

## SHEET NO -3

### ENGINEERING CURVE-2

- 1) a string is kept tight while unwinding it from a pentagonal prism which is resting with its base on hp. if 125mm long string can be unwound in one turn, name the path traced by the end point of the string.
- 2) a circle of 50 mm diameter rolls along a straight line without slipping. draw the curve traced out by point p on the periphery of the circle. take the initial position of the point at the bottom on the vertical center line of the circle. name the curve and also draw the normal and the tangent to the curve at suitable point on curve.
- 3) draw an archimedean spiral of 1.5 convolutions, the greatest and least radii being 115 mm and 25 mm respectively. draw tangent and normal to the spiral at any point on the curve.
- 4) major axis ab & minor axis cd are 100 and 70mm long respectively .draw ellipse half by arcs of circles method and another half by rectangle method