

CODE: 17CA03101

B. Tech I Year II Semester (R17) Regular Examinations, May/June - 2018

ENGINEERING DRAWING

(ECE)

Time: 3 hours

Max Marks: 70

Answer all **FIVE** units (5 x 14 = 70 Marks)

UNIT-I

1. Draw an ellipse of eccentricity $e=2/3$, the distance of the focus from the directrix is 50mm
OR
2. Draw an epi-cycloid of a circle of 40mm diameter which rolls outside an another circle of 120mm diameter for one revolution. Draw a tangent and normal to the curve at a point 90mm from the directing circle.

UNIT-II

3. A point H is 30mm from HP and 40mm from VP. Draw its projections considering it to be located in all the four quadrants (separately).
OR
4. The front view of a line 90mm long is inclined at 45° to the XY line, The front view being 65mm long. The point A is 15mm above the XY line and is in VP. Draw the projections of the line and find its inclinations with HP and VP.

UNIT-III

5. A circular lamina of 60mm diameter rests on HP such that the surface of the lamina is inclined at 30° to HP. The diameter through the point on which the lamina rests on HP, appears to be inclined at 45° to VP in the top view. Draw its projections.
OR
6. A pentagonal plane lamina of edges 20 mm is resting on HP with one of its corners touching it such that the plane surface makes an angle of 60° with HP. The two of the base edges containing the corner on which the lamina rests make equal inclinations with HP. If the edge opposite to this corner makes an angle of 45° with VP. Draw the top and the front views of the plane lamina in this position.

UNIT-IV

7. Draw the projections of a pentagonal prism 20 mm side of base and axis 40 mm long resting on a corner such that the two base edges passing through it make equal inclinations with HP and its base is inclined at 60° to HP and the axis appears to be inclined at 30° to VP in the top view.
OR

8. Draw the top and front views of a right circular cylinder of base 45 mm diameter and 60 mm long when it lies on HP, such that its axis is inclined at 30° to HP and the axis appears to be perpendicular to VP in the top view

UNIT-V

9. Draw the isometric view of a cylinder of 50mm diameter of base and 65mm height resting with its base on HP.
OR

10. Draw the isometric view of a cone of diameter 40mm and height 65mm
