SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B.Tech. I Year I Semester Regular & Supplementary Examinations December/January-2025/2026
ENGINEERING GRAPHICS
(Common to EEE, CSIT & CSE)

Time: 3 Hours

Max. Marks: 70

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

UNIT-I

1	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	L6	14M

OR

2	a	Construct a regular Pentagon of base side 30mm by general method.	CO1	L6	7M
	b	Construct a regular Hexagon of base side 30mm by general method.	CO1	L6	7M

UNIT-II

3	A line NS 80mm long has its end N 10mm above HP and 15mm In front of VP. The other end S is 65mm above HP and 50mm in front of VP. Draw the projections of the line and Find its true inclinations with HP & VP.	CO2	L3	14M

OR

4	Draw the projections of a straight line AB of 70 mm long, in the following positions:	CO2	L1	14M

i) parallel to both HP and VP and 20 mm from each.
ii) Parallel to and 20 mm above the HP and on VP
iii) Parallel to and 30 mm in front of VP and on HP
iv) Perpendicular to HP, 30 mm in front of VP & one end 25 mm above HP
v) Perpendicular to HP, 30 mm in front of VP & one end on HP

UNIT-III

5	Draw the projections of a hexagonal prism of base side 25mm and axis 60mm long, when it is resting on one of its corners of the base on H.P. The axis of the solid is inclined at 450 to H.P.	CO3	L6	14M

OR

6	a	Draw the projections of a cylinder of base 30mm diameter and axis 50mm long, when it is resting on H.P on one of its bases.	CO3	L6	7M
	b	Draw the projections of a cone of base 30mm diameter and axis 50mm long, when it is resting on H.P on one of its bases.	CO3	L6	7M

7   A pentagonal pyramid with edge of base 25 mm and axis 65 mm long,   CO4   L6   14M
     its base is resting on HP. It is cut by a section plane, inclined at 600 to
     HP and perpendicular to V.P it bisects the axis. Draw the projections and
     obtain the true shape of the section.
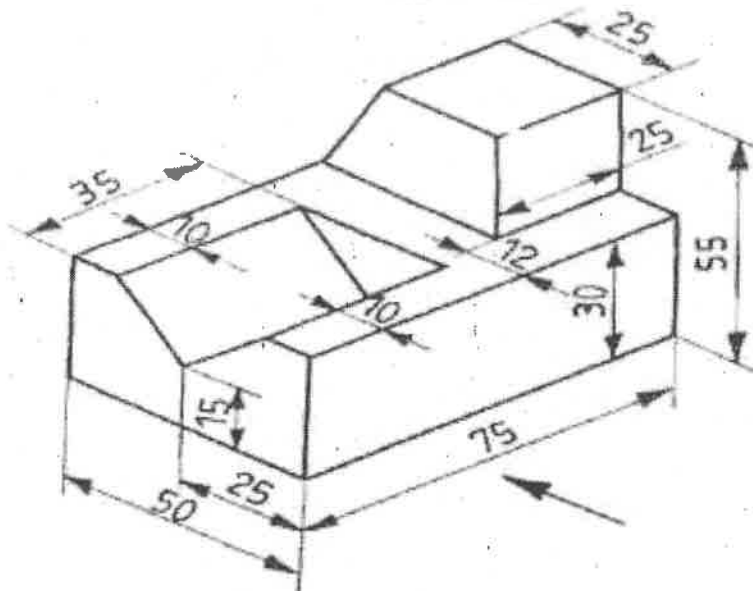
OR

8   A cone of base 50 mm diameter and height 65 mm rests with its base on   CO4   L1   14M
     HP. A section plane perpendicular to VP and inclined at 300 to HP
     bisects the axis of the cone. Draw the development of the lateral surface
     of the truncated cone.

UNIT-V

9   a Draw the isometric view of a cylinder of base diameter 50mm and axis   CO5   L1   8M
        60 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   CO5   L1   6M
        the three principal planes using four centre methods.

OR

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

*** END ***