**CODE: 17CA03101**

B. Tech I Year I Semester (R17) Supplementary Examinations, February 2018

# ENGINEERING DRAWING

(EEE & CSE)

Time: 3 hours Max Marks: 70

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

## UNIT-I

**1.** Draw the Rectangular Hyperbola at a Point 'P' (30,60) whose Asymptoes are right angles to each other.

OR

**2.** Draw the locus of a point P moving so point F to its distance from a fixed straight line $DD^1$ is ¾ $DD^{1.}$.Also draw a tangent and normal to the curve.

## UNIT-II

**3.** The top view of a line PQ is 70 mm and front view is 60 mm long. The end Q is nearer to both HP and VP than the end P and is 15 above HP and 20 mm infront of VP. Draw the projections of the line if the distance between projectors is 50 mm.

OR

**4.** A line AB 100 mm long measures 80 mm in front view and 70 mm in top view the mid point M of the line is 40 mm from both HP and VP. Draw its projections. Find its inclinations.

## UNIT-III

**5.** A pentagonal lamina having edges 25mm is placed on one of its corners on HP such that the surface makes an angle 30° with HP and perpendicular bisector of the edge passing through the corner on which the lamina rests appears to be inclined at 30° to VP. Draw the top and front views of the lamina.

OR

**6.** A regular pentagonal lamina of 25mm side is resting on one of its sides on HP while the corner opposite to this side touches VP. If the lamina makes an angle of 60° with HP and 30° with VP, draw the projections of the lamina.

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## UNIT-IV

**7.** A hexagonal prism 25 mm sides of base and 50 mm axis length rests on HP on one of its corners of the base such that the two base edges containing the corner on which it rests make equal inclinations with HP. Draw the projections of the prism when the axis of the prism is inclined to HP at 40° and appears to be inclined to VP at $45^0$.

OR

**8.** A square prism 35 mm sides of base and 65 mm axis rests on HP on one of its edges of the base which is inclined to VP at $30^0$.Draw the projections of the prism when the axis is inclined to HP at $45^0$

## UNIT-V

**9.** A frustum of cone base diameter 50mm, top diameter 25mm and height 50mm is placed centrally on a square slab side-80mm and thickness-30mm. Draw the isometric projection of the combination.

OR

**10.** A frustum of cone base diameter 50mm, top diameter 25mm and height 50mm is placed centrally on the top face of a cylinder diameter 60mm and height 60mm. Draw the isometric projection of the combination

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