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

Sr	Questions	Answers Choice
1	x = 0 is in the solution of the inequality	A. x > 0 B. 3x + 4 < 0 C. x + 3 < 0 D. x - 2 < 0
2	The point _____ is in the solution of the inequality 2x - 3y > 5	A. (1, -1) B. (2,2) C. (0,0) D. (3,0)
3	Order (or sense) of an inequality is changed by multiplying or dividing its each side by a:	A. Zero B. one C. negative constant D. Non negative constant
4	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
5	Sum of two quantities is at least 20 is denoted by	A. x +y =20 B. x +y≥ 20 C. x +y≠ 20 D. x +y≤20
6	The points (x, y) which satisfy a linear inequality in two variables x and y from its	A. domain B. range C. solution D. none of these
7	The feasible region which can be enclosed within a circle is called	A. Bounded region B. Convex region C. Unbounded region D. None
8	Question Image	A. p < r B. p > rr C. p + r < 0 D. p - r < 0
9	x = _____ is in the solution of 2x - 5 > 0	A. 0 B. 2 C. -2 D. 3
10	(1,0) is in the solution of the inequality	A. 3x + 2y > 8 B. 2x - 3y < 4 C. 2x + 3y > 3 D. x - 2y < -5
11	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)
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	x = _____ is in the solution of 2x + 3 < 0	A. 0 B. 2 C. -1 D. -2
14	Which is not a half plane	A. ax + by < c B. ax + by > c C. Both A and B D. None
15	The graph of linear equation 2x + 3y = 10	A. Parabola B. Circle C. Hyperbola D. Straight line

16	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)
17	3x + 4 ≥ 0 is	A. equation B. inequality C. identity D. none of these
18	2x + 3y > 4 is a linear inequality in	A. one variable B. two variables C. three variables D. none of these
19	s > t then	A. (s - t)²> (t - s) ² B. (s - t)²< (t - s) ² C. (s - t)²= (t - s) ² D. None
20	A point (x,y) which satisfy a linear inequality in two variables form its	A. Solution B. Domain C. Range D. None