**CE101 Engineering Drawing July- Nov 2019**

**Indian Institute of Technology Guwahati**

**Lab Sheet-2 Curves and Conics Thursday Morning**

**Max Marks: 90 + 10 (overall neatness) Date: 22.08.2019**

1. Draw the involute of a square of side 15 mm. **[20]**
2. Construct a cycloid for the full revolution of a generating circle of diameter 45 mm. Consider the point P to be initially located on the surface of the base line. **[25]**
3. The vertex of an ellipse is located at a distance 30 mm from the focus. Draw the ellipse considering an eccentricity of 0.5. Draw a normal and a tangent at a point **Q** on the curve, located at a distance of 120 mm from the directrix. **[25]**
4. Draw a parabola (by rectangle method) having an abscissa of 40 mm and double ordinate of 60 mm. **[20]**