Q.P. Code: 20ME0301a

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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

B.Tech I Year I Semester Regular & Supplementary Examinations May-2022

ENGINEERING GRAPHICS

(Electronics and Communication Engineering)

Time: 3 hours Max. Marks: 60

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

UNIT-I

1	**a**	Construct an ellipse having major axis is equal to 100 mm and the minor axis is equal to 70 mm. Use the concentric circle method.	**L3**	**6M**
	b	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.	**L6**	**6M**

OR

2		Construct an ellipse when the distance between the focus and directrix is 35 mm and eccentricity is 3/4. Also draw the tangent and normal to any point on the curve.	**L3**	**12M**

UNIT-II

3		Draw the projections of the following points, keeping the distance between the projectors as 25mm on the same reference lines. A – 20mm above HP and 30mm in front of VP B – 20mm above HP and 30mm behind VP C – 20mm below HP and 30mm behind VP D – 20mm below HP and 30mm in front of VP E – On HP and 30mm in front of VP F – On VP and 20mm above HP G – Lying on both HP and VP	**L6**	**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.	**L6**	**12M**

UNIT-III

5		A regular hexagonal plane of 30 mm side has a corner on HP, and its surface is inclined at 45^0 to HP. Draw the projections, when the diagonal through the corner, which is on HP makes 30^0 with VP.	**L6**	**12M**

OR

6		A pentagonal prism of base side 30 mm and axis 60mm is resting on one of its rectangular faces on HP, with the axis parallel to VP. Draw its projections.	**L6**	**12M**

UNIT-IV

7		A cube of side 40 mm is resting on HP on one of its faces, with a vertical face inclined at 300 to VP. It is cut by a section plane inclined at 45^0 to HP and passing through the axis at 8 mm from the top surface. Draw the projections of the solid and also show the true shape of the section.	**L6**	**12M**

OR

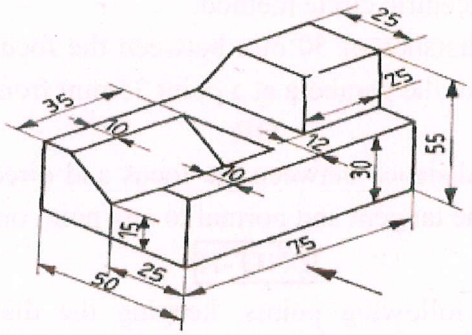
8	A square prism of side of base 40 mm and axis 80 mm long, is resting on its base on HP such that, a rectangular face of it is parallel to VP. Draw the development of the prism.	**L6**	**12M**

UNIT-V

9	Draw the isometric projection of a pentagonal prism of base side 35 mm and axis 60mm. The prism rests on its base on the HP with an edge of the base parallel to the VP.	**L6**	**12M**

OR

10	Draw three views of the blocks shown pictorially in figure according to first angle projection.	**L6**	**12M**



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