ECAT (Pre-Eng) Mathematics Chapter 20 Analytic Geometry

Sr	Questions	Answers Choice
1	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
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 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
4	The length of perpendicular from (3,1) to the line 4x + 3y +20 = 0 is:	A. 7 B. 5 C. 11 D. 12
5	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
6	In translation of axes,_____is shifted to another point in the plane.	A. a-axis B. y-axis C. origin D. Point
7	Shifting origin to (1,-2), the new coordinates of (4,5) are:	A. (3,7) B. (5,3) C. (-3,7) D. (3,-7)
8	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
9	In □ABC the mid points of AB and AC are (3,5) and -3,-1) respectively, then the length of the side BC is:	A. 15 B. 10 C. 30 D. 20
10	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
11	The distance between lines 3x + 4y = 9 and 6x +8y = 15 is:	A. 2/3 B. 3/10 C. 8 D. 6/5
12	The slope of the line from B (2,-3) through A (0,3) is:	A. -3 B. 1/3 C. 0 D. undefined
13	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)
14	Bisectors of angles of a triangle are:	A. Collinear B. Concurrent C. Perpendicular D. zero
15	If points (-1 , h), (3,2) and (7,3) are collinear then h=	A. 3 B. 4 C. 0 D. None of these

16	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)
17	The distance between two parallel lines 2x - 5y + 13 = 0 and -2x +5y -6 = 0 is:	A. √29 B. 8/√29 C. 7 /√29 D. 29√7
18	Shifting origin to (-3,2), the new coordinate of (-2,6) are:	A. (1,4) B. (2,4) C. (-1,3) D. (-1,4)
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	Three points (-2,2) (8,-2) and (-4,3) are vertices of a :	A. Isosceles triangle B. right-angled triangle C. Equilateral trainagle D. Rectangle