

B.Com (Hons.) Semester IV

Subject: Business Mathematics (Practical)

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Dear Students,

I hope you have practiced the linear programming problems through excel solver. If you have any queries, you can contact me through email: kaur.harmanpreet01@gmail.com.

Next, we would be covering how to solve linear programming problem graphically in excel. I am sharing the link for the video exhibiting step by step guide to solve the same.

<https://www.youtube.com/watch?v=pQp4GZfoxTo>

Go through the video and practice the following questions:

Question 1: $\text{Max } Z = 50x + 30y$

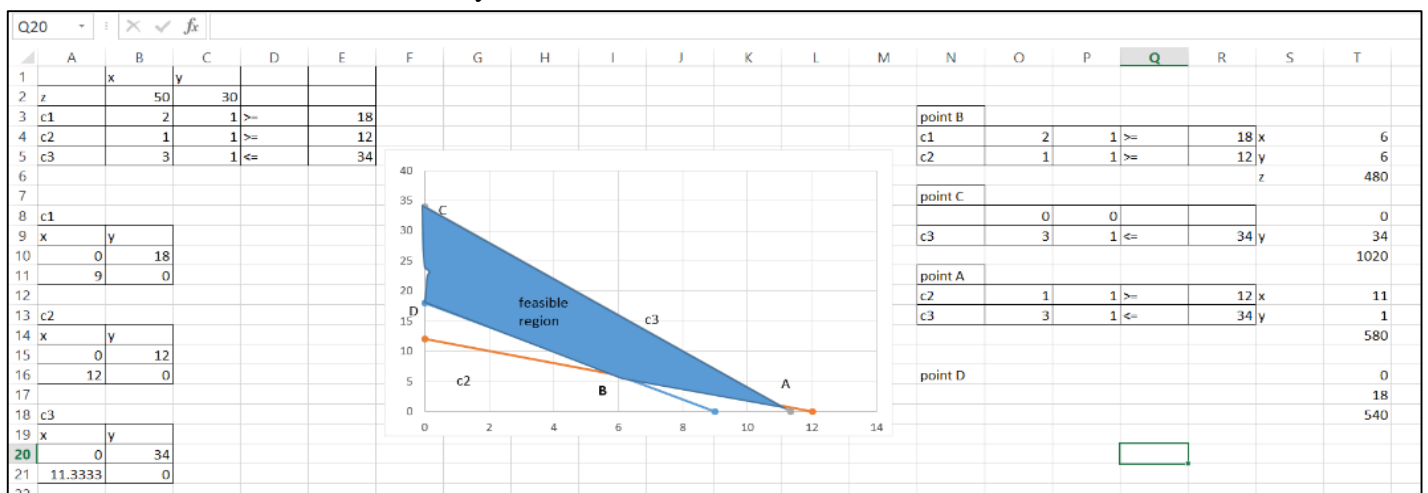
Subject to constraints:

$$2x + y \geq 18$$

$$x + y \geq 12$$

$$3x + y \leq 34$$

$$x, y \geq 0$$



Question 2: Solve the following problem graphically:

$$\text{Minimize } Z = 3x + 3.5y$$

Subject to the constraints:

$$x + 2y \geq 240$$

$$2x + y \geq 180$$

$$3x + 4y \leq 620$$

$$x, y \geq 0$$

Question 3: Solve the following problem graphically:

$$\text{Maximize } Z = 17x + 27y$$

Subject to the constraints:

$$2x + 3y \geq 18$$

$$2x + y \geq 10$$

$$x + y \leq 8$$

$$x, y \geq 0$$