



R22 Regulation

Subject code:4E2AK

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech II Semester Supplementary Examinations, January 2026

COMPUTER AIDED ENGINEERING GRAPHICS

(ECE)

Maximum Marks: 60

Date: 20.01.2026

Duration: 3 hours

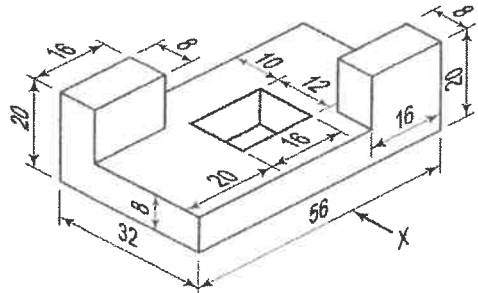
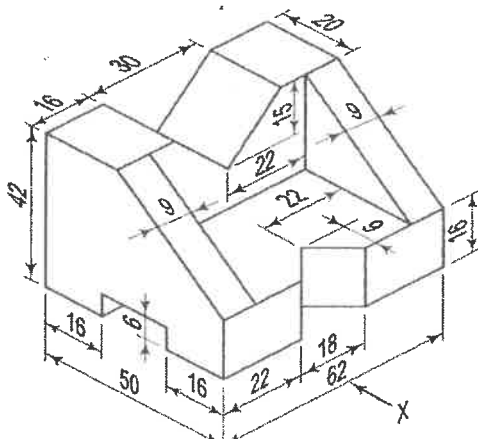
- Note:
- 1.This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X1M=10 Marks)		Marks	CO	BTL
1.a	Mention the different types of scales used in practice	1M	1	L1
b	Define the conic sections	1M	1	L1
c	Centre lines, section lines are drawn using _____ pencil	1M	2	L1
d	In II quadrant, the front view will be _____ the reference line..	1M	2	L1
e	What is meant by pyramid.	1M	3	L1
f	Define a cone.	1M	3	L1
g	List applications of development of surface.	1M	4	L1
h	Method used for the development of solids is	1M	4	L1
i	A line is perpendicular to vertical plane. Its vertical trace coincides with its _____ view.	1M	5	L1
j	If a line has one of its ends in the vertical plane. Its vertical trace coincides with the	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 30mm above HP and 25mm 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 pentagonal pyramid of base side 30 mm and axis length 65 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	Draw the development of lateral surface of hexagonal pyramid with a 30mm base side and 60mm long axis, which is resting on its base in the H.P such that an edge of the base is perpendicular to V.P when a horizontal section plane cuts the pyramid at a height of 25mm from the base.	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