R22 Regulation *Subject code:4E2AH*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech II Semester Supplementary Examinations, June 2026

COMPUTER AIDED ENGINEERING GRAPHICS

(CSE(DS))

Maximum Marks: 60 Date: 22.06.2026 Duration: 3 hours

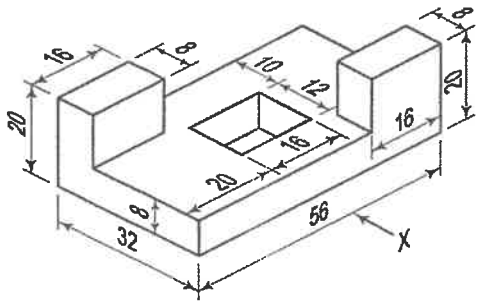
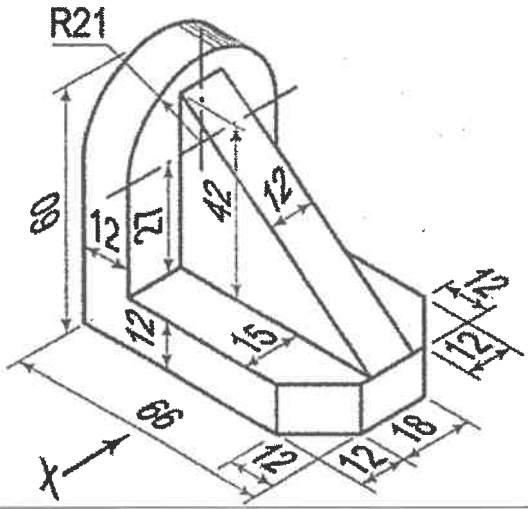
Note: 1.This question paper contains two parts A and B.
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X1M=10 Marks)		Marks	CO	BTL
1.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 IV quadrant, the front will be _____ the reference line.	1M	2	L1
e	Define a cylinder	1M	3	L1
f	What is meant by generator	1M	3	L1
g	Applications of development of surface	1M	4	L1
h	Every line on the development of surfaces must be the _____ of the corresponding edge on the surface	1M	4	L1
i	Orthographic projection is the representation of ____views on the mutual perpendicular projection planes.	1M	5	L1
j	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

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
2	Draw a Hyperbola when the distance of its focus from its directrix is 50mm and eccentricity is 3/2. Also draw a tangent and a normal to the hyperbola at a point 25mm from the directrix.	10M	1	L2
	OR			
3	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
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 20mm above HP and 30mm 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 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 $30^0$and its axis is inclined to V.P at 45^0 . Draw its projections.	10M	3	L2

	OR			
7	A pentagonal prism 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 45^0 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