ECAT (Pre-Eng) Mathematics Chapter 20 Analytic Geometry

Sr	Questions	Answers Choice
1	Shifting origin to (1,-2), the new coordinates of (4,5) are:	A. (3,7) B. (5,3) C. (-3,7) D. (3,-7)
2	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)
3	The points (-1,3), (3,0) are the vertices of:	A. Right-angled triangle B. Isosceles triangle C. Equilateral triangle D. square
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	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
6	If the line is parallel to they y-axis, then m is said to be:	A. zero B. undefined C. 1/2 D. -1
7	The cartesian system of coordinates was introduced by:	A. Eulaer B. Euclid C. Descrates D. Maclream
8	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
9	The distance of a point (x cosθ , x sinθ) from origin is:	A. x B. x tanθ C. -tanθ D. -cotθ
10	The points (5,2),(-2,3),(-3,-4) and (4,-5) are the vertices of:	A. rhombus B. Parallelogram C. rectangle D. square
11	The medians of a triangle are:	A. Collinear B. Concurrent C. Perpendicular D. zero
12	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
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	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	If points (-1 , h), (3,2) and (7,3) are collinear then h=	A. 3 B. 4 C. 0 D. None of these

16	In translation of axes,_____is shifted to another point in the plane.	A. a-axis B. y-axis C. origin D. Point
17	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
18	The quadrilateral with the vertices (-3,-2), (2,-1), (3,4) and (-2,3) is a:	A. Square B. Rectangle C. rhombus D. parallelogram
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 distance from the point P(3,4) to the line y = 2x - 3 is:	A. √5 B. √3 C. 2√3 D. 1/√5