SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B.TECH II Year I Semester Supplementary Examinations June 2019
ENGINEERING GRAPHICS
(ECE, CSE & CSIT)

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

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

UNIT-I

1 a Draw an ellipse having major axis is equal to 100 mm and the minor axis is equal to 70 mm. Use the concentric circle method.   6M

  b A ball thrown up in the air reaches maximum height of 45 meters and travels a horizontal distance of 75 metres. Trace the path of the ball, assuming it to be parabolic.   6M

OR

2 Draw a hypo cycloid of a circle of 50 mm diameter, which rolls inside another circle of 180 mm diameter for one revolution counter clockwise.   12M

UNIT-II

3 A line AB of 100mm length is inclined at an angle of 300 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.   12M

OR

4 A line CD 75mm long is inclined at an angle of 45° to HP and 30° to VP. The point P is 15mm above HP and 20mm in front of VP. Draw the projections of the line.   12M

UNIT-III

5 A regular hexagonal plane of 45 mm side has a corner on HP, and its surface is inclined at 450 to HP. Draw the projections, when the diagonal through the corner, which is on HP makes 300 with VP.   12M

OR

6 A square pyramid, base 40 mm side and axis 70 mm long, is freely suspended from one of the corners of its base. Draw its projections, when the axis as a vertical plane makes an angle of 450 with the VP.   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 45 degree from apex 32mm .Draw the projections of FV,S.TV, True shape.   12M

OR

8 A square pyramid, with side of base 30 mm and axis 50 mm long, is resting on its base on HP with an edge of the base parallel to VP. It is cut by a section plane, perpendicular to VP and inclined at 45 degree to HP. The section plane is passing through the mid-point of the axis. Draw the development of the surface of the cut pyramid.   12M

UNIT-V

9 Draw three views of the blocks shown pictorially in figure according to first angle projection.   12M
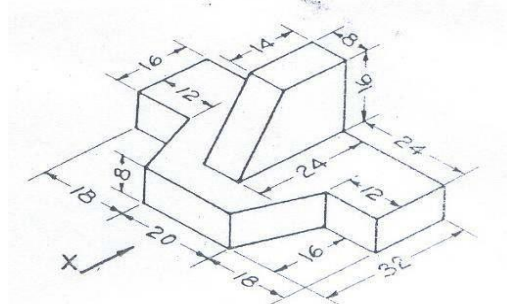
OR

10 a Draw the isometric projection of a hexagonal prism of base side 30 mm and axis 70mm. The prism rests on its base on the HP with an edge of the base parallel to the VP.   6M

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

END