MUEO

MOI UNIVERSITY

OFFICE OF THE DEPUTY VICE CHANCELLOR (A,R&E)

UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER EXAMINATIONS

FOR THE COMMON COURSES

COURSE CODE: ECO 110/ECF 113/BHR 103/BSM 108

COURSE TITLE: INTRODUCTION TO MICROECONOMICS

DATE: 16TH AUG, 2023   **TIME:** 2.00 – 5.00 PM

INSTRUCTION TO CANDIDATES

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SEE INSIDE

ECO 110: INTRODUCTION TO MICROECONOMICS

INSTRUCTIONS TO CANDIDATES: Answer Question ONE And Any Other THREE Questions

QUESTION ONE

a) The prices for oligopoly market are said to be sticky around the kink. Explain **(3 Marks)**

b) Explain 3 sources of monopoly power to a firm **(3 Marks)**

c) Distinguish between cardinal and ordinal utility analysis **(4 Marks)**

d) Using the ordinal utility theory, explain the consumer equilibrium and show how the demand curve for a normal good is derived **(4 Marks)**

e) Assume that the Kenyan coffee industry is modeled by the following:

$$P = Q_D + 27$$

$$P = 8Q_S$$

Where: Q_D = quantity of coffee consumed per month (in thousands)

Q_S = quantity of coffee produced per month (in thousands), and

P = price per kg (shillings)

i. Deduce what the price elasticity of supply is (Hint: you do not need to calculate it).

(2 mark)

ii. Calculate the equilibrium price and quantity **(3 marks)**

iii. Draw a diagram and illustrate the consumer surplus **(3 marks)**

iv. Use appropriate diagrams to explain why the government prefers to impose a tax on goods that have an inelastic demand. **(3 marks)**

QUESTION TWO

a) Describe the production function for the firm, identifying the inputs and their relationship to output. Discuss the assumptions underlying the production function. **(7 marks)**

b) Based on the production function, analyze the firm's short-run and long-run cost curves. Explain the concepts of fixed costs, variable costs, average costs, and marginal costs.

(8 marks)

QUESTION THREE

a) Explain the income and substitution effects of a change in price of a normal good. Use appropriate diagrams. **(7 marks)**

b) Discuss the concept of economies of scale or diseconomies of scale in the context of the chosen industry. Analyze the implications for firms in terms of cost efficiency, market structure, and competitive advantage **(8 marks)**

QUESTION FOUR

You are a city planner at the Nairobi County. Part of your job is to predict how many people utilize the parking spaces in the Central Business District (CBD) and the subsequent revenue generated from parking fees. You know that the short-run price elasticities for parking is 0.4 whilst the long-run price elasticities for parking is 2.5. The current number of people parking in the CBD is 50,000 per day. The city is considering 114% increase in parking fees.

a) Is the price elasticity of demand elastic or inelastic in the short run and in the long-run? Explain. **(3 marks)**
b) How many people are expected to pack their cars in the CBD if parking is increased by 114% in the short run? Show your calculations **(4 marks)**
c) Will total revenue increase or decrease in the short-run? Show your calculations **(4 marks)**
d) How many people are expected to pack their cars in the CBD if parking is increased by 114% in the long run? Show your calculations **(4 marks)**

QUESTION FIVE

Choose a specific industry or market of your choice (e.g., smartphone market, ride-sharing services, fast food restaurants). Identify the major firms operating in that market and their respective market shares. Based on your choice, answer the following questions:

a) Analyze the market structure of the chosen industry. Is it a perfectly competitive market, a monopolistic competition, an oligopoly, or a monopoly? Justify your answer. **(5 marks)**
b) Discuss the factors that contribute to the chosen market structure and explain how they affect firms' pricing decisions and behavior. **(10 marks)**

QUESTION SIX

a) Explain the three stages of production under the law of variable proportions. Feel free to use a diagram **(6 marks)**
b) Write short notes on the following concepts;
    i.   Scarcity and choice   **(2 marks)**
    ii.   Opportunity cost   **(1 marks)**
    iii.   Isocost and Isoquant curves   **(2 marks)**
    iv.   Microeconomics and Macroeconomics   **(2 marks)**
    v.   Normal good and giffen good   **(2 marks)**