

Code: 15A03101a

B.Tech I Year I Semester (R15) Supplementary Examinations June 2018

**ENGINEERING DRAWING**  
(Common to CE & EEE)

Time: 3 hours

Max. Marks: 70

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

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**UNIT - I**

1 Draw epicycloids of rolling circle 40 mm radius which rolls outside another circle (base circle) of 120 mm radius for one revolution.

**OR**

2 Draw a hypo cycloid when the radius of the directing circle (base circle) is twice the radius of the generating circle (rolling circle). Radius of the generating circle is 20 mm.

**UNIT - II**

3 Draw the projections of a point Q, which is 45 mm above HP and 15 mm behind VP.

**OR**

4 Draw the projections of a point R, which is 40 mm below HP and 15 mm behind VP.

**UNIT - III**

5 Draw the projections of a line CD 60 mm long parallel to HP and inclined at 35° to VP. C is 20 mm above HP and 15 mm in front of VP.

**OR**

6 Point A of the line AB is 5 mm above HP and 15 mm in front of VP. Point B is 30 mm above HP and 45 mm in front of VP. The front and top views lie in the same projector. Draw the projections and find the true length and true inclinations.

**UNIT - IV**

7 A hexagonal prism of base side 30 mm, height 50 mm is resting on the ground on one of its lateral faces with the axis perpendicular to VP. Draw the projections.

**OR**

8 Draw the full development of the cube of side 30 mm rests on its face with all the edges equally inclined at 30° to HP passing through the cube at the top left corner of the cube.

**UNIT - V**

9 Draw the isometric projection of a cylinder base 50 mm diameter and 70 mm height when it rests with its base on HP.

**OR**

10 Draw the three orthographic views of the objects shown in figure below.

