



**Strathmore**  
UNIVERSITY

**STRATHMORE BUSINESS SCHOOL**

MASTER OF MANAGEMENT IN AGRIBUSINESS

**END OF SEMESTER EXAMINATION**

**MMA 8107: ECONOMICS OF AGRIBUSINESS**

**Date:** Thursday 2<sup>nd</sup> December 2021

**Time:** 3 Hours

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**Instructions**

- This examination contains **FOUR** questions
- Attempt **Question One** and any **two** other questions

**Question 1 (Compulsory) (30 Marks)**

- Explain economic welfare concepts and discuss the welfare implications of a tariff  
(15 Marks)
- Explain, giving examples, what the agribusiness can do to bring economic development.  
(15 Marks)

**Question 2 (15 marks)**

Discuss the typical solutions of the farm problems by the government interventions in agriculture.

### Question 3 (15 Marks)

You are provided the following production data for maize and the amount of irrigation water used in the production.

| Irrigation water<br>(acre-inch) | Maize yield<br>per acre<br>(25kg bag) | Marginal<br>input<br>cost<br>(MIC) |
|---------------------------------|---------------------------------------|------------------------------------|
| 10                              | 104.0                                 |                                    |
| 12                              | 116.8                                 | 3.00                               |
| 14                              | 128.6                                 | 3.00                               |
| 16                              | 138.2                                 | 3.00                               |
| 18                              | 144.8                                 | 3.00                               |
| 20                              | 149.0                                 | 3.00                               |
| 22                              | 151.8                                 | 3.00                               |
| 24                              | 153.6                                 | 3.00                               |
| 26                              | 154.2                                 | 3.00                               |

Given prices for irrigation water at  $\$3.00/\text{acre-inch}$  and the price of 25kg bag of maize is  $\$2.50$ .

- Derive the marginal physical product of this farm **(5 marks)**
- Determining the Profit-Maximizing Irrigation Level for maize Production **(5 Marks)**
- Determine the amount of maize that maximize profit and the optimal profit **(5 Marks)**

### Question 4 (15 Marks)

Discuss the four key interrelated structural characteristics used when discussing competitive behavior of a market