

MALINENI LAKSHMAIAH WOMEN'S ENGINEERING COLLEGE
(AUTONOMOUS)

I-B.Tech I-Semester Regular Examinations (MR23), February - 2024
ENGINEERING GRAPHICS (COMMON TO ALL BRANCHES)

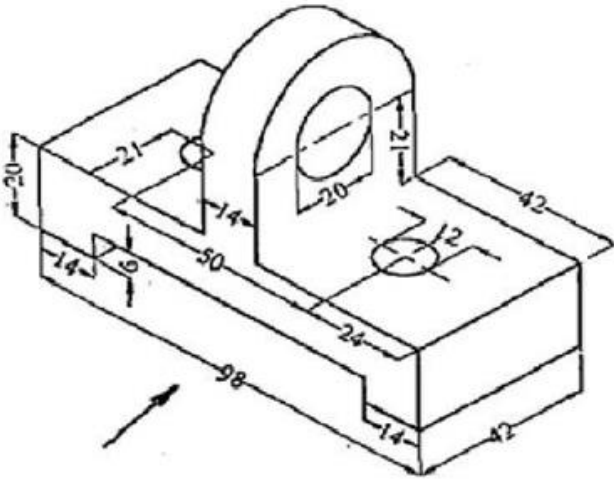
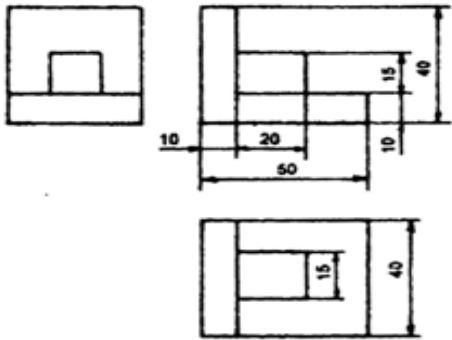
Time: 3 hours

Max. Marks: 70

Answer any Five Questions One Question form each unit
ALL questions Carry Equal Marks

PART-A (5X14M = 70M)

		UNIT - I	MARKS	CO	BL
1.	a.	Construct a regular pentagon of side 50mm by general method.	5M	CO1	L3
	b.	Draw the Path traced by a point P moving in such a way that the distance of the Focus from the directrix is 50mm. The Eccentricity is Unity. Also draw the tangent and Normal at a point 70mm from the directrix.	9M	CO1	L4
		(OR)			
2.	a.	Draw an epi-cycloid of a circle of 50 mm diameter, which rolls outside on another circle of 150 mm diameter for one revolution clockwise. Draw a tangent and normal to it at a point 90 mm from the centre of the directing circle.	7M	CO1	L3
	b.	The distance between two points on a map is 15cm. The real distance between them is 20km. Draw a diagonal scale to measure up to 25km and show a distance of 13.6 km on it.	7M	CO1	L4
		UNIT - II			
3.	a.	Point A is 10mm above HP and 35mm in front of VP and another Point B is 15mm behind VP and below HP. The Line joining their Front views makes an angle of 45 ⁰ to XY line and the line joining their Top views makes an angle of 30 ⁰ to the XY. Find the distance of point B from the HP.	6M	CO2	L3
	b.	A line MN measures 65mm in the front view. It is Parallel to HP and inclined at 45 ⁰ to VP. Its one end M is 15mm above HP and 35mm in front of VP. Draw its projections and determine its true length.	8M	CO2	L3
		(OR)			
4.		A regular pentagonal lamina of 30 mm sides has one Edge in HP and inclined at an angle of 30 ⁰ to VP. Draw its projections when its surface is inclined at 45 ⁰ to HP.	14M	CO2	L4
		UNIT - III			
5.	a.	A Hexagonal prism of side of base 25mm and axis 70mm long, lies on one of its rectangular faces on H.P and its axis is perpendicular to VP. Draw its Projections.	6M	CO3	L4
	b.	Draw the projections of a cone of base diameter 50mm and height 65mm with a point of its base on HP and axis inclined at 40 ⁰ to HP and parallel to VP. Draw the projections of the cone.	8M	CO3	L4

		(OR)			
6.	a.	Draw the projections of regular pentagonal pyramid, with base side 30mm and height 70mm lying with its base on HP and one its base edge perpendicular to VP.	6M	CO3	L4
	b.	A cylinder of base 50mm diameter and axis 70mm long has resting on a point of its base on VP and the axis inclined at 35° to VP. Draw the projections of the cone.	8M	CO3	L4
		UNIT - IV			
7.		A hexagonal pyramid of base side 25mm and axis 65mm long is resting on its Base on HP with an edge of the base perpendicular to VP. It is cut by section plane inclined at 30° to HP and passing through the axis at a point 20mm from the base. Draw the front view, sectional top view and true shape of the section.	14M	CO4	L4
		(OR)			
8.		A cone of 60mm diameter with 70mm height, it is cut by a section plane such that, the plane passes through the midpoint of the axis and tangential to the base circle. Draw the development of the lateral surface of the bottom part of the Cone.	14M	CO4	L4
		UNIT - V			
9.		<p>Draw the front view, top view and side view of given object below. All dimensions are in mm.</p> 	14M	CO5	L3
		(OR)			
10.		<p>The Following diagram shows the front view, top view and side view of the object. Draw the Isometric view of the object.</p> 	14M	CO5	L4
