

ECAT Mathematics Chapter 20 Analytic Geometry

Sr	Questions	Answers Choice
1	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
2	Bisectors of angles of a triangle are:	A. Collinear B. Concurrent C. Perpendicular D. zero
3	The points $(a,0)$, $(0,b)$ and $(3a, -2b)$ are:	A. Collinear B. Vertices of isosceles triangle C. corner of a right-angled triangle D. None of these
4	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
5	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
6	Shifting origin to $(-3,2)$, the new coordinate of $(-2,6)$ are:	A. $(1,4)$ B. $(2,4)$ C. $(-1,3)$ D. $(-1,4)$
7	The distance of a point $(x \cos \theta, x \sin \theta)$ from origin is:	A. x B. $x \tan \theta$ C. $-\tan \theta$ D. $-\cot \theta$
8	The medians of a triangle are:	A. Collinear B. Concurrent C. Perpendicular D. zero
9	The distance between the parallel lines $3x - 4y + 3 = 0$ and $3x - 4y + 7 = 0$ is:	A. $2/3$ B. $9/13$ C. $4/5$ D. $7/12$
10	The points A, B and C are said to be collinear if they:	A. be on same line B. have same slope C. Lie on a same plane D. options a & b
11	In translation of axes, _____ is shifted to another point in the plane.	A. a-axis B. y-axis C. origin D. Point
12	Shifting origin to $(-3,2)$, the new coordinates of $(-6,9)$ are:	A. $(-9,7)$ B. $(3,7)$ C. $(-3,7)$ D. $(3,-7)$
13	The two lines $5x + 7y = 35$ and $3x - 7y = 21$, intersect at the point:	A. $(7,5)$ B. $(1,2)$ C. $(2,7)$ D. $(7,0)$
14	The points $(3,1)$, $(-2,-3)$ and $(2,2)$ are the vertices of :	A. Equilateral triangle B. Isosceles triangle C. right -angled triangle D. rhombus
15	The cartesian system of coordinates was introduced by:	A. Euler B. Euclid C. Descartes D. MacLaurin

16	The distance from the point P(6,-1) to the line $6x - 4y + 9 = 0$ is:	A. $\frac{5}{7}$ B. $\frac{\sqrt{52}}{7}$ C. $\frac{2}{48}$ D. $\frac{49}{\sqrt{52}}$
17	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
18	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)
19	The points (-1,3), (3,0) are the vertices of:	A. Right-angled triangle B. Isosceles triangle C. Equilateral triangle D. square
20	Shifting origin to (-4,-6), the new coordinates of (-6,-8) are:	A. (-1,2) B. (-2,-2) C. (1,-2) D. (3,-2)