PAN AFRICA CHRISTIAN UNIVERSITY
END OF TRIMESTER EXAMINATION
DEPARTMENT: BUSINESS
COURSE CODE: BUS1313/BCM101
COURSE TITLE: PRINCIPLES OF MICROECONOMICS

EXAM DATE:

TIME: 3HRS

INSTRUCTIONS

- Read all questions carefully before attempting.
- Write your **student number** on the answer booklet provided.
- Answer FOUR questions **ONLY, Question one is compulsory**

SECTION ONE
QUESTION ONE(COMPULSORY)

The Outgrow Farmers Market

The Outgrow Farmers Market is a small urban marketplace where local farmers sell fresh fruits and vegetables. Recently, the market has experienced notable fluctuations in demand and supply for tomatoes. During the rainy season, tomato yields increased significantly, causing a rise in supply. At the same time, consumer income in the area rose due to new employment opportunities in a nearby manufacturing plant.

The market management is debating whether to adjust stall fees for farmers, as they have noticed that when supply increases too much, some farmers feel discouraged due to lower market prices. They also want to predict how equilibrium will change in the upcoming dry season, when supply typically falls and consumers shift to alternative vegetables.

Required:

a) Explain the effects of rainy season on the **market equilibrium** for tomatoes at the Outgrow Farmers Market. (10 mks)
b) Discuss **two determinants of demand** and **two determinants of supply** that are relevant in this case. (10 mks*)*
c) The management wants to predict price and quantity trends for the upcoming dry season. Using elasticity concepts, analyse how the market may respond to reduced

supply and changing consumer preferences. (10 mks)

SECTION TWO

QUESTION TWO

A firm faces the following **demand schedule** for its product:

Price (KSh)	**Quantity Demanded**
100	10
80	20
60	35
40	60

a) Calculate the **arc price elasticity of demand** between prices at;
   i) **100 and 80**, (2mks)
   ii) **80 and 60**. (2 mks)

b) Interpret your results for managerial decision-making. (3mks)

c) Describe three factors that determine price elasticity of demand (3mks)

QUESTION THREE

A firm's demand function is given by:

$$Q = 80 - 4P$$

Its total cost (TC) function is:

$$TC = 20 + 8Q$$

Required:

(a) Determine the firm's **profit-maximizing output and price**. (4Mks)

(b) Compute the **maximum profit**. (4mks)

(c) Comment on whether the firm is operating efficiently at this output level. (2Mks)

QUESTION FOUR

a) With the aid of a diagram, demonstrate the following terms as used in economics

i. Price Floor (3marks)

ii. Price Ceiling (3marks)

b) Discuss the concept of Breakeven point in economics (4marks**)**

QUESTION FIVE

A consumer consumes two goods: bread and milk. The marginal utility of bread (MU_B) is 10, and the marginal utility of milk (MU_M) is 5. The price of bread is ksh2, and the price of milk is ksh1.

(a) Prove or otherwise whether this consumer is maximizing utility

(5mks)

(b) If not, explain what should the consumer do

(5ks)