



R22 Regulation

Subject Code: 4E2AH

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech II Semester Supplementary Examinations, January 2024

**Computer Aided Engineering Graphics
(CSE(DS))**

Maximum Marks: 60

Duration: 3 Hours

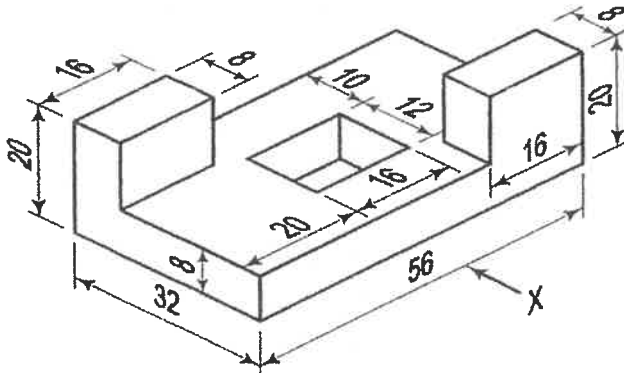
- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 10 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10x1M=10 Marks)		CO	Bloom Tx
1	Define Eccentricity	CO1	L2
2	Define a Cycloid	CO1	L2
3	Initial work and construction lines are drawn using _____ pencil.	CO2	L1
4	In II quadrant, the front view will be _____ the reference line..	CO2	L2
5	What is meant by pyramid	CO3	L3
6	What is meant by solid	CO3	L2
7	Applications of development of surface	CO4	L2
8	The form of sheet obtained by laying all outer surfaces of solid with suitable allowances for the joints is known as _____	CO4	L1
9	Orthographic projection is the representation of _____ views on the mutual perpendicular projection planes.	CO5	L1
10	A line AB is on the horizontal plane inclined to vertical plane at 45 degrees, _____ view gives the actual length of the line AB	CO5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)			
11	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]	CO1	L3
OR			
12	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]	CO1	L3
13	Draw the projections for the following points keeping the distance between the projectors as 25mm on the same reference line. [10M] A point K on HP and 30mm in front of VP B 50mm below HP 30mm behind VP C 35mm below HP on VP D 50mm below HP 20mm in front of VP E on HP 30mm above 50mm behind VP .	CO2	L3
OR			
14	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]	CO2	L3

15	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]	CO3	L3
	OR		
16	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° to HP and meets the axis at a distance 30mm from the base. Draw the front view, sectional top view. [10M]	CO3	L3
17	A hexagonal prism, edge of base 20 mm and axis 50 mm long, rests with its base on HP such that one of its rectangular faces is parallel to VP. It is cut by a plane perpendicular to VP, inclined at 45° to HP and passing through the right corner of the top face of the prism. Develop the lateral surface of the prism. [10M]	CO4	L3
	OR		
18	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]	CO4	L3
19	Draw the front view, top view and side view of the figures shown below. All dimensions are in mm. [10M]	CO5	L3
			
	OR		
20	Draw an isometric diagram from given orthographic projection views shown in figures. [10M]	CO5	L3
	