## Code: 4G513

B.Tech. I Year Supplementary Examinations June 2022

## Engineering Drawing

(Common to EEE, ECE \& CSE)
Time: 3 Hours
Max. Marks: 70
Answer any five full questions by choosing one question from each unit ( $5 \times 14=70$ Marks )
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## UNIT-I

1. a) To construct regular pentagon of given side 25 mm by using Inscribe circle method
b) Inscribe a regular heptagon in a circle having an 80 mm diameter

## OR

2. a) Draw a cycloid for one complete revolution of a circle having a 50 mm diameter. Draw a tangent and normal to the curve at a point distant 35 mm above the base line.

## UNIT-II

3. a) $A$ line $A B$ is 30 mm long and inclined at $30^{\circ}$ to $H P$ and parallel to VP. The end $A$ of the line is 15 mm above HP and 20 mm in front of VP. Draw the projections of the line.

## OR

4. a) A line $A B$ of 100 mm length is inclined at an angle of $30^{\circ}$ to HP and $45^{\circ}$ to VP. The point $A$ is 15 above HP and 25 in front of VP. Draw the projections of the line.

## UNIT-III

5. a) Draw the projections of a regular pentagon of 25 mm side with its surface making angle of $45^{\circ}$ to HP. One of the sides of the pentagon is parallel to HP and 15 mm away from it.

## OR

6. a) A thin rectangular plate of $60 \times 40 \mathrm{~mm}$ size has its shorter edge on HP and inclined at $30^{\circ}$ to VP. Draw the projections of the plate when the top view is a square of 40 mm side

## UNIT-IV

7. a) Draw the projections of a cylinder of base 30 mm diameter and axis 50 mm long when it is resting on HP on one of its base.

## OR

8. a) Draw the projections of a hexagonal prism of base 25 mm side and axis 60 mm long, when it is resting on one of its corners of the base to HP. The axis of the solid is inclined at $45^{\circ}$ to HP

UNIT-V
9. Draw the isometric view of a pentagon of 50 mm side, plane in vertical and horizontal

## OR

10. Draw the front view, Top view and Side view of the following isometric view

