5-1-2026 AN

Q.P.Code: 23ME0301b	R23	H.T.No.									

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B.Tech. I Year I Semester Regular & Supplementary Examinations December/January-2025/2026
ENGINEERING GRAPHICS
(Computer Science & Engineering)

Time: 3 Hours **Max. Marks: 70**

(Answer all the Questions **5 x 14 = 70** Marks)

UNIT-I

1		Draw a parabola having a distance of 50 mm between the focus and directrix and identify normal and tangent to the parabola at a point 35 mm from the focus.	CO1	L6	14M
		OR			
2	a	Draw the involute of a regular pentagon of side 20 mm.	CO1	L3	6M
	b	Develop the involute of a circle of side diameter 50 mm. Draw a tangent and normal to the curve at a distance of 100 mm from the centre of the circle	CO1	L3	8M

UNIT-II

3		A square plane ABCD of side 30mm is parallel to HP and 20mm away from it. Draw the projections of the plane, when (i) two of its sides are parallel to VP and (ii) and one of its side is inclined at 300 to VP.	CO3	L6	14M
		OR			
4		A semi circular plane of diameter 70mm has its straight edge on the VP and inclined at 30o to the HP .Draw the projection of the plane when its surface is inclined at 450 to VP	CO3	L6	14M

UNIT-III

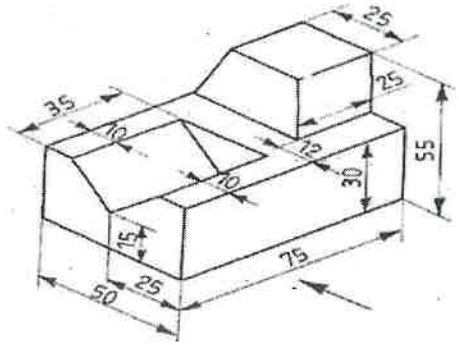
5		A cube of 40mm side is resting with a face on H.P such that i) vertical faces are equally inclined to V.P. ii) one of its vertical faces is inclined at 300 to V.P.Draw its projections.	CO3	L6	14M
		OR			
6		A cone of diameter 50 mm and axis 60 mm has its generator in the VP and the axis is parallel to the HP. Draw its projections.	CO3	L6	14M

UNIT-IV

7		A pentagonal pyramid with edge of base 25 mm and axis 65 mm long, its base is resting on HP. It is cut by a section plane, inclined at 600 to HP and perpendicular to VP it bisects the axis. Draw the projections and obtain the true shape of the section.	CO4	L6	14M
		OR			
8		A cone of 50 mm diameter and axis 70 mm long. Its base is on HP. It is cut by a sectional plane perpendicular to VP and inclined to HP at 450 from apex 32mm .Draw the projections of FV,S.TV, True shape.	CO4	L6	14M

UNIT-V

9		Draw the isometric view of a cone of base diameter 50mm and axis 60 mm. The cone has its base on (i)HP (ii)VP	CO5	L1	14M
		OR			
10		Draw three views of the blocks shown pictorially in figure according to first angle projection	CO6	L6	14M



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