**Ellipse**

**MCQ-Single Correct**

1. The eccentricity of an ellipse whose centre is at the origin is . If one of its directrices is x = -4, then the equation of the normal to it at  is :

(1)  (2) 

(3)  (4)  **[2017]**

2. The area (in sq. units) of the quadrilateral formed by the tangents at the end points of the latera recta to the ellipse , is :

(1) 18 (2) 

(3) 27 (4)  **[2015]**

3. The locus of the foot of perpendicular drawn from the centre of the ellipse on any tangent to it is

(1)  (2) 

(3)  (4)  **[2014]**

4. The equation of the circle passing through the foci of the ellipse , and having centre at (0,3) is

(1)  (2) 

(3)  (4)  **[2013]**

5. An ellipse is drawn by taking a diameter of the circle , as its semi-minor axis and a diameter of the circle as its semi-major axis. If the centre of the ellipse is at the origin and its axes are the coordinate axes, then the equation of the ellipse is

1.  (2) 

(3)  (4)  **[2012]**

6. The ellipse  is inscribed in a rectangle aligned with the coordinate axes, which in turn is inscribed in another ellipse that passes through the point (4,0). Then the equation of the ellipse is

(1)  (2) 

(3)  (4)  **[2009]**

7. A focus of an ellipse is at the origin. The directrix is the line x = 4 and the eccentricity is ½. Then the length of the semi-major axis is

(1)  (2) 

(3)  (4)  **[2008]**

8. In an ellipse, the distance between its foci is 6 and minor axis is 8. Then its eccentricity is

(1)  (2) 

(3)  (4)  **[2006]**

9. An ellipse has OB as semi minor axis, F and F’ its focii and the angle FBF’ is a right angle. Then the eccentricity of the ellipse is

(1)  (2) 

(3)  (4)  **[2005]**

10. The eccentricity of an ellipse, with its centre at the origin, is . If one of the directrices is x = 4, then the equation of the ellipse is

(1)  (2) 

(3)  (4)  **[2004]**

11. The foci of the ellipse  and the hyperbola  coincide. Then the value of is

(1) 1 (2) 5

(3) 7 (4) 9 **[2003]**