

ECAT Pre General Science Mathematics Chapter 23 Conic Section Online Test

Sr	Questions	Answers Choice
1	Question Image	A. (-6,4) B. (-3,2) C. (6,-4) D. (3, -2)
2	The centre fo the circle $x^2 + y^2 + 12x - 10 = 0$ is	A. (12, -10) B. (6, -5) C. (-12, 10) D. (-6, 5)
3	Question Image	
4	Question Image	A. (g,f) B. (-g,f) C. (g,-f) D. (-g,-f)
5	The parametric equations of a circle are	
6	Question Image	
7	Question Image	
8	The equation of the circle wit (-1, 1) and radius 2 is	
9	Question Image	
10	Question Image	
11	Question Image	
12	The equation of the circle with centre (5, -2) and radius 4 is	A. $(x-5)^2 + (y+2)^2 = 16$ B. $(x-5)^2 + (y+2)^2 = 4$ C. $(x-5)^2 + (y-2)^2 = 16$ D. $(x-5)^2 + (y-2)^2 = 4$
13	The equation of the circle witch centre (-3, 5) and radius 7 is	A. $(x-3)^2 + (y+5)^2 = 7^2$ B. $(x-3)^2 + (y-5)^2 = 7^2$ C. $(x+3)^2 + (y+5)^2 = 7^2$ D. $(x+3)^2 + (y-5)^2 = 7^2$
14	The equation of the circle with centre origin and radius r is	A. $x^2 + y^2 = 1$ B. $x^2 + y^2 = r^2$ C. $x^2 + y^2 = 0$ D. $x^2 - y^2 = r^2$
15	The equation of the circle with centre (-h, -k) and radius r is	A. $(x+h)^2 + (y+k)^2 = r^2$ B. $(x+h)^2 + (y-k)^2 = r^2$ C. $(x-h)^2 + (y+k)^2 = r^2$ D. $(x-h)^2 + (y-k)^2 = r^2$
16	The equation of the circle with centre (h, k) and radius r is	A. $(x+h)^2 + (y+k)^2 = r^2$ B. $(x+h)^2 + (y-k)^2 = r^2$ C. $(x-h)^2 + (y+k)^2 = r^2$ D. $(x-h)^2 + (y-k)^2 = r^2$

$$D. (x - h)^2 + (y - k)^2 = r^2$$

17	The constant distance of all points of the circle from its centre is called the	A. radius of the circle B. secant of the circle C. chord of the circle D. diameter of the circle
18	The fixed point from which all the points of a circle are equidistant is called the	A. chord of the circle B. centre of the circle C. diameter of the circle D. radius of the circle
19	If the cutting plane is parallel to the axis of the cone and intersects both of its nappes, then the curve of intersection is	A. an ellipse B. a hyperbola C. a circle D. a parabola
20	If the intersecting plane is parallel to a generator of the cone, but intersects its one nappe only, the curve obtained is	A. an ellipse B. a hyperbola C. a circle D. a parabola
21	If the cutting plane is slightly tilted and cuts only one nappe of the cone, the intersection is	A. an ellipse B. a hyperbola C. a circle D. a parabola
22	If a plane passes through the vertex of a cone then the intersection is	A. an ellipse B. a hyperbola C. a point circle D. a parabola
23	If a cone is cut by a plane perpendicular to the axis of the cone, then the section is a	A. parabola B. circle C. hyperbola D. ellipse
24	Conic sections or simply conics are the curves obtained by cutting a right circular cone by	A. a line B. two lines C. a plane D. two planes
25	The second degree equation of the form $Ax^2 + By^2 + Gx + Fy + C = 0$ represent hyperbola if	A. $A = B \neq 0$ B. $A \neq B$ and both are of same sign C. $A \neq B$ both are of opposite sign D. Either $A = 0$ or $B = 0$
26	If the distance of any point on the curve from any of the two lines approaches zero then it is called	A. Axis B. Directrices C. Asymptotes D. None
27	The ellipse and hyperbola are called	A. Concentric conics B. Central conics C. Both a & b D. None
28	The directrix of $y^2 = -4ax$ is	A. $y = -a$ B. $y = a$ C. $x = a$ D. $x = -a$
29	A line joining two distinct points on a parabola is called	A. Axis B. Directrix C. Chord D. Tangent
30	For the parabola the line through focus and perpendicular to the directrix is called	A. Tangent B. Vertex C. Axis D. None