KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2024/2025ACADEMIC YEAR
FIRST YEAR, FIRST SEMESTER EXAMINATION
FOR THE DEGREE OF BACHELOR OF SCIENCE
(BUSINESS ADMINISTRATION)

Date: 11th December, 2024
Time: 8.30am –10.30am

KFI 2100   - PRINCIPLES OF MICRO ECONOMIC THEORY

INSTRUCTIONS TO CANDIDATES

ANSWER **QUESTION ONE (COMPULSORY)** AND **ANY OTHER TWO** QUESTIONS

QUESTION ONE (30 MARKS)

In 2024, the global smartphone market is experiencing significant changes due to technological advancements, shifting consumer preferences, and changes in economic conditions. The introduction of 5G technology, coupled with increasing environmental concerns, has led to innovations in battery life, camera quality, and sustainability. At the same time, supply chain disruptions due to global trade tensions and raw material shortages have increased production costs for smartphone manufacturers. Despite these challenges, major players in the market, such as Apple, Samsung, and Huawei, are competing aggressively. The launch of new flagship smartphones has led to an increase in demand in both developed and emerging markets, particularly in the context of the holiday shopping season. Consumers are increasingly looking for smartphones with longer battery life, better cameras, and eco-friendly production, but they are also sensitive to price. While the demand for higher-end models has been strong, budget smartphones are gaining traction due to their affordability in the face of economic uncertainty. Due to ongoing supply chain disruptions and increased prices for essential raw materials (e.g., semiconductors and rare earth metals), smartphone manufacturers face rising production costs. As a result, the price of smartphones has risen by 15% in the past year.

a)   Explain the **income effect** and the **substitution effect** that consumers might experience.
(3 Marks)

b)   Explain the expected relationship between price and quantity demanded using a graph.
(5 Marks)

c)   Explain the concept of shift in demand using the above case study graphically.   (5 Marks)

d)   Discuss the concept of **price elasticity of demand** (PED) in reference to the above case study.
(5 Marks)

e)   Explain the effect of an increase in production costs on the **supply curve.**
(3 Marks)

f)   Analyze the impact of the **price increase** (due to higher production costs) on the **equilibrium price and quantity** of smartphones.   (3 Marks)

g)   What are the potential effects of a **price ceiling** on the smartphone market?
(3 Marks)

h)   Explain how shifts in consumer preferences could lead to changes in the **demand curve** for smartphones.   (3 Marks)

QUESTION TWO (20 MARKS)

a)   Explain five the key assumptions of the cardinal utility theory.

(10Marks)

b)   Using a graph, describe the profit maximization in a monopoly market in the long run.

(10 Marks)

QUESTION THREE (20 MARKS)

a)   Describe five factors influencing the demand of product.

(5 Marks)

b)   Critically five the limitations of the cardinal utility theory in modern economic analysis.

(5 Marks)

c)   Using a graph, explain the concept of an indifference curve and its properties.

(10 Marks)

QUESTION FOUR (20 MARKS)

A consumer has a monthly income of $120. They spend their income on two goods: apples (good X) and bananas (good Y). The price of apples is $2 per unit, and the price of bananas is $3 per unit.

a)   Write the budget constraint equation for the consumer.

(5 Marks)

b)   Graph the budget constraint, showing the intercepts and labeling the axes.

(10 Marks)

c)   Calculate the maximum number of apples and bananas the consumer can purchase if they spend their entire income on only one good.

(5 Marks)

QUESTION FIVE (20 MARKS)

a)   Describe five sources of monopoly power   .

(10 Marks)

b)   Describe the graphically profit maximization under perfect competition market in the short run.

(10 Marks)