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PACE INSTITUTE OF TECHNOLOGY & SCIENCES::ONGOLE  
(AUTONOMOUS)

I B.TECH I SEMESTER END REGULAR EXAMINATIONS, FEB - 2023  
ENGINEERING GRAPHICS  
(Common to CE,EEE Branches)

Time: 3 hours

Max. Marks: 70

Answer all the questions from each UNIT (5X14=70M)

Q.No.	Questions	Marks	CO	KL
UNIT-I				
1.	a) The major axis of an ellipse is 100 mm long and the foci are at a distance of 15 mm from its ends. Find the minor axis. Draw the ellipse by Oblong method.	[7M]	1	
	b) Draw a vernier scale of R.F. = 5 to read 1/5 cm and 1/25 cm and to measure up to 5 cm. Mark on a scale distances of 2.12 cm and 4.29 cm.	[7M]	1	
OR				
2.	a) A point A is situated in the first quadrant. Its shortest distance from the intersection point of HP and VP and auxiliary plane is 60 mm and it is equidistant from the principal planes. Draw the projections of the point and determine its distance from the principal planes.	[7M]	1	
	b) Draw the projections of the following points on the same ground line, keeping the Projectors 25mm apart. i) A, in the HP and 20 mm behind the VP. ii) B, 40mm above the HP. and 25mm in front of the VP.	[7M]	1	
UNIT-II				
3.	a) A 100 mm long line is parallel to and 40 mm above the HP. Its two ends are 25mm and 50 mm in front of the VP respectively. Draw its projections and find its inclinations with the VP.	[7M]	2	
	b) The length of the top view of a line parallel to the VP and inclined at 45° to the HP is 5 cm. One end of the line is 1.2 cm above the HP and 2.5 cm in front of the VP. Draw the projections of the line and determine its true length.	[7M]	2	
OR				
4.	A line PQ of 90 mm long has its end P at 20 mm above HP and 25 mm in front of VP. Its front view and top view measure 75 mm and 80 mm respectively. Draw the projections of the line and determine its inclinations with HP and VP. Locate traces also.	[14M]	2	
UNIT-III				
5.	A thin circular plate of 70 mm diameter is resting on its circumference such that its plane is inclined 60° to the HP and 30° to the VP. Draw the projections of the plate.	[14M]	3	
OR				
6.	Draw the projections of a cylinder 75mm in diameter and 100 mm long, lying on the ground with its axis inclined at 30° to the VP and parallel to the ground.	[14M]	3	
UNIT-IV				

7.		Draw isometric view	[14M]	4	
OR					
8.	a)	Draw the front view, top view and side view for the following Isometric view.	[7M]	4	
	b)	Draw the development of the lateral surface of a pentagonal prism side of base 30mm and height 60mm resting with its base on H.P.	[7M]	4	
UNIT-V					
9.	a)	Explain The Fusion 360 Interface Design Navigation.	[7M]	5	
	b)	Discus User Interface steps in fusion 360.	[7M]	5	
OR					
10.	a)	Discus following states a).Manage your design b). Data Panel Interface	[7M]	5	
	b)	Explain the Sketching Workflow - Sketch Entities -Dimensioning Sketch Constraint.	[7M]	5	

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