

B.Tech I Year I Semester (R15) Supplementary Examinations June 2017

**ENGINEERING DRAWING**

(Common to CE and EEE)

Time: 3 hours

Max. Marks: 70

(Answer all five units, 05 X 14 = 70 Marks)

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**UNIT – I**

- 1 The major and minor axes of an ellipse are 120 and 80. Draw an ellipse by using four centre method.

**OR**

- 2 The asymptotes of a hyperbola are inclined at  $70^\circ$  to each other. Construct the curve when a point P on it is at a distance of 20 and 30 from the two asymptotes.

**UNIT – II**

- 3 Construct a scale of 1:8 to show decimeters and centimeters and to read up to 1 m. Show a length of 7.6 dm on it.

**OR**

- 4 (a) A point A is on HP and 30 in front of VP. Draw its projections.  
(b) A point A is 20 above HP, 25 in front of VP. Draw its projections.

**UNIT – III**

- 5 A room is 6 m x 5 m x 3.5 m high. An electric bulb is above the centre of the longer wall and 1 m below the ceiling and 0.35 m away from the wall. The switch for the light is 1.25 m above the floor, on the centre of an adjacent wall. Determine graphically, shortest distance between the bulb and switch.

**OR**

- 6 Semi-circular plate of 80 diameter, has its straight edge on VP and inclined at  $30^\circ$  to HP, while the surface of the plate is inclined at  $45^\circ$  to VP. Draw the projections of the plate.

**UNIT – IV**

- 7 An octahedron of side 40, is resting with one of its corners on HP. The axis passing through this corner is vertical and one of its horizontal edge is parallel to and 15 in front of VP. Draw the projections of the solid.

**OR**

- 8 A pentagonal pyramid of side of base 30 and axis 60 long, is resting on its base on HP, with an edge of the base parallel to VP. Draw the development of the lateral surface of the pyramid.

**UNIT – V**

- 9 Draw the isometric view of a hexagonal prism, with side of base 30 and axis 60 long. The prism is resting on its base on HP, with an edge of the base parallel to VP.

**OR**

- 10 Draw the front view, top view and side view for the following isometric view.

