

ECAT Mathematics Chapter 22 Circle

Sr	Questions	Answers Choice
1	If the centre of the circle is the origin, then equation of the circle is	A. $x^2 + y^2 = 0$ B. $2gx + 2fy - c = 0$ C. $x^2 + y^2 = r^2$ D. $gx + fy - c/2 = 0$
2	A second degree equation in which coefficients of x^2 and y^2 are equal and there is no product term xy represents	A. a parabola B. a circle C. an ellipse D. a pair of lines
3	If three non-collinear points through which a circle passes are known, then we can find the	A. variables x and y B. value of x and c C. three constant f, g and c D. inverse of the circle
4	Question Image	A. Three Independent Variables B. Two independent constant C. Three independent parameters D. Three independent constant
5	If the intersecting plane is parallel to a generator of the cone, but intersects its one nappe only, the curve of intersection is	A. a circle B. an ellipse C. a parabola D. a hyperbola
6	If the cutting plane is slightly tilted and cuts only one nappe of the cone, the resulting section is	A. an ellipse B. a circle C. a hyperbola D. a parabola
7	Question Image	B. $a = b, h = 0$ C. $f = g, h = 0$ D. $h = h, c = 0$
8	Question Image	
9	The equation of the circle with centre at $(5, -2)$ and radius 4 is	
10	Question Image	
11	The vertex of the cone is also called	A. nappes B. axis C. rulings D. apex
12	Question Image	A. 1 B. 2 C. 0 D. None of these
13	The area of the circle centred at $(1, 2)$ and passing through $(4, 6)$ is	
14	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 circle C. a parabola D. a hyperbola
15	The equation: $x^2 + y^2 + 2gx + 2fy + c = 0$, represents	A. pair of lines B. a circle C. a general second degree equation D. a hyperbola
16	Apollonius was a	A. rocket B. Muslim scientist C. Greek mathematicians D. method of finding conics
17	The equation of the circle whose centre is $(-3, 5)$ and having radius 7 is	A. $(x-3)^2 + (y+5)^2 = 49$ B. $(x-3)^2 + (y+5)^2 = 7$ C. $(x-3)^2 + (y-5)^2 = 49$ D. $(x+3)^2 + (y-5)^2 = 7$

D.
$$x^2 + y^2 + 6x - 10y - 15 = 0$$

18 The generators of a cone are also called
A. rulings
B. apex
C. nappes
D. ellipse

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 circle
C. a parabola
D. a hyperbola

20 The set of all points in the plane that are equally distant from a fixed point is called a
A. parabola
B. ellipse
C. hyperbola
D. circle
