KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2020/2021 ACADEMIC YEAR
FIRST YEAR, FIRST SEMESTER EXAMINATION
FOR THE DEGREE OF BACHELOR OF SCIENCE
(BUSINESS ADMINISTRATION)

Date: 15th December, 2020

Time: 2.30pm – 4.30pm

KFI 100   - PRINCIPLES OF MICRO ECONOMIC THEORY

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS)

a)   Consider the production possibility frontier schedule on the table below

Alternative Points	Units of good X	Units of good Y
A	0	10
B	1	8
C	2	6
D	3	4
E	4	2
F	5	0

   i) Plot the PPF from the data above   (3 Marks)

   ii) On the same figure plot point G referring to 9 units of Y and 3 units of X and point H
       referring to 5 units of Y and 2 units of X.   (4 Marks)

   iii) What does point D, G and H show? Explain   (3 Marks)

   iv) Explain briefly the concepts of scarcity and opportunity cost.   (2 Marks)

   v) From the PPF above, what is the opportunity cost of producing 1 unit of good X.

                                                                                                                                  (2 Marks)

b)   Distinguish between the following terms using appropriate examples and diagrams where
        necessary.
        i)   Stable equilibrium and unstable equilibrium   (2 Marks)
        ii)   Giffen good and Inferior good   (2 Marks)
        iii)   Marginal utility and marginal product   (2 Marks)
        iv)   Production Possibility frontier and Production Function   (2 Marks)
        v)   Isoquants and Indifference Curves   (2 Marks)

c)   Explain the basic assumptions of the ordinal approach consumption theory.

                                                                                                                                  (6 Marks)

QUESTION TWO (20 MARKS)

a) Price floors and price ceilings cause distortions in the affected markets and can cause the market not to clear, using a well labeled diagram show how they cause market distortions.

(6 Marks)

b) Graphically demonstrate the consumer surplus.

(3 Marks)

c) The following are functions of commodity X, $Q_1 = 4P + 40$ and $Q_2 = 100 – 2P$
   1. Identify with reasons the demand and supply function (4 Marks)
   2. Determine the equilibrium price and quantity (3 Marks)
   3. What are the effects of the following on the equilibrium above

   i)   A fall in price of X's Substitute (2 Marks)
   ii) A simultaneous increase in input prices and a fall in consumer's income. (2 Marks)

QUESTION THREE (20 MARKS)

a) Explain the sources of monopoly power (3 Marks)

b) State and explain factors that determine elasticity of supply (10 Marks)

c) A student in her final year at Kiriri Women University of Science and Technology was working on her project paper. She decided she would test the validity of the theory of demand for a normal good i.e. ice cream. She decided to carry out her experiment on a Monday. It was very cold in the morning but later in the afternoon the weather changed instantly and it became extremely hot. She visited all ice cream vendors in Nairobi Central Business Area in the morning and found out that a cone of ice cream was selling at Kshs. 20 and the vendors sold a total of 1,200 cones. Later in the afternoon she visited the same ice cream vendors and noticed that the price per cone has increased to Kshs. 45 and vendors sold a total of 3,000 cones. Does this observation violate the theory of demand for a normal good (ice cream). Using a well labeled diagram explain this scenario. (7 Marks)

QUESTION FOUR (20 MARKS)

a) With a suitable illustration, explain the concept of abnormal demand curve.

(6 Marks)

b) Determine the equilibrium quantity of commodities X and Z for a consumer whose total utility (U) and other variables are given below:

   $U = 20X – 4Z^2 – 4Z – X^2$
   Income level Y = Kshs 48
   Price of X (P_x) = Kshs 2
   Price of Z (P_z) = Kshs 4 (7 Marks)

c) Explain the short-run equilibrium of a firm under perfect competition. Illustrate your answer.

(7 Marks)

QUESTION FIVE (20 MARKS)

a) Using a well labeled diagram explain the relationship that exists between average total cost, average variable cost and marginal cost. (6 Marks)

b) Briefly describe three economic applications of the concept of elasticity of demand.

(6 Marks)

c) By use of a relevant illustration explain the stages of production.

(8 Marks)