H.T No										

Sreenidhi Institute of Science and Technology
(An Autonomous Institution)

Regulations: A22

Code No: 9BC01 **Date: 27-Mar-2023 (FN)**

B.Tech I-Year I- Semester External Examination, March-2023 (Regular)
ENGINEERING GRAPHICS (CIVIL, EEE, ME, ECE and ECM)

Time: 3 Hours **Max.Marks:60**

Note: ***a)*** *No additional answer sheets will be provided.*
b) All sub-parts of a question must be answered at one place only, otherwise it will not be valued.
c) Missing data can be assumed suitably.

Bloom's Cognitive Levels of Learning (BCLL)

Remember	L1	Apply	L3	Evaluate	L5
Understand	L2	Analyze	L4	Create	L6

Part - A Max.Marks: 6x2=12

ANSWER ALL QUESTIONS, EACH QUESTION CARRIES 2 MARKS.

		BCLL	CO(s)	Marks
1	Define an Ellipse.	L1	CO1	[2M]
2	Define Vertical and horizontal Planes.	L1	CO2	[2M]
3	What is meant by Projection?	L1	CO3	[2M]
4	Define a section Plane.	L1	CO4	[2M]
5	Define Isometric projection.	L1	CO5	[2M]
6	Draw the sign convention used to represent First angle projection.	L1	CO6	[2M]

Part – B Max.Marks: 6x8=48

ANSWER ALL QUESTIONS. EACH QUESTION CARRIES 8 MARKS.

			BCLL	CO(s)	Marks
7.	a)	Construct an ellipse, with distance of the focus from the directrix as 50mm and eccentricity as 2/3.	L3	CO1	[8M]
		OR			
	b)	Construct a parabola with the distance of the focus from the directrix as 50mm. Also, draw normal and tangent to the curve, at a point 40mm from the directrix.	L3	CO1	[8M]
8.	a)	Draw the projections of the following point, i) A– 20mm above HP and 30mm in front of VP ii) B – 20mm above HP and 30mm behind VP iii) C– 20mm below HP and 30mm behind VP iv) D– 20mm below HP and 30mm in front of VP	L1	CO2	[8M]
		OR			
	b)	A line AB of 100mm length, is inclined at an angle of 30^0 to HP and 45^0 to VP. The point A is 15mm above HP and 20mm in front of VP. Draw the projections of the line.	L1	CO2	[8M]
9.	a)	Draw the projections of a regular pentagon of 25mm side, with its surface making an angle of 45^0 with HP. One of the sides of the pentagon is parallel to HP and 15 mm away from it.	L1	CO3	[8M]
		OR			
	b)	Draw the projections of a cylinder, base 50 mm diameter and axis 75mm long resting with its base on the HP axis parallel to VP.	L1	CO3	[8M]

10. a) A cylinder of 40 mm diameter, 60 mm height and having its axis vertical, is cut by a section plane, perpendicular to the VP, inclined at 45^0 to the HP and intersecting the axis 32 mm above the base. Draw its front view, sectional top view and true shape of the section L1 CO4 [8M]

OR

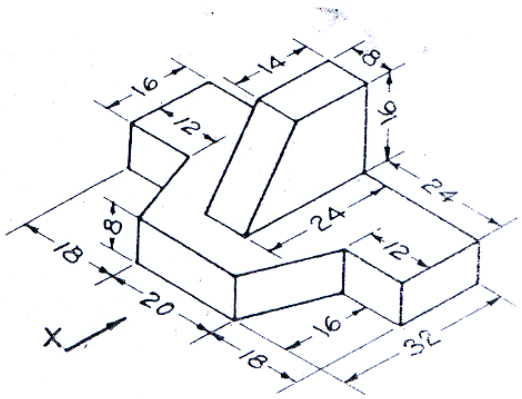
b) A square prism of side of base 40 mm and axis 80 mm long, is resting on its base on HP such that, a rectangular face of it is parallel to VP. Draw the development of the prism. L1 CO4 [8M]

11. a) Draw the isometric view of a square prism of side of base 35 mm and height 65 mm when its axis is (i) vertical and (ii) horizontal. L1 CO5 [8M]

OR

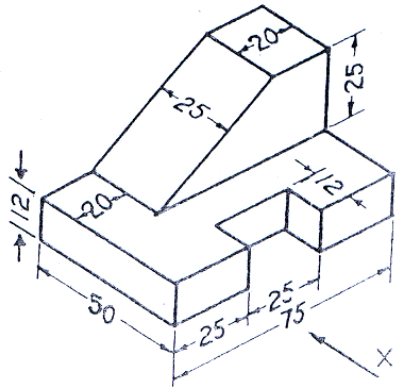
b) Draw the isometric view of a cylinder of base 50 mm diameter and 70 mm height when it rests with its base on HP. L1 CO5 [8M]

12. a) Draw front view ,top view and side views of the of the isometric view shown in fig L1 CO6 [8M]



OR

b) Draw front view ,top view and side views of the isometric view shown in fig L1 CO6 [8M]



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