



STRATHMORE BUSINESS SCHOOL
MASTER OF SCIENCE IN DEVELOPMENT FINANCE
END OF SEMESTER EXAMINATION
MDF 8102: MICRO AND MACRO ECONOMICS

Date: Tuesday, 26th March 2024

Time: 3 Hours

Instructions

1. This examination consists of **FOUR** questions.
2. Answer **QUESTION ONE** and **ANY OTHER TWO** questions.

Question 1 (Compulsory) (30 marks)

- a) With the help of a well labeled diagram, discuss the total welfare cost of a price support policy to maize farmers. **(15 Marks)**
- b) Consider how an increase in taxes affects equilibrium income and derive the tax multiplier. Assume that the marginal propensity to consume is 0.8 **(15 Marks)**

Question 2 (15 marks)

A consumer has a utility function of the form,

$$u(x_1, x_2) = x_1^a x_2^b.$$

where x_1 is the quantity of good 1 consumed and x_2 is the quantity of good 2 consumed. The price per unit of good 1 is *Ksh* P_1 and *Ksh* P_2 is the price per unit of good 2. The consumer has m shillings to spend on the two goods. Determine the optimal quantities of the two goods the consumer should purchase so as to maximize utility.

Question 3 (15 marks)

Draw a well-labelled diagram showing the effects of import quotas and conduct a welfare analysis. The welfare analysis should identify all the effects of import quotas to the economy.

Question 4 (15 marks)

You are provided the following information for a duopoly in a small town with 140 residents. The “good”: cell phone service with unlimited anytime minutes and free phone. Two firms: Zain, Yu. Each firm’s costs: $FC = \$0$, $MC = \$10$

The table below shows the Small town’s demand schedule

<i>P</i>	<i>Q</i>
\$0	140
5	130
10	120
15	110
20	100
25	90
30	80
35	70
40	60
45	50

Required:

- a) Derive the small town competitive and monopoly outcomes from the data provided. Justify your outcomes. **(6 Marks)**
- b) What outcomes should we expect from our duopolists? **(9 Marks)**