ECAT (Pre-Eng) Mathematics Chapter 20 Analytic Geometry

Sr	Questions	Answers Choice
1	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)
2	The points (-1,3), (3,0) are the vertices of:	A. Right-angled triangle B. Isosceles triangle C. Equilateral triangle D. square
3	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
4	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)
5	In translation of axes,_____is shifted to another point in the plane.	A. a-axis B. y-axis C. origin D. Point
6	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)
7	The slope of the line from B (2,-3) through A (0,3) is:	A. -3 B. 1/3 C. 0 D. undefined
8	The length of perpendicular from (3,1) to the line 4x + 3y +20 = 0 is:	A. 7 B. 5 C. 11 D. 12
9	The quadrilateral with the vertices (-3,-2), (2,-1), (3,4) and (-2,3) is a:	A. Square B. Rectangle C. rhombus D. parallelogram
10	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
11	The distance from the point P(3,4) to the line y = 2x - 3 is:	A. √5 B. √3 C. 2√3 D. 1/√5
12	If the line is parallel to they y-axis, then m is said to be:	A. zero B. undefined C. 1/2 D. -1
13	If points A (6,-1), B (1,3) and C (x,8) are such that AB=BC, then x =	A. 3,5 B. -3,5 C. 3,-5 D. -3,-5
14	If points (5 , 5), (10 , x) and (-5 , 1) are collinear, x =	A. 5 B. 3 C. 9 D. 7
15	Bisectors of angles of a triangle are:	A. Collinear B. Concurrent C. Perpendicular D. zero

16	The equation of the line through (-8, 5) having slope undefined is:	A. y + 8 = 0 B. y = 8 C. y = x + 8 D. x + 8 = 0
17	The distance from the point P(6,-1) to the line 6x - 4x + 9 = 0 is:	A. 5/7 B. √52/7 C. 2/48 D. 49 /√52
18	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
19	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
20	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