Reg. No. : | | | | | | | | | | | | |

Question Paper Code : U1710

B.E./B.Tech. DEGREE EXAMINATION, APRIL 2024

First Semester

Computer Science and Design

21UME110 – ENGINEERING DRAWING AND DESIGN

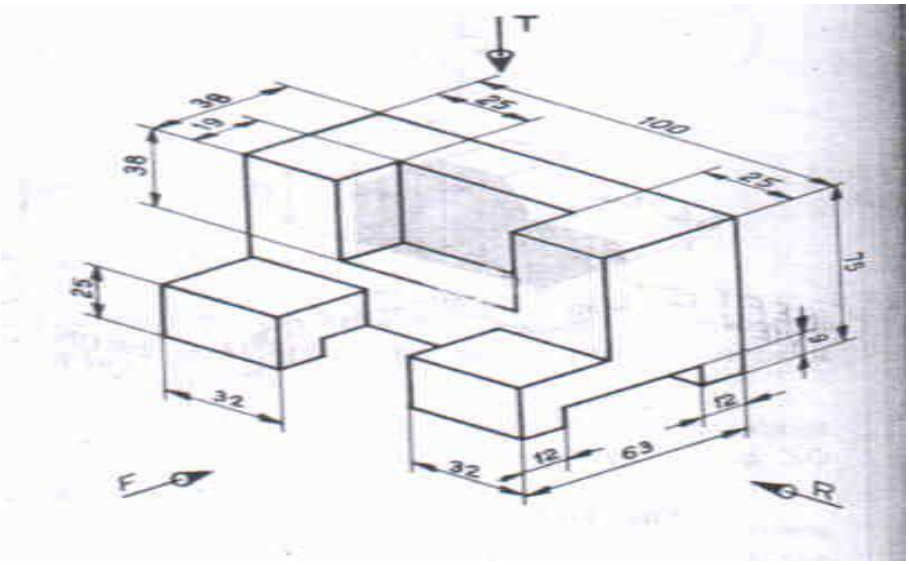
(Regulations 2021)

Duration: Three hours Maximum: 100 Marks

PART A - (5 x 20 = 100 Marks)

1	(a)	Draw an ellipse when the distance of focus from the directrix is equal to 35 mm and eccentricity is 3/4.Also draw a tangent and a normal at any point on the ellipse.	CO1-App	(20)
		Or		
	(b)	A fixed point is 50 mm from a fixed line. Draw the focus of a point moving in such a way that its distance from the fixed straight line is equal to its distance from the fixed point. Name the curve. Draw a tangent and normal at a point at horizontal distance of 40 mm from the directrix.	CO1-App	(20)
2	(a)	A Cylinder of diameter 40mm and height 65mm is resting on ground on a base. It is then tilted such that its axis makes an angle of $30^0$with HP and parallel to VP. Draw the Projections	CO2-App	(20)
		Or		
	(b)	A cone of diameter 50mm, axis height 70mm is lying on HP on one of its base points with its axis inclined at 40^0 to HP and parallel to VP. Draw its projections.	CO2 - App	(20)
3	(a)	Draw the Isometric view of a cylinder of base 50 mm diameter and 70 mm height when its rests with its base on HP.	CO3-App	(20)
		Or		
	(b)	A square pyramid of side of base 30 mm and altitude 50 mm stands on the ground vertically with an edge of base parallel to and 15 mm behind PP. The station point is 35 mm in front of PP and 60 mm above the ground. The central plane is located at 35 mm to the left of the solid. Draw the perspective projection of the pyramid.	CO3-App	(20)

4.	(a)	A cylinder of diameter 50 mm and axis length 60 mm lies on ground with its axis perpendicular to the picture plane and one of its circular bases touching the picture plane. The station point is 45 mm to the right of the axis of the cylinder, 40 mm in front of Picture Plane and 70 mm above the Ground Plane. Draw the Perspective View of the cylinder.	CO3-App	(20)
	(b)	A square pyramid of base side 35 mm and axis height 50 mm resting on HP with its base parallel to VP. Draw the isometric view.	CO3-App	(20)
5.	(a)	Draw the three orthographic views for the following fig.	CO4-App	(20)



Or

(b) Draw the three principal views of the component as shown in the figure CO4-App (20)