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

Sr	Questions	Answers Choice
1	x = 1 is in the solution of the inequality	A. x + 1 > 0 B. x - 2 > 0 C. 3x - 1 < 0 D. x + 2 < 0
2	The total cost of 2 apples and 3 oranges is $1.70, which of the following is true	A. The cost of one apple B. The cost of one orange C. Both have equal cost per item D. Cost of each single item can not be determined
3	The maximum value of Z = 3x+ 4y subjected to the constrains x+ y≤ 40,x+ 2y≤ 60, x≥ 0 and y≥ 0 is	A. 120 B. 100 C. 140 D. 160
4	A point of a solution regions where two of its boundary lines intersect, is called:	A. Vertex of the solution B. Feasible point C. Point of inequality D. Null point of the solution region
5	Multiplying each side of an inequality by (-1) will:	A. Not effect B. Change the sign C. Become zero D. Not defined
6	The real numbers which satisfy an inequality form its	A. solution B. coefficient C. domain D. range
7	(0,0) is in the solution of the inequality	A. x + y > 3 B. x - y > 2 C. 3x + 2y > 5 D. 3x - 2y < 2
8	Optimal solution is found by evaluation the objective function at	A. All point of feasible region B. Corner point C. Origin D. None
9	The solution set of the inequality ax + by < c is	A. straight line B. half plane C. parabola D. none of these
10	3x + 4 = 0 is	A. not inequality B. equation C. identity D. inequality
11	The point _____ is in the solution of the inequality 4x - 3y < 2	A. (0,1) B. (2,1) C. (2,2) D. (3,3)
12	A point of a solution region where two of its boundary lines intersect, is called	A. Boundary B. Inequality C. Half plane D. Vertex
13	(0,1) is in the solution of the inequality	A. 3x + 2y > 8 B. 2x - 3y < 4 C. 2x + 3y > 5 D. x -2y < -5
14	The graph of y < 2 is the	A. Left half plane B. upper half plane C. Right half plane D. Lower half plane
15	x = _____ is in the solution of 2x + 3 < 0	A. 0 B. 2 C. -1

		D. -2
16	$3x + 4 \geq 0$ is	A. equation B. inequality C. identity D. none of these
17	The graph of the linear equation of the form ax =by = c is a line which divided the plane into:	A. Two similar regions B. Two disjoint regions C. Four equal parts D. One region
18	The feasible region which can be enclosed within a circle is called	A. Bounded region B. Convex region C. Unbounded region D. None
19	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)
20	An expression involving any of the symbols <,>,$\leq$ or $\geq$ is called	A. equation B. inequality C. linear equation D. identity