

## ECAT Mathematics Chapter 20 Analytic Geometry

Sr	Questions	Answers Choice
1	The cartesian system of coordinates was introduced by:	A. Eulaer B. Euclid C. Descrates D. Macdream
2	The points $(-1,3)$ , $(3,0)$ are the vertices of:	A. Right-angled triangle B. Isosceles triangle C. Equilateral triangle D. square
3	The points $(5,2)$ , $(-2,3)$ , $(-3,-4)$ and $(4,-5)$ are the vertices of:	A. rhombus B. Parallelogram C. rectangle D. square
4	The two lines $x + y = 0$ and $2x - y + 3 = 0$ intersect at the point:	A. $(-1,1)$ B. $(2,3)$ C. $(1,3)$ D. $(-1,2)$
5	If $(x,y)$ are the coordinates of a point P, then the first number of the ordered pair is called:	A. Ordinate B. Abscissa C. quadrant D. Cartesian
6	Shifting origin to $(-3,2)$ , the new coordinates of $(-6,9)$ are:	A. $(-9,7)$ B. $(3,7)$ C. $(-3,7)$ D. $(3,-7)$
7	The medians of a triangle are:	A. Collinear B. Concurrent C. Perpendicular D. zero
8	The two vertices of a triangle are $(-2,4)$ and $(5,4)$ . If its centroid is $(5,6)$ , then third vertex is:	A. $(-10,12)$ B. $(12,-10)$ C. $(12,10)$ D. $(10,12)$
9	If a point $(p,q)$ is equidistant from the points $(5,3)$ and $(-2,-4)$ , then $p+q =$	A. -1 B. 1 C. 3 D. -3
10	If points $(5, 5)$ , $(10, x)$ and $(-5, 1)$ are collinear, $x =$	A. 5 B. 3 C. 9 D. 7
11	Three points $(-2,2)$ , $(8,-2)$ and $(-4,3)$ are vertices of a :	A. Isosceles triangle B. right-angled triangle C. Equilateral triangle D. Rectangle
12	The points $(0,-1)$ , $(2,1)$ , $(0,3)$ and $(-2,1)$ are the corner of:	A. Square B. rhombus C. Parallelogram D. rectangle
13	x-axis divides the line segment joining points $(2,-3)$ and $(5,6)$ in the ratio:	A. 2 : 1 B. -2 : 1 C. 1 : 2 D. -1 : 2
14	The distance of a point $(x \cos \theta, x \sin \theta)$ from origin is:	A. x B. $x \tan \theta$ C. $-x \tan \theta$ D. $-x \cot \theta$
15	Shifting origin to $(1,-2)$ , the new coordinates of $(4,5)$ are:	A. $(3,7)$ B. $(5,3)$ C. $(-3,7)$ D. $(3,-7)$

16	The length of perpendicular from (3,1) to the line $4x + 3y + 20 = 0$ is:	A. 7 B. 5 C. 11 D. 12
17	The coordinates of a point which trisects segment joining (0,0) and (9,12) are:	A. (4,3)(8,6) B. (4,3)(6,8) C. (3,4)(6,8) D. (3,4)(8,6)
18	The slope of the line from B (2,-3) through A (0,3) is:	A. -3 B. 1/3 C. 0 D. undefined
19	The two lines $5x + 7y = 35$ and $3x - 7y = 21$ , intersect at the point:	A. (7,5) B. (1,2) C. (2,7) D. (7,0)
20	The distance from the point P(6,-1) to the line $6x - 4x + 9 = 0$ is:	A. 5/7 B. $\sqrt{52}/7$ C. 2/48 D. $49/\sqrt{52}$