

SRI RAMAKRISHNA INSTITUTE OF TECHNOLOGY, COIMBATORE-10 (Approved by AICTE, New Delhi – Affiliated to Anna University, Chennai) Department of Mechanical Engineering



Class	: I Year
Topic	: Curves-Ellipse
Duration	:

Semester	: I
Max Marks	:
Date	:

The focus of a conic is 50 mm from the directrix. Draw the locus of a point 'P' moving in such a way that its distance from the directrix is equal to its distance from the focus. Name the curve. Draw a tangent to the curve at a point 60 mm from the directrix. (April/May 2011)



2. Draw a hyperbola when the distance between its focus and directrix is 50 mm and eccentricity is 3/2. Also draw the tangent and normal at a point 25 mm from the directrix. **(January 2010 AN)** 



The focus of a conic is 50 mm from the directrix. Draw the locus of a point 'P' moving in such a way that its distance from the directrix is equal to its distance from the focus. Name the curve. Draw a tangent to the curve at a point 60 mm from the directrix. (January 2010 FN)



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Draw the conic curve, if the distance of focus from the directrix is 70mm and the eccentricity is <sup>3</sup>/<sub>4</sub>. Also draw a tangent and a normal at any point on the curve. (January 2009)



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5. Draw the locus of a point P which moves in a plane in such a way that the ratio of its distances from a fixed point F and a fixed straight line AB is always 2/3. The distance between the fixed point F and fixed straight line is 50 mm. Also draw a tangent and normal on a point on the locus at a horizontal distance of 55 mm from the fixed straight line. **(May/June 2010)** 



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6. Draw the locus of a curve traced by a point, when the distance of focus from the directrix is equal to 35mm and eccentricity is 4/3. Also draw the tangent and normal to the curve at any point on the curve **(January 2009)** 



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 Draw the locus of the point P moving so that the ratio of the distance from a fixed point F to its distance from a fixed straight line is 1. The point P is at a distance of 30mm from the fixed straight line. Also draw a tangent and normal to the generated curve. (January 2010 AN)



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8. Draw the locus of a curve traced by a point, when the distance of focus from the directrix is equal to 35mm and eccentricity is 3/4. Also draw the tangent and normal to the curve at any point on the curve **(January 2011)** 



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The distance of the focus from the directrix is 40mm. trace the path of a point which moves such that its distance from the focus is equal to its distance from the directrix. (January 2011)



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10. Draw the locus of a point P which moves in a plane in such a way that the ratio of its distances from a fixed point F and a fixed straight line AB is always 2/3. The distance between the fixed point F and fixed straight line is 50 mm. Also draw a tangent and normal on a point on the locus at a horizontal distance of 55 mm from the fixed straight line. **(January 2012 AN)** 



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