



R22 Regulation

Subject code: 4E2AH

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech II Semester Regular/Supplementary Examinations, June 2024

COMPUTER AIDED ENGINEERING GRAPHICS

(CSE(DS))

Maximum Marks: 60

Date:04.07.2024 Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 10 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)	CO	Bloom Tx
1.	a	Define parabola.		1	1
	b	Find the length of a scale of R.F. 1:2.5, showing centimeters and millimeters and long enough to measure up to 20 centimeters		1	2
	c	Explain the differences between planes and solids with a suitable sketch.		2	2
	d	What is the Plane?		2	1
	e	Give the symbolic representation of first and third angle projection		3	1
	f	Define an auxiliary inclined plane, auxiliary vertical plane.		3	1
	g	What is the Principle of Development of Surfaces?		4	1
	h	Write the applications of development of Surfaces?		4	1
	i	What is isometric projection.		5	1
	j	State the relation between true length and isometric length?		5	1

Part-B

Answer All the following questions.			(5X10M=50 Marks)	CO	Bloom Tx
2		Draw a parabola when the distance between the focus and directrix is 50mm. Also draw tangent and normal to any point on the curve. [10M]		1	3
OR					
3		Construct a scale of 1:40 to read meters, decimeters and centimeters and long enough to measure up to 6m. Mark a distance of 4.76m on it. [10M]		1	3
4		A circle of diameter 50 mm inclined at 30° to HP and perpendicular to VP, has its center 30 mm in front of VP. Draw the projection of lamina and side view. [10M]		2	3
OR					
5		A line AB 70 mm long is inclined at an angle of 40° to the H.P. and 30° to the V.P. The end A is in V.P and 30 mm above H.P. Draw the projections of the line. [10M]		2	3
6		A square prism of base edge 35 mm and axis 60 mm is resting on an edge of its base on the H.P. and the axis inclined at 45° to the H.P. If the edge resting on the H.P. is inclined at 30° to the V.P., draw its projections. [10M]		3	3
OR					

7	A hexagonal pyramid of base side 30 mm and axis 60 mm, has an edge of its base on the ground inclined at 45° to the V.P. and the axis is inclined at 30° to the H.P. Draw its projections. [10M]	3	3
8	A cone of base diameter 50 mm and axis 60 mm is resting on its base on the H.P. Draw the development of its lateral surface. [10M]	4	3
OR			
9	Draw the development of the lateral surface of a square pyramid of base side 40 mm and axis 60 mm, resting on its base on the H.P. such that all the sides of the base are equally inclined to the V.P. [10M]	4	3
10	A. Draw the isometric view of the hexagonal prism with side of base 25 and axis 60mm long. The prism is resting on its base on HP with an edge of the base parallel to VP. [5M] B. Draw the isometric drawing of a cone of base diameter 30mm and axis 45mm long. [5M]	5	3
OR			
11	Draw the following views of the block shown in figure. [10M] (a) Front View (b) Top view (c) Both side views	5	3
			