ECAT (Pre-Eng) Mathematics Chapter 21 Linear Inequalities & Linear Programming

Sr	Questions	Answers Choice
1	Maximum value of z =15x +20y subject to 3x+ 4y≤ 12,x,y≥ 0 is given by	A. 46 B. 60 C. 50 D. 70
2	For which of the following ordered pairs (s, t) is s + t > 2 and s - t < -3?	A. (3, 2) B. (2, 3) C. (1, 8) D. (0, 3)
3	The corner point of the boundary lines, x-2y 2x + y = 2 is:	A. (2,6) B. (6,2) C. (-2,2) D. (2,-2)
4	A function which is to be maximized or minimized is called an	A. Explicit function B. Implicit function C. Objective function D. None
5	The real numbers which satisfy an inequality form its	A. solution B. coefficient C. domain D. range
6	(1, 1) is the in the solution of the inequality	A. 3x + 4y > 3 B. 2x + 3y < 2 C. 4x = 3y > 5 D. 2c - 3y > 2
7	Which is in the solution set of 4x - 3y < 2	A. (3, 0) B. (4, 1) C. (1, 3) D. None
8	ab > 0 and a > 0 then	A. a > b B. a < b C. a = b D. None
9	The solution set of x < 4 is	A. -∞< x < 4 B. -∞> x > 4 C. -∞< x < 2 D. -∞> x > 2
10	2x + 3y > 4 is a linear inequality in	A. one variable B. two variables C. three variables D. none of these
11	3x + 4 ≥ 0 is	A. equation B. inequality C. identity D. none of these

12	For graphing a linear inequality, solid line is drawn if the inequality involves the symbols:	A. > or < B. <u>></u> or <u><</u> C. = or≠ D. = or >
13	3x + 4 > 0 is	A. equation B. identity C. inequality D. none of these
14	A point of a solution region where two of its boundary lines intersect, is called	A. Boundary B. Inequality C. Half plane D. Vertex
15	(2, 1) is in the solution of the inequality	A. 2x + y <u>></u> 7 B. x - y > 2 C. 3x + 5y < 6 D. 2x + y < 6
16	There may be _____ feasible solution in the feasible region	A. Infinite B. Finite C. Defined D. None of above
17	Inequalities have _____ symbol	A. 2 B. 3 C. 4 D. 1
18	The set of ordered pairs (x,y) such that ax+ by < c, and (x,y) such that ax + by>0, are called	A. Half planes B. Boundary C. Linear Inequalities D. Feasible regions
19	If ab > 0 and a < 0, which of the following is negative?	A. b B. -b C. -a D. (a - b)²
20	Which of the following is not a solution of system of inequalities 2x- 3y ≤6,2x +y≥ 2,x +2y≤ 8, x≥ 0,y ≥ 0	A. (1,0) B. (0,4) C. (3,0) D. (8,0)