

Code: 15A03101b

B.Tech I Year I Semester (R15) Supplementary Examinations June/July 2019

**ENGINEERING DRAWING**  
(Computer Science & Engineering)

Time: 3 hours

Max. Marks: 70

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

\*\*\*\*\*

**UNIT – I**

- 1 To draw rectangular hyperbola given the position of point p on it, 40 mm and 20 mm from the asymptotes.

**OR**

- 2 Draw a cycloid given the diameter of a rolling circle as 40 mm and also draw normal and tangent at any point on the curve.

**UNIT – II**

- 3 Construct a diagonal scale of RF = 1/32 showing yards, feet and inches and to measure up to 4 yards.

**OR**

- 4 (a) Two points A and B are in the HP. The point A is 30 mm in front of the VP. While B is behind the VP. The distance between their projectors is 75 mm and the line joining their top views makes an angle of  $45^\circ$  with xy. Find the distance of the point B from the VP.  
(b) A line AB 55 mm long makes an angle of  $30^\circ$  to HP and  $45^\circ$  to VP. The end A is 12 mm in front of VP and 15 mm above HP. Draw the projection of the line.

**UNIT – III**

- 5 A hexagonal lamina of 20 mm side rests on one of its corners on the HP. The diagonal passing through this corner is inclined at  $45^\circ$  to HP. The lamina is then rotated through  $90^\circ$  such that the top view of this diagonal is perpendicular to the VP and the surface is still inclined at  $45^\circ$  to the HP. Draw the projections of the lamina.

**OR**

- 6 A thin rectangular plate of sides 50 mm x 25 mm has its shorter side in the HP and inclined at an angle of  $30^\circ$  to the VP. Project its front view when its top view is a perfect square of 25 mm side.

**UNIT – IV**

- 7 A pentagonal prism side of base 25 mm and axis 50 mm long rests with one of its edges on HP such that the base containing that edge makes an angle of  $30^\circ$  to HP and its axis is parallel to VP. Draw its projections.

**OR**

- 8 A cone base 55 mm diameter and height 75 mm rests with its base on HP. Draw its projections and draw the development of the lateral surfaces of the cone.

Contd. in page 2

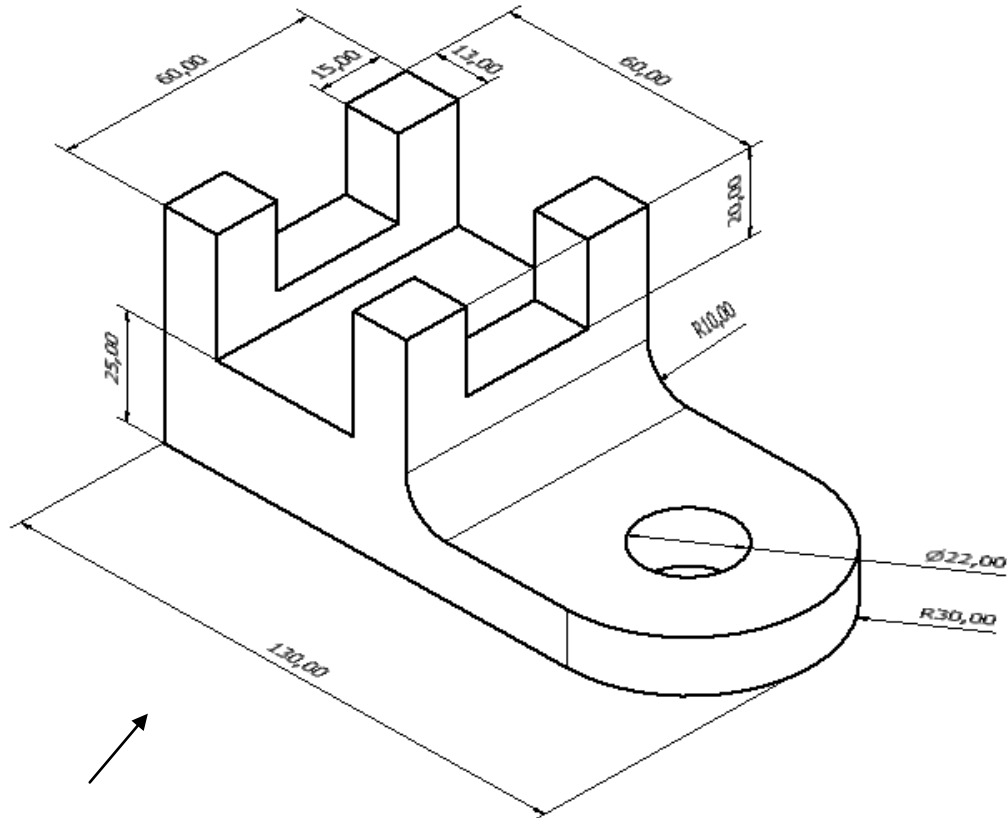
Code: 15A03101b

**UNIT – V**

9 Draw the isometric projection of a sphere of diameter 50 mm resting centrally on the top of a cube of side 60 mm.

**OR**

10 Draw the front view top view and side view of the given isometric view.



\*\*\*\*\*