O.P.Code: 16ME302	R16	H.T.No.									

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

B.Tech I Year I Semester Supplementary Examinations June-2024

ENGINEERING GRAPHICS

(Common to ECE, CSE & CSIT)

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

(Answer all Five Units **5 x 12 = 60** Marks)

UNIT-I

1	The vertex of a hyperbola is 60 mm from its focus. Draw the curve, if the eccentricity is 3/2. Draw a normal and a tangent at a point on the curve, 75 mm from the directrix.	CO1	L1	12M
	OR			
2	Construct an ellipse, with distance of the focus from the directrix as 50 mm and eccentricity as 2/3. Also draw normal and tangent to the curve at a point 40 mm from the directrix.	CO1	L1	12M

UNIT-II

3	A point A is 20mm above the HP and 50mm in front of the VP. Another point B is 40mm below the HP and 15mm behind the VP. The distance between the projectors of the points, measured parallel to xy, is 75mm. Draw the projections of the points. Draw lines joining their FVs and TVs	CO2	L2	12M
	OR			
4	A line AB of 100mm length is inclined at an angle of 300 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.	CO2	L2	12M

UNIT-III

5	An equilateral triangular plane ABC of side 40mm, has its plane parallel to VP and 20mm away from it. Draw the projections of the plane when one of its sides is (i) perpendicular to HP (ii) parallel to HP and (iii) inclined to HP at an angle of 45^0.	CO3	L5	12M
	OR			
6	A thin 300 – 600 set-square has its longest edge (diagonal) on HP and inclined at 300 to VP. Its surface makes an angle of 45^0 with HP. Draw the projections, choosing suitable size for the set-square.	CO3	L5	12M

UNIT-IV

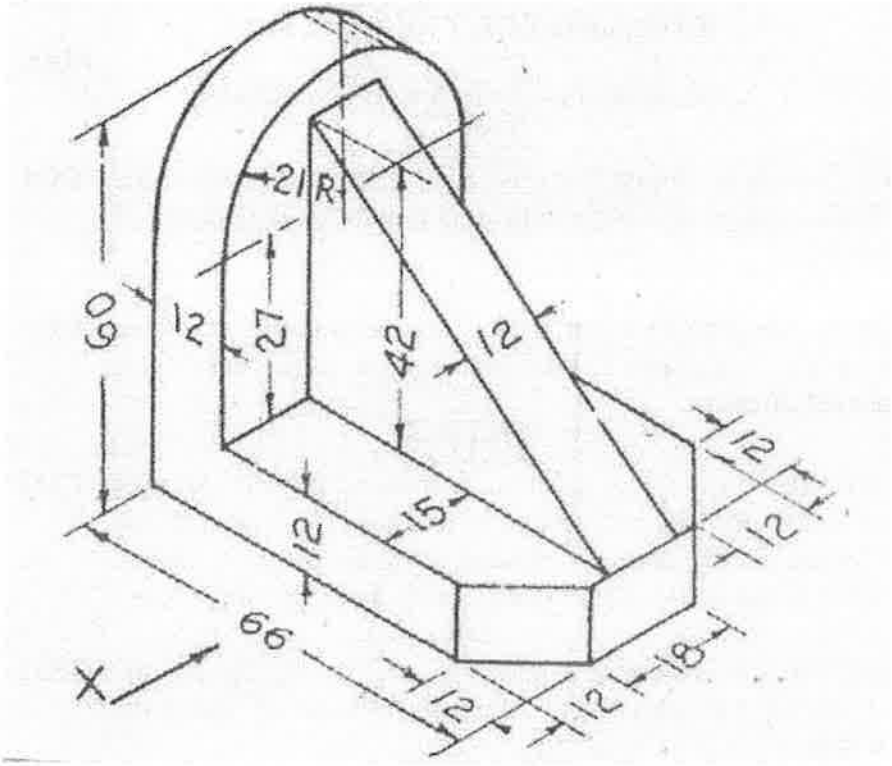
7	A hexagonal prism of side of base 30 mm and length of axis 75 mm, is resting on its base on HP. It is cut by a section plane inclined 35 degree to HP and passing through top corner. Draw the front and sectional top views of the solid and true shape of the section.	CO4	L6	12M
	OR			
8	A pentagonal pyramid, side of base 30 mm and height 52 mm, stands with its base on HP and an edge of the base is parallel to VP. It is cut by a plane perpendicular to VP, inclined at 40 degree to HP and passing through a point on the axis, 32 mm above the base. Draw the development of the lateral surface of the truncated pyramid	CO4	L6	12M

UNIT-V

9	Draw the isometric view of a cone of base diameter 50mm and axis 60 mm. The cone has its base on (a)HP (b)VP	CO5	L4	12M

OR

10 Draw three views of the blocks shown pictorially in figure according to first angle projection **CO5 L7 12M**



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