CODE: 17CA03101

B. Tech I Year II Semester (R17) Supplementary Examinations, July/August - 2018

ENGINEERING DRAWING

(ECE)

Time: 3 hours Max Marks: 70

Answer all **FIVE** units (5 X 14 = 70 Marks)

UNIT-I

1. Draw an ellipse when the distance of focus from the directrix is equal to 50 mm and eccentricity is 2/3. Also draw a tangent and normal to the curve at a point 35 mm from the fixed straight line.

OR

2. Draw an epicycloid generated by a rolling circle of 50 mm on the outside of another circle of diameter 150 mm without slipping. Draw the tangent and normal to the cycloid at a distance 90 mm from the centre of base circle.

UNIT-II

3. A point 'M' is 20 mm above HP and 25 mm in front of VP. Another point 'N' is 30 mm behind VP and 35 mm below HP. Draw the projections of point M and N locating the distance between the projectors equal to 50 mm. Also draw a straight line joining their front views and their top views.

OR

4. A line 'AB' 70 mm long has its end A is 15 mm above the HP and 20 mm in front of the VP. The inclinations of the line with HP and VP are 30° and 45° respectively. Draw its projections.

UNIT-III

5. A hexagonal plane of side 30 mm is lying on HP by one of its side which is perpendicular to the VP. Draw the projections of the plane when its surface is 30° inclined to the HP.

OR

6. Draw the projections of a thin pentagonal plate of 30 mm side has one of its sides in HP and inclined at 30° to VP and its surface is inclined at 45° to the HP.

UNIT-IV

7. A hexagonal pyramid side of base 25 mm, axis length is 60 mm is lying on HP with one of its triangular face. Draw the projections of the solid when its axis is 30° inclined to VP.

OR

8. A pentagonal pyramid of base side 30 mm and height 70 mm is rest on HP by its base, whose one side is perpendicular to the VP and the axis is inclined at an angle of 45° to HP. Draw the projections of the solid.

UNIT-V

9. Draw the isometric view of the right circular cone of base diameter 50 mm and height 70 mm, when it is lying on HP with its base.

OR

10. Draw the isometric view of a square block of 60mm X 60mm X 20mm on which a sphere of radius 20mm is lying on its centre.

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