SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B.Tech I Year II Semester Regular & Supplementary Examinations August-2023
ENGINEERING GRAPHICS
(Common to CCC & CSM)

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	L3	6M	

OR

2	Draw an ellipse(half ellipse by concentric circle method and half by rectangle method) having major axis is equal to 100mm and the minor axis is equal to 70 mm.	CO1	L3	6M	

UNIT-II

3 a State the quadrants in which the following points are located   CO2 L3 6M
　　A – Front view blow xy and top view above xy
　　B – Front and top views are above xy
　　C – Front view above xy and top view below xy
　　D – Front and top views are below xy

　 b Identify the relative positions of the projections of the following   CO2 L3 6M
　　points with respect to xy
　　A – In the second quadrant
　　B – In the third quadrant
　　C – In the first quadrant p
　　D – In the fourth quadrant

OR

4 Draw the projections of a straight line AB of 70 mm long, in the   CO2 L3 12M
following positions:
a)Inclined at 30o to VP, in HP and one end on VP
b) Inclined at 45 o to HP, one end 20 mm above HP and parallel
to and 30 mm in front of VP
c) Inclined at 60 o to VP, one end 20 mm in front of VP and
parallel to and 25 mm above HP

UNIT-III

5 An equilateral triangular plane ABC of side 40mm has its plane parallel to   CO3 L3 12M
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°.

OR

6 A cone of diameter 50 mm and axis 60 mm has its generator in the VP and   CO3 L3 12M
the axis is parallel to the HP.Draw its projections.

7   A pentagonal pyramid with edge of base 25 mm and axis 65 mm long, its   CO4   L3   12M
     base is resting on HP. It is cut by a section plane, inclined at 60° to HP and
     perpendicular to VP at bisect the axis. Draw the projections and obtain the
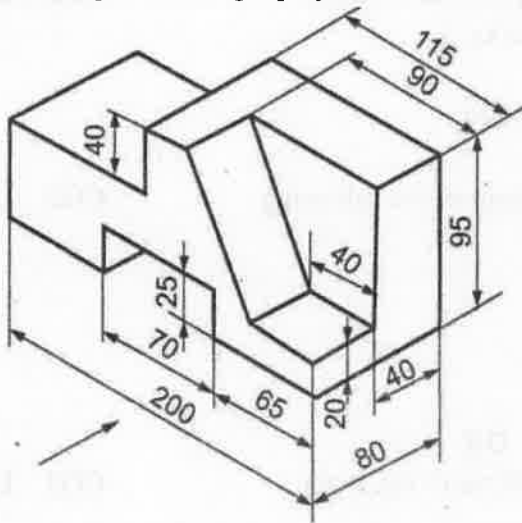   true shape of the section.

<div align="center">OR</div>

8   A square pyramid of base 40 mm and axis 60 mm long, Its base lies on VP   CO4   L3   12M
     with its axis parallel to HP. A cut sectional plane, 60° to VP and it pass
     10mm away from the axis. Draw the projections sectional front view.

<div align="center">UNIT-V</div>

9   a Draw the isometric view of a cylinder of base diameter 50mm and axis 60   CO5   L3   6M
        mm the axis of the cylinder is perpendicular to the HP.

     b Draw the isometric view of a circular lamina of diameter 50mm on all the   CO5   L3   6M
        three principal planes using four centre methods.

<div align="center">OR</div>

10   Draw three views of the blocks shown pictorially in figure   CO5   L3   12M
     according to first angle projection

<div align="center">*** END ***</div>