

## ECAT Pre General Science Mathematics Chapter 23 Conic Section Online Test

Sr	Questions	Answers Choice
1	Circumcentre of the triangle, whose vertices are (0, 0), (6, 0) and (0, 4) is	A. (2, 0) B. (3, 0) C. (0, 3) D. (3, 2)
2	The equation $x^2 + y^2 = 0$ represents	A. A circle B. A degenerate circle C. An empty set D. A st. line
3	Question Image	
4	Question Image	A. 1 B. 5 C. 7 D. 9
5	Question Image	A. A parabola B. An ellipse C. A hyperbola D. A circle
6	A rectangular hyperbola whose centre is C is cut by any circle of radius r in four points P, Q, R and S. Then $CP^2 + CQ^2 + CR^2 + CS^2 =$	A. $r^2$ B. $2r^2$ C. $3r^2$ D. $4r^2$
7	Question Image	
8	The line $y = 4x + c$ touches the hyperbola $x^2 - y^2 = 1$ if	
9	The eccentricity of the conic $9x^2 - 16y^2 = 144$ is	A. 4/5 B. 5/4 C. 4/3 D. 3/4
10	A chord passing through the centre of the circle is called	A. the secant of the circle B. the tangent of the circle C. the arc of the circle D. the diameter of the circle
11	A line segment whose end points lie on a circle is called	A. the secant of the circle B. the arc of the circle C. the chord of the circle D. the circumference of the circle
12	Question Image	A. 6 C. 20 D. 0
13	Question Image	A. 184 D. none of these
14	Question Image	
15	Question Image	
16	Question Image	
17	Question Image	
18	Question Image	
19	Question Image	
20	Question Image	
21	Question Image	
22	Question Image	D. none of these
23	Question Image	

24	Question Image	
25	Question Image	
26	Question Image	
27	Question Image	D. none of these
28	The tangents drawn from the point P to a circle are real and distinct if	A. P is on the circle B. P is inside the circle C. P is outside the circle D. none of these
29	The tangents drawn from the point P to a circle are real and coincident if	A. P is on the circle B. P is inside the circle C. P is outside the circle D. none of these
30	The tangents drawn from the point P to a circle are imaginary if	A. P is on the circle B. P is inside the circle C. P is outside the circle D. none of these