



Strathmore
UNIVERSITY

STRATHMORE BUSINESS SCHOOL

MASTER OF MANAGEMENT IN AGRIBUSINESS

END OF SEMESTER EXAMINATION

MMA 8103: ECONOMICS OF AGRIBUSINESS

Date: Thursday 1st December 2022

Time: 3 Hours

Instructions: Attempt **Question One** and any **two** other questions

Question 1 (Compulsory) (30 Marks)

- a) Explain economic welfare concepts and discuss the welfare implications of a drought
(15 Marks)
- b) From 1970 to 2016, the real (constant-dollar) price of eggs fell by 34 percent in the USA. What caused this large decline in egg prices? Illustrate and explain what effect these changes have on the equilibrium price and quantity of eggs
(15 Marks)

Question 2 (15marks)

You have been selected to lead the textile trade policy reforms in your country. Conduct a welfare analysis and advise the government on potential outcomes for exporting and importing of textile.

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 (acre-inch)	Maize yield per acre (25kg bag)	Marginal input cost (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 typical solutions of the farm problems by the government interventions in agriculture.