Code: 15A03101a

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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,  $05 \times 14 = 70 \text{ Marks}$ )

# UNIT – I

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

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

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

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

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

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

