulation *Subject code:4E1DA,4E1DB & 4E1DD*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech I Semester Supplementary Examinations, June 2026

COMPUTER AIDED ENGINEERING GRAPHICS

(Common to EEE, CSE & CSE(AI&ML))

Maximum Marks: 60 Date: 25.06.2026 Duration: 3 hours

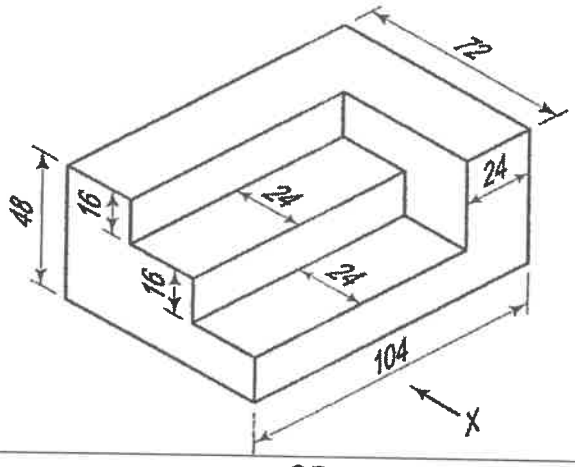
Note: 1.This question paper contains two parts A and B.
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

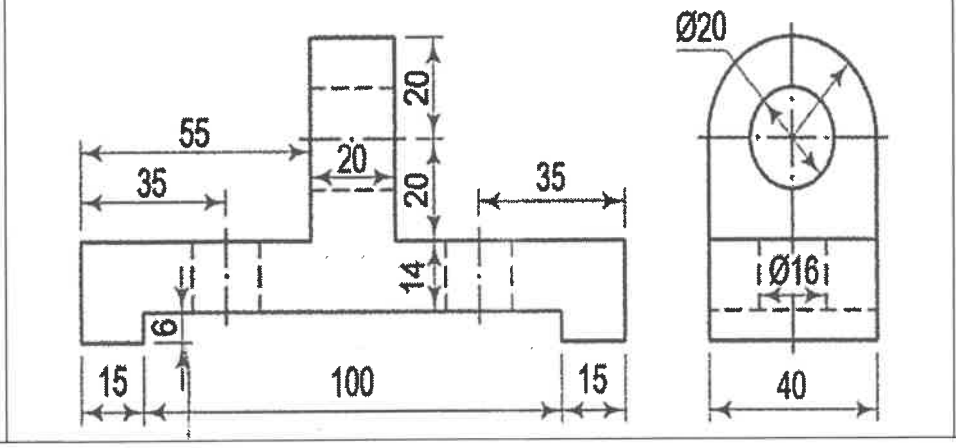
Part-A

	All the following questions carry equal marks (10X1M=10 Marks)	Marks	CO	BTL
1	Mention the different types of scales used in practice	1M	1	L1
2	Define the conic sections	1M	1	L1
3	Centre lines, section lines are drawn using _____pencil	1M	2	L1
4	In II quadrant, the front view will be _____ the reference line..	1M	2	L1
5	What is meant by pyramid	1M	3	L1
6	Define a cone	1M	3	L1
7	When the surfaces of a solid are laid out on a plane, the figure obtained is called its _____	1M	4	L1
8	Method used for the development of solids is_____	1M	4	L1
9	A line AB is on the horizontal plane inclined to vertical plane at 45 degrees, _____view gives the actual length of the line AB.	1M	5	L1
10	A line is perpendicular to horizontal plane. Its horizontal trace coincides with its_____ view.	1M	5	L1

Part-B

	Answer All the following questions. (5X10M=50Marks)	Marks	CO	BTL
2	Draw a cycloid of a circle of diameter 60mm for one revolution. Also draw a tangent and a normal to the curve at a point 35mm above the base line.	10M	1	L2
	OR			
3	Construct a Parabola when the distance of the focus from the directrix is 50mm. Also draw a tangent and normal at point 70mm from the directrix.	10M	1	L2
4	A line AB 75mm long is inclined to HP at 30° and to VP at 45°. Draw is projections when one of the end is 20 above HP and 30 in front of VP.	10M	2	L2
	OR			
5	The Top view of 70mm long line measures 60mm while its front view measures 55mm. Draw the projections of the straight line when one of the end is 30 above HP and 25 in front of VP.	10M	2	L2

6	A pentagonal prism of base side 30 mm and axis length 65 mm is inclined to H.P at 30^0 and its axis is inclined to V.P at 45^0 draw its projections.	10M	3	L2
	OR			
7	A cylinder of base diameter 50mm and height 65mm rests on its base on HP. It is cut by a plane perpendicular to VP and inclined at 30^0 to HP and meets the axis at a distance 30mm from the base. Draw the front view, sectional top view.	10M	3	L2
8	A pentagonal prism, having a base 30mm side and 70mm long axis is resting on its base on H.P such that one of its rectangular surfaces is parallel to V.P. It is cut by an auxiliary inclined plane at 45^0 and passes through the midpoint of the axis. Draw the developments of truncated prism.	10M	4	L2
	OR			
9	A hexagonal prism, side of base 25 mm and altitude 50 mm, rests on its base on the HP such that an edge of the base is parallel to VP and nearer to the observer. It is cut by a plane inclined at 30° to HP, perpendicular to VP and passing through the centre of the axis. Draw the development of the complete surfaces of the truncated prism.	10M	4	L2
10	Draw the front view, top view and side view of the figures shown below. All dimensions are in mm. 	10M	5	L2
	OR			
11	Draw an isometric diagram from given orthographic projection views shown in figures.	10M	5	L2


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