**CBSE Class 11 Mathematics**

**Important Questions**

**Chapter 11**

**Conic Sections**

**1 Marks Questions**

1. Find the equation of a circle with centre (P, Q) & touching the y-axis.
2. Find the equation of the directrix & the axis of the parabola
3. Find the coordinates of the foci of the ellipse
4. Find the eccentricity of the hyperbola:
5. Find the equation of a circle with centre (b, a) & touching x – axis?
6. Find the length of axes of
7. Find the length of the latus rectum of
8. Find the length of the latus rectum of the parabola
9. The equation represent a circle find its center.
10. Find the equation of the parabola with focus F(4, 0) & directrix .
11. Find the coordinates of foci of
12. Find the coordinates of the vertices of
13. Find the eccentricity of ellipse
14. Find the length of the latus rectum of
15. Find the centre of the circles
16. Find the centre of the circles
17. Find the radius of the circle
18. Find the length of latus rectum of
19. Find the length of latus rectum of

**CBSE Class 12 Mathematics**

**Important Question**

**Chapter 11 Conic Section**

**4 Marks Questions**

1. Show that the equation represent a circle, also find its centre and radius?
2. Find the equation of an ellipse whose foci are & the eccentricity is ?
3. Find the equation of an ellipse whose vertices are &
4. Find the equation of hyperbola whose length of latus rectum is 36 & foci are .
5. Find the equation of a circle drawn on the diagonal of the rectangle as its diameter. Whose sides are .
6. Find the coordinates of the focus & vertex, the equations of the directrix & the axis & length of latus rectum of the parabola
7. Show that the equation represents a circle. Also find its centre & radius.
8. Find the equation of the parabola with focus at & directrix is
9. Find the equation of the hyperbola with centre at the origin, length of the transverse axis 18 & one focus at
10. Find the equation of ellipse whose vertices are & foci are
11. Find the equation of the ellipse whose foci are & length of whose major axis is 10.
12. Find the equation of the hyperbola with centre at origin, length of the transverse axis 8 & one focus at (0, 6).
13. Find the equation of the hyperbola whose foci are & the length of whose conjugate axis is .
14. Find the equation of the hyperbola whose vertices are & foci are .
15. Find the equation of the ellipse for which & whose vertices are
16. Find the equation of the ellipse, the ends of whose major axis are & the ends of whose minor axis are
17. Find the equation of the parabola with vertex at the origin & as its directrix. Also, find its focus.
18. Find the equation of the circle, the end points of one of whose diameters are .
19. Find the equation of ellipse whose vertices are & the foci are
20. Find the equation of the hyperbola whose foci are & the transverse axis of length is 8.
21. Find the equation of a circle, the end points of one of whose diameters are .
22. If eccentricity is & foci are find the equation of an ellipse.
23. Find the equation of the hyperbola where foci are 7 the transverse axis of length.
24. Find the length of axes & coordinates of the vertices of the hyperbola .
25. Find the length of axes & length of latus rectum of the hyperbola .
26. Find the eccentricity of the hyperbola of
27. Find the equation of the hyperbola with centre at the origin, length of the transverse axis 6 & one focus at (0, 4).
28. Find the equation of the ellipse, the ends of whose major axis are & at the ends of whose minor are .
29. Find the equation of the parabola with focus at & directrix
30. If is a chord of the circle find the equation of the circle with this chord as diameter.

**CBSE Class 12 Mathematics**

**Important Questions**

**Chapter 11**

**Conic Sections**

**6 Marks Questions**

1. Find the length of major & minor axis coordinate’s of vertices & the foci, the eccentricity & length of latus rectum of the ellipse .
2. Find the length of the axis, the coordinates of the vertices & the foci the eccentricity & length of the latus rectum of the hyperbola .
3. Find the area of the triangle formed by lines joining the vertex of the parabola to the ends of its latus rectum.
4. A man running in a race course notes that the sum of the distances of the two flag posts from him is always 12 m & the distance between the flag posts is 10 m. Find the equation of the path traced by the man.
5. An equilateral triangle is inscribed in the parabola so that one angular point of the triangle is at vertex of the parabola. Find the length of each side of the triangle.
6. Find the equation of the hyperbola whose foci are at & which passes through the points (2, 3).
7. Find the equation of the curve formed by the set of all these points the sum of whose distance from the points A(4, 0, 0) & B(-4, 0, 0) is 10 units.
8. Find the equation of the ellipse with centre at the origin, major axis on the y – axis & passing through the points (3, 2) & (1, 6).
9. Prove that the standard equation of an ellipse is where a & b are the length of the semi major axis & the semi minor axis respectively & a > b.