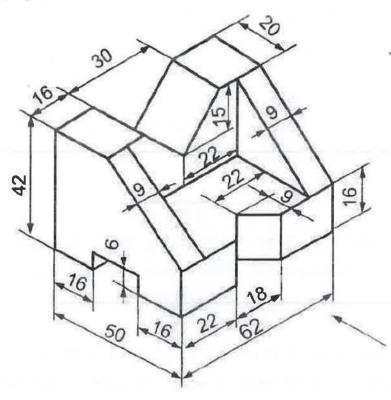
			-	
O.P.	.Code: 23ME0301d R23 H.T.No.			
SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR (AUTONOMOUS)				
B.Tech. I Year I Semester Regular & Supplementary Examinations December/January-2024/202. ENGINEERING GRAPHICS				
(Electronics & Communications Engineering)				
Time: 3 Hours		Max.	Mar	ks: 70
(Answer all the Questions $5 \times 14 = 70$ Marks)				
	UNIT-I			
1	Construct a hypo cycloid of a circle of 50 mm diameter, which rolls inside	CO1	L6	14M
	another circle of 180 mm diameter for one revolution counter			
	clockwise.			
	OR			
2	a) Draw the involute of a regular pentagon of side 20 mm.	CO1	L6	7M
	b) Develop the involute of a circle of side diameter 50 mm. Draw a tangent	CO1	L6	7M
	and normal to the curve at a distance of 100 mm from the centre of the			
	circle.			
	UNIT-H			
3	A square plane ABCD of side 30mm is parallel to HP and 20mm away	CO ₂	L1	14M
	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 30° to VP.			
	OR			
4	A regular hexagonal plane of 30 mm side has a corner on HP, and its	CO2	L3	14M
	surface is inclined at 45° to HP. Draw the projections, when the diagonal			
	through the corner, which is on HP makes 30° with VP.			
	UNIT-III			
5	A cylinder of base diameter 50mm and axis 70 mm has a generator in the	CO3	L6	14M
	VP and inclined at 45° to the HP. Draw its projections.			
	OR			
6	A pentagonal pyramid of base edge 30mm and axis 60mm rests on an edge	CO3	L6	14M
	of its base in the HP. Its axis is parallel to VP and inclined at 45° to the HP.			
	Draw its projections.			
UNIT-IV				
7	A square prism of side of base 40 mm and axis 80 mm long, is resting on	CO4	L6	14M
	its base on HP such that, a rectangular face of it is parallel to VP. Draw			
	the development of the prism.			

A cone of base 50 mm diameter and height 65 mm rests with its base on CO4 L6 14M HP. A section plane perpendicular to VP and inclined at 30° to HP bisects the axis of the cone. Draw the development of the lateral surface of the truncated cone.

UNIT-V

9 Draw three views of the blocks shown pictorially in figure according to CO6 L6 14M first angle projection.



base parallel to the VP.

OR

10 Draw the isometric view of a pentagonal prism of base side 35 mm and CO5 L1 1 axis 60mm. The prism rests on its base on the HP with an edge of the

*** END ***