Reg. No:

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B.Tech I Year II Semester Supplementary Examinations May-2022
Engineering Graphics
(Common to CE, AGE, CSE, CSIT, CSM & CIC)

Time: 3 hours   Max. Marks: 60

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

UNIT-I

1   a   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.   **L3**   **6M**

    b   Construct an ellipse in a parallelogram having sides 120 mm and 80 mm long by using Rectangle method.   **L3**   **6M**

OR

2   a   Inscribe an ellipse in a parallelogram having sides 150 mm and 100 mm long and an included angle of 120^0.   **L3**   **6M**

    b   Construct a parabola in a parallelogram of sides 100 x 60 with an included angle of 75^0.   **L3**   **6M**

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.   **L3**   **12M**

OR

4   A line AB of 100mm length is inclined at an angle of 30^0 to HP and 450 to VP. The point A is 15mm above HP and 20mm in front of VP. Draw the projections of the line.   **L3**   **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.   **L3**   **12M**

OR

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

UNIT-IV

7   A cone of 50 mm diameter and axis 70 mm long. Its base is on HP.It is cut by a sectional plane perpendicular to VP and inclined to HP at 450 from apex 32mm .Draw the projections of FV,S.TV, True shape.   **L3**   **12M**
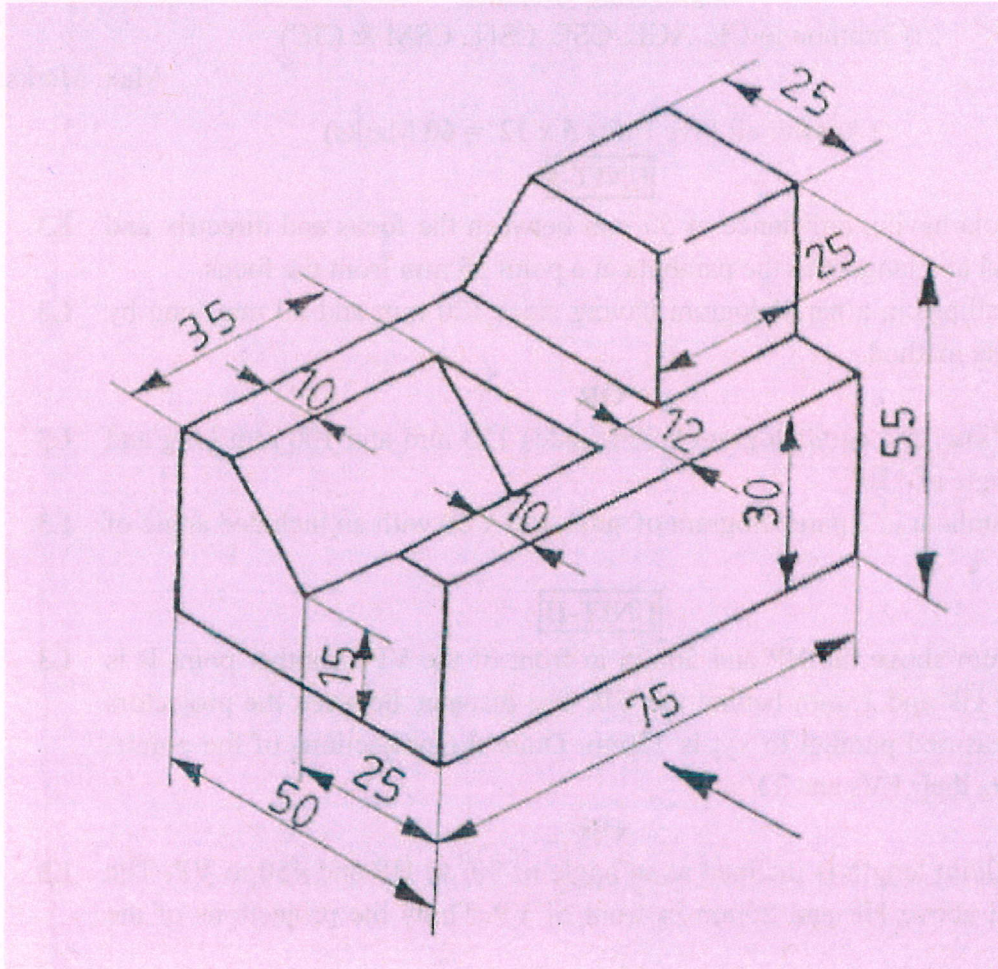
OR

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 400 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.   **L3**   **12M**

UNIT-V

9   Draw the isometric projection of the frustum of a hexagonal Pyramid of base side 40   **L3**   **12M**
mm, top side 25mm, and height 70mm. The frustum rests on the HP

OR

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

*** END ***