ECAT (Pre-Eng) Mathematics Chapter 20 Analytic Geometry

Sr	Questions	Answers Choice
1	Shifting origin to (-3,2), the new coordinates of (-6,9) are:	A. (-9,7) B. (3,7) C. (-3,7) D. (3,-7)
2	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
3	The distance of a point (x cosθ , x sinθ) from origin is:	A. x B. x tanθ C. -tanθ D. -cotθ
4	If the line is parallel to they y-axis, then m is said to be:	A. zero B. undefined C. 1/2 D. -1
5	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)
6	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
7	The distance between lines 3x + 4y = 9 and 6x +8y = 15 is:	A. 2/3 B. 3/10 C. 8 D. 6/5
8	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
9	In translation of axes,_____is shifted to another point in the plane.	A. a-axis B. y-axis C. origin D. Point
10	If points (-1 , h), (3,2) and (7,3) are collinear then h=	A. 3 B. 4 C. 0 D. None of these
11	The points (0,-1), (2,1),(0,3) and (-2,1) are the corner of:	A. Square B. rhombus C. Parallelogram D. rectangel
12	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
13	Bisectors of angles of a triangle are:	A. Collinear B. Concurrent C. Perpendicular D. zero
14	The length of perpendicular from (3,1) to the line 4x + 3y +20 = 0 is:	A. 7 B. 5 C. 11 D. 12
15	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

16	If the points (a,b), (x,y) and (a-x, b-y) are collinear, then ay =	A. bx B. b-y C. a-x D. x
17	The in-centre of triangle whose vertices are (0,0), (5,12) and (16,12) is:	A. (9,7) B. (2,7) C. (9,2) D. (7,9)
18	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)
19	The points (-1,3), (3,0) are the vertices of:	A. Right-angled triangle B. Isosceles triangle C. Equilateral triangle D. square
20	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