CW 3 Engineering Curves II

1. Construct an ellipse when the distance of the focus from the directrix is equal to 50 mm and eccentricity is 2/3. Also draw tangent and normal to the ellipse at any point.

2. Construct an ellipse when its major axis is 100 mm and minor axis 70 mm by using 'concentric circle method'.

3. The major axis of an ellipse is 110 mm long and the minor axis is 70 mm long. Find the foci and draw the ellipse by 'arcs of circles' method. Draw a tangent to the ellipse at a point it 25 mm above the major axis.

4. Construct the parabola, when the distance between of the focus from the directrix is 50 mm and draw a tangent and normal at a point on it 40 mm from F.

5. Draw a parabola having length 80 mm and axis height 50 mm by the rectangle method and also draw a tangent at any point on it.

6. Construct a hyperbola when the distance of the focus from the directrix is equal to 50 mm and eccentricity is 3/2. Also draw tangent and normal to the hyperbola at any point on it.

7. A point P is 20 mm and 30 mm respectively from two straight lines which are at right angles to each other. Draw a rectangular hyperbola from P within 6 mm distance from each line.