ECAT Pre General Science Mathematics Chapter 23 Conic Section Online Test

Sr	Questions	Answers Choice
1	Latus rectum = 4 x _____	A. focal distance of the vertex B. Chord C. Focus D. 1/2
2	If $_{e}$> 1 , then the conic, is:	A. Ellipse B. Parabola C. Hyperbola D. None of these
3	the latus rectum of the parabola x^3 = -4ay is:	A. x = a B. y = -a C. x = -a D. y = 0
4	the curve of the parabola y^2 = -4ax is symmetric with respect to	A. x -axis B. y - axis C. Botha x and y- axis D. None of thes
5	The point which is closet to the focus of a parabola is:	A. vertex B. Chord C. Focus D. Directix
6	The parabola y2 + 2y + x = 0 lie in _____ quadrant.	A. First B. Second C. Third D. Fourth
7	The axis of the parabola x^2 = 4ay is:	A. y = 0 B. x = 0 C. x = -a D. y = a
8	What is the axis of the parabola y^2 = 4ax?	A. x = 0 B. y = 0 C. x = a D. y = 0
9	The conic is a parabola, when:	A. $_{e}$ > 1 B. $_{e}$ < 1 C. $_{e}$ = 1 D. $_{e}$ = 0
10	If the vertex of the parabola is the origin and directrix is x+5 = 0 . then its latus rectum is:	A. 10 B. 5 C. 0 D. 20
11	The distance of point P(x,y) from focus in a parabola y^2 =4ax, is:	A. 2a B. a C. x + a D. x-a
12	a chord passing through the focus of a parabola is called a:	A. Focal chord B. Latus rectum C. Tangent D. Directrix
13	y=0 of the parabola y^2 = 4ax is the	A. equation of directirx B. Equatio of the tangent C. Equation of axis D. equation of latus rectum
14	I f the focus is F (0,-a) and directrix is the line v=a, then equation of the parabola is:	A. x² = 4ay B. y² = 4ax C. y² = -4ax D. x² = 4ax
15	A line joining two distinct points on a parabola is called a _____ of the parabola.	A. Chord B. Tangent C. Lust rectum D. directrix

16	If the focus lies on the y-axis with coordinates f(0,a) and directrix of the parabola is y = -a, the equation of parabola is:	A. y² = -4 ax B. x² = 4ay C. x² = -4ay D. y² = 4ax
17	$_{\varrho}$ is a	A. variable B. Positive constant C. Positive variable D. Directrix
18	The line through the focus and perpendicular to the directrix is called _____ of the parabola	A. axis B. focal chord C. tangent D. latus rectum
19	The vertex of the equation $y^2 = 4ax$ is:	A. (2, -2) B. (1,1) C. (0 , 0) D. (2 , 2)
20	If (0,4) and (0,2) are vertex and focus of the parabola respectively, the the equation of the parabola is:	A. x² = 4y -32 B. x² =8y -32 C. y³ = 16 x D. x2 + 8y =32
21	The point where the axis meets the parabola is called	A. Directrix B. Foucu C. Chord D. Vertix
22	The locus of the point of intersection of tangents to an ellipse at two points, sum of whose eccentric angles is constant is	A. A parabola B. A circle C. An ellipse D. A st. line
23	The number of real tangents that can be drawn to the ellipse $3x^2 + 5y^2 = 32$ passing thro. (3, 5) is	A. 0 B. 1 C. 2 D. Infinite
24	The two different parts of the hyperbola are called its	A. Vertices B. Directrices C. Nappes D. Branches
25	The line through the centre and perpendicular to the transverse axis is called the	A. Major axis B. Minor axis C. Focal axis D. Conjugate axis
26	The vertices of the ellipse $x^2 + 4y^2 = 16$ are	
27	The end points of the major axis of the ellipse are called its	A. Foci B. Vertices C. Co - vertices D. None of these
28	The axis of the parabola $y^2 = 4ax$ is	A. X = 0 B. Y = 0 C. X = y D. X = -y
29	The conic is a parabola if	A. e < 1 B. e > 1 C. e = 1 D. None of these
30	The perpendicular bisector of any chord of a circle	A. Passes through the centre of the circle B. Does not pass through the centre of the circle C. May or may not pass through the centre of the circle D. None of these