

Assignment 02
Eco404
Marks: 15

This assignment covers video lecture # 01-28

Instructions

- Make sure that you upload the solution file before due date. No assignment will be accepted through e-mail after the due date.
- File once uploaded will not be replaced under any condition so you should upload the correct file in first go.

Formatting guidelines

- Use the font style “Times New Roman / Arial” and font size “12”.
- Compose your document in MS-Word.
- Use black and blue font colors only.

Solution guidelines

- The students will work individually.
- Give the answer according to question, avoid irrelevant material.

Please note that your assignment will not be graded if:

- It is submitted after due date.
- The file you uploaded does not open.
- It is not in the required format.
- Cheating or copying of assignment is strictly prohibited. The cheated or copied assignment will be marked as **ZERO**.

Question: 01

Consider the following information of the firm:

Total fixed cost = Rs. 350

Price level = Rs. 20

Average variable cost = Rs. 10

Target profit level = Rs. 250

From this information, calculate the break even level of output and target level of output.

(Marks: 2.5+2.5)

Question: 02

You have given the following linear programming problem:

Maximize Profit (π) = Rs. 20X + Rs. 8Y

Subject to the following constraints:

$$3X + 1Y + SA = 40$$

$$2X + 2Y + SB = 25$$

$$4Y + SC = 30$$

The corner points are given as:

Corner points	X	Y
A	0	0
B	7	0
C	5	3
D	2	7
E	0	7

From all this information, find the profit (Rs.) level at each corner point.

(Marks: 5)

Question: 03

Given the total revenue and total cost functions:

$$TR = 80Q - 0.00025Q^2$$

$$TC = 260,450 + 5Q + 0.00035Q^2$$

Find the profit maximizing level of output under monopoly.

(Marks: 5)

Important Note:

Calculate each question to the point. **NO** need to write irrelevant material or extra interpretation.

(Best of Luck)