



**TECHNICAL UNIVERSITY OF MOMBASA  
SCHOOL OF BUSINESS**

DEPARTMENT OF MANAGEMENT SCIENCE  
UNIVERSITY EXAMINATIONS 2016/2017

FIRST YEAR FIRST SEMESTER EXAMINATIONS FOR BACHELOR OF  
BUSINESS AND OFFICE MANAGEMENT

**BFI 4102: MICROECONOMICS**

END OF SEMESTER EXAMINATIONS  
**SERIES: DECEMBER 2016**  
**TIME: 2 HOURS**

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**INSTRUCTIONS:**

1. Answer Question **ONE (Compulsory)** and any other **TWO** questions.
2. Question one carries 30 marks
3. Other questions carry 20 marks each.
4. Marks will be awarded to students who demonstrate accuracy and clarity of presentation.
5. Calculators are allowed in the examination room

### QUESTION ONE

- a) Define economics and distinguish between micro and macroeconomics. (6 marks)
- b) Describe the Properties of an indifference curve (8 marks)
- c) Explain the determinants of demand for a commodity (6 marks)
- d) Quantity demanded and quantity supplied functions for a commodity are  $Q_d = 50 - 0.5P$  and  $Q_s = 20 + 2P$ , respectively.
- Calculate equilibrium quantity and price demanded and price. (5 marks)
  - If the commodity's price changed from Sh. 20 to Sh. 10 and quantity from 200Kgs to 250 Kgs, determine the commodity's price elasticity of demand and comment on your answer. (5 marks)

### QUESTION TWO

- a) Discuss the measurement of utility basing your argument on the cardinal school of thought and show how the consumer's equilibrium is achieved. (20 marks)

### QUESTION THREE

- a) Make a rough sketch showing the relationship between marginal cost (MC), average total cost (AC), average revenue (AR) and marginal Revenue (MR) curves under conditions of perfect competition. Explain why marginal revenue (MR) and average revenue (AR) equal price and describe the point of profit maximization (8 marks)
- b) Distinguish between the following terms applied in demand analysis
- Elastic and inelastic demand. (2 marks)
  - Perfect substitutes and perfect compliments. (2 marks)
- c) A utility function is defined as  $U = XY$ . If the prices of commodities X and Y are  $P_x$  and  $P_y$  respectively. Show that at consumer equilibrium  $\frac{Y}{X} = \frac{P_x}{P_y}$ . (8 marks)

#### QUESTION FOUR

- a) Given the following demand function  $X_1 = 20 + \frac{M}{20P_1}$  where  $X_1$  = demand for good 1,  $M$  = Income,  $P_1$  = price of good 1. If  $M = 240$ ,  $P_1 = 6$  and  $P_1$  decreases from  $P_1 = 6$  to  $P_1 = 4$  calculate substitution, income and total price effects based on the Slutsky theorem (10 marks)
- b) Critically examine the concept of elasticity as applied in decision making. (10 marks)

#### QUESTION FIVE

- a) Clearly distinguish between pure monopoly and perfect competition. (10 marks)
- b) Discuss the merits of a capitalistic economic system. (10 marks)