Government College of Engineering, Amravati

(An Autonomous Institute of Government of Maharashtra)

First Year B. Tech.

Course Code: MEU201 Course Name: Engg. Graphics

Time: 01 hr. Max. Marks: 15

Date:-19/09/2016 Time:-12.00 to 01.00pm

Solve any three. Each question carries equal marks

Q.1) A rod PQ, 80mm long oscillate about P. A point R moves from free end Q uniformly along the rod towards the pivoted end and comes back to its initial position as the rod swings first to the right from its vertical position through 70^0 and come to its initial position then to the left by the same angle and comes back to its vertical position. Draw the locus of the point R.

Q.2) Draw half of Ellipse by concentric circle method and remaining half by using Oblong method when major axis = 90 m and minor axis = 60 m. Also draw tangent and normal at any point outside the curve. (Assume suitable scale)

Q.3) A circle of radius 25 mm rolls, without slipping, on a horizontal line for half a revolution and then on a vertical line for another half revolution. Draw a curve traced out by a point P on the circumference of the circle. Assume point P initially in contact with horizontal line and circle)

Q.4) An inelastic string 150 mm long has its one end attached to the circumference of a circular disc, of 40 mm diameter. Draw the curve traced out by the other end of the string when it is completely wound around the disc keeping the string always tight. Also draw tangent and normal at a p9oint 70mm from centre of circle

**********BEST OF LUCK**********