



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**

QUESTION ONE(COMPULSORY)

- a) Assume the market demand and supply functions for coffee are given by:

Demand: $Q_d = 100 - 2P$

Supply: $Q_s = 20 + 3P$

Find the equilibrium,

- i) **Price and** (2mks)
ii) **Quantity.** (2mk)

- b) Suppose the price of coffee increases by 20%, leading to a 10% decrease in the quantity demanded. At the same time, the supply of coffee increases by 15% due to favorable weather conditions.
- c) Calculate the price elasticity of demand (PED). (2mks)
- d) Calculate the price elasticity of supply (PES) (2mks)

- e) Explain the effect of these two changes on the equilibrium price and quantity. (2mks)

QUESTION TWO

- a) Explain the following market structures

i. Pure oligopoly (2mks)

ii. Differentiated oligopoly (3mks)

- b) With relevant examples, describe the following theories as used in economics

i. Law of variable proportions (2mks)

ii. Law of returns to scale (3mks)

QUESTION THREE

- a) Describe the law of diminishing returns as used in production theory (4marks)

- b) The law of demand doesn't apply to all goods. Explain (6 marks)

QUESTION FOUR

A consumer has a budget of Ksh100 and spends it on two goods: apples and oranges. The price of an apple is ksh2, and the price of an orange is ksh4.

- (a) Formulate the consumer's budget constraint equation. (4mks)

- (b) If the consumer decides to buy 20 apples, how many oranges can they afford? (6mks)

QUESTION FIVE

- 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 SIX

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)