



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, January 2026

COMPUTER AIDED ENGINEERING GRAPHICS

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

Maximum Marks: 60

Date: 21.01.2026

Duration: 3 hours

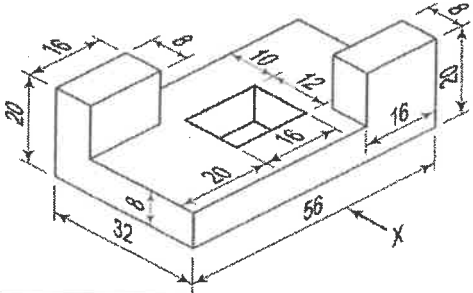
- Note: 1.This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X1M=10 Marks)		Marks	CO	BTL
1.a	Define Eccentricity	1M	1	L1
b	Define a Cycloid	1M	1	L1
c	In IV quadrant, the front will be _____ the reference line	1M	2	L1
d	Initial work and construction lines are drawn using _____ pencil	1M	2	L1
e	Define a cone	1M	3	L1
f	What is meant by prism	1M	3	L1
g	When the surfaces of a solid are laid out on a plane, the figure obtained is called its _____	1M	4	L1
h	Method used for the development of solids is _____	1M	4	L1
i	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
j	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	Construct a scale of 1:40 to read metres, decimetres and centimetres and long enough to measure up to 6m. Mark a distance of 4.76m on it	10M	1	L2
OR				
3	Draw an ellipse when the distance of its focus from its directrix is 50mm and eccentricity is 2/3. Also draw a tangent and a normal to the ellipse at a point 70mm away from the directrix	10M	1	L2
4	The end A of a line AB is 20 above and 30 in front of VP, While the end B is 50 above and 55infront of VP. The distance between projectors are 60mm apart Draw the projections and determine its inclinations	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 cylinder of base diameter 30 mm and axis length 60 mm is inclined to H.P at 30° and its axis is inclined to V.P at 45° . Draw its projections.	10M	3	L2
OR				
7	A cylinder of base diameter 30 mm and axis length 60 mm is inclined to H.P at 30° and its axis is inclined to V.P at 45° . Draw its projections.	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° and passes through the midpoint of the axis. Draw the developments of truncated prism.	10M	4	L2
OR				
9	A cylinder base diameter 50 mm and axis length 60 mm is resting with its base on HP and it is cut by a section plane perpendicular to the V.P and inclined at 45° to the H.P and intersecting the axis at 15 mm from the top of the axis. Draw its development.	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 the front view, top view and side view of the figures shown below. All dimensions are in mm	10M	5	L2
