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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B.Tech I Year I Semester Supplementary Examinations November-2020
ENGINEERING GRAPHICS
 (Common to ECE, CSE & CSIT)

Time: 3 hours

Max. Marks:60

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

UNIT-I

- 1 Construct a hyperbola with the distance between the focus and directrix as 50 and eccentricity as $3/2$. Also, draw normal and tangent to the curve at a point 30 from the directrix. 12M

OR

- 2 Construct a cycloid, given the diameter of the generating circle as 40 mm. Draw the tangent to the curve at a point on it, 35 mm from the line. 12M

UNIT-II

- 3 a Draw the projections of the following points, keeping the distance between the projectors as 25mm on the same reference lines.
 a) Point 'A' is 20mm above HP and 30mm in front of VP. 5M
 b) Point 'B' is 20mm below Hp and 40mm behind VP.
 c) Point 'P' is 10mm above HP and 30mm Behind VP.
 d) Point 'C' is 45mm below HP and 35mm in front of VP.
- b Two point A and B are on H.P, the point A being 30 mm in front of V.P, while B is 45 mm behind V.P.The line joining their top views makes an angle of 45^0 with XY.find the horizontal distance between two points. 7M

OR

- 4 A line AB of 80 mm long as its end A 15 mm from both H.P and V.P. The other end B is 40 mm above H.P and 50 mm in front of V.P. Draw the projections of the line and determine the inclination of the line with H.P and V.P. 12M

UNIT-III

- 5 Draw the projections of a hexagonal prism of side of base 25 mm and axis 60 mm long, when it is resting on one of its corners of the base on H.P. The axis of the solid is inclined at 45^0 to H.P. 12M

OR

- 6 Draw the projections of a cylinder of 40 mm diameter and axis 60 mm long, when it is lying on H.P, with its axis inclined at 45^0 to H.P and parallel to V.P. 12M

UNIT-IV

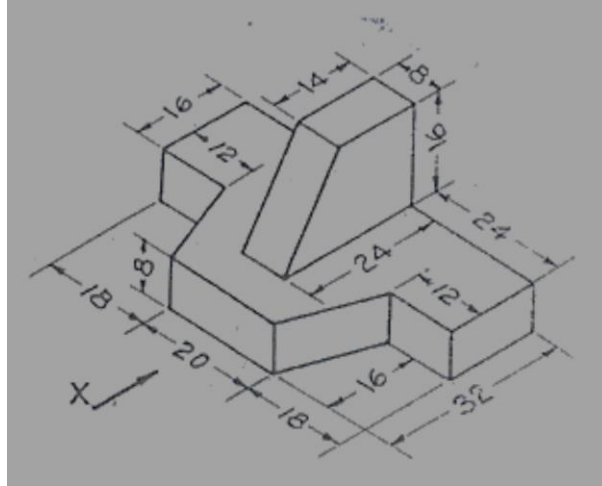
- 7 A cone of base 50 mm diameter and height 65 mm rests with its base on H.P.A section plane perpendicular to V.P and inclined at 30^0 to H.P bisects the axis of the cone. Draw the development of the lateral surface of the cone. 12M

OR

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

UNIT-V

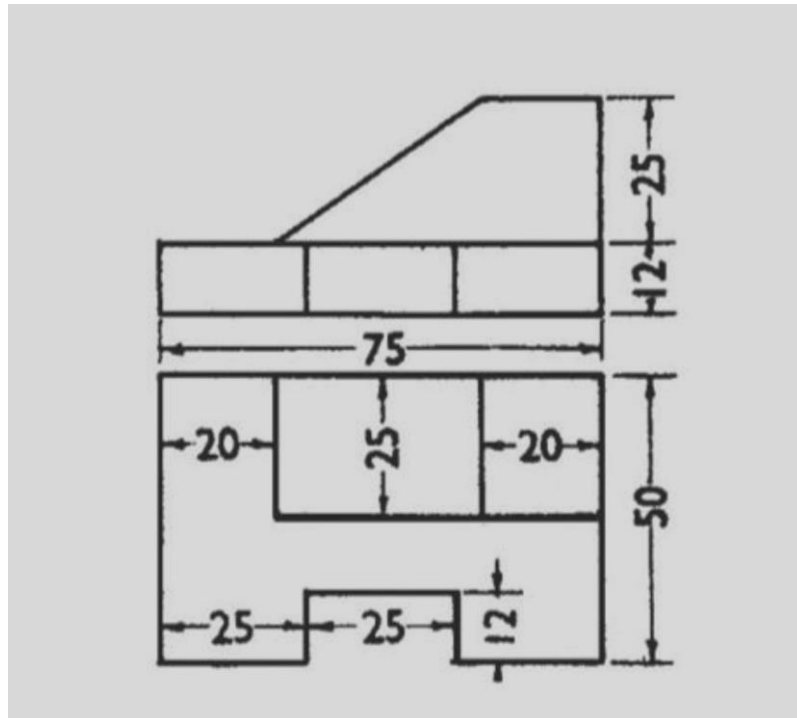
- 9 Draw three views of the blocks shown pictorially in figure according to first angle projection.



12M

OR

- 10 Draw the isometric view of the following sketch.



12M

*** END ***