GARISSA UNIVERSITY

UNIVERSITY EXAMINATION 2017/2018 ACADEMIC YEAR **TWO** **SECOND** SEMESTER EXAMINATION

SCHOOL OF BUSINESS AND ECONOMICS

FOR THE DEGREE OF BACHELOR OF BUSINESS MANAGEMENT

COURSE CODE: ECO 210

COURSE TITLE: INTERMEDIATE MICROECONOMICS1

EXAMINATION DURATION: 3 HOURS

DATE: 19/04/18   TIME: 2.00-5.00 PM

INSTRUCTION TO CANDIDATES

- **The examination has SIX (6) questions**

- **Question ONE (1) is COMPULSORY**

- **Choose any other THREE (3) questions from the remaining FIVE (5) questions**

- **Use sketch diagrams to illustrate your answer whenever necessary**

- **Do not carry mobile phones or any other written materials in examination room**

- **Do not write on this paper**

This paper consists of THREE (3) printed pages   *please turn over*

QUESTION ONE (COMPULSORY)

(a) Define a consumer and explain some assumptions underlying cardinal utility analysis **[5 marks]**

(b) Define marginal rate of substitution and explain the information it conveys **[5 marks]**

(c) Define an indifference map and explain it graphically. **[5 marks]**

(d) Kate's Katering provides catered meals, and the catered meals industry is perfectly competitive. Kate's machinery costs $100 per day and is the only fixed input. Her variable cost consists of the wages paid to thecooks and the food ingredients. The variable cost per day associated with each level of output is given in the accompanying table.

Quantity of Meals	VC (Ksh)
0	0
10	200
20	300
30	480
40	700
50	1000

i. Calculate the total cost, the average variable cost, the average total cost, and the marginal cost for each quantity of output. **[1 mark]**

ii. What is the break-even price? What is the shut-down price? **[1 mark]**

iii. Suppose that the price at which Kate can sell catered meals is Ksh21 per meal. In the short run, will Kate earn a profit? In the short run, should she produce or shut down **[1 mark]**

iv. Suppose that the price at which Kate can sell catered meals is Ksh17 per meal. In the short run, will Kate earn a profit? In the short run, should she produce or shut down? **[1 mark]**

v. Suppose that the price at which Kate can sell catered meals is Ksh13 per meal. In the short run, will Kate earn a profit? In the short run, should she produce or shut down? **[1 mark]**

(e) Why does a firm in perfect competition produce the quantity at which marginal cost equals price

[5 marks]

QUESTION TWO

Consider the following five utility functions and assume that α and β are positive real numbers:

$$1. u^A(x_1, x_2) = x_1{}^\alpha x_2{}^\beta$$

$$2. u^B(x_1, x_2) = \alpha x_1 + \beta x_2$$

$$3. u^C(x^1, x^2) = \alpha x_1 + \beta \ln x_2$$

$$\alpha$$

4. $u^D(x^1, x^2) = (-) \ln x_1 + \ln x_2$

β

5. $u^E(x^1, x^2) = -\alpha \ln x_1 - \beta \ln x_2$

i. Calculate the formula for the Marginal Rate of Substitution (MRS) for each of these utility functions **[15 marks]**

QUESTION THREE

(a) What are the characteristics of a perfectly competitive market **[6 marks]**

(b) Under perfect competition, firms shut down temporarily. Discuss. **[9 marks]**

QUESTION FOUR

(a) What do you understand by income consumption effect? **[3 marks]**

(b) With a given line of income and two types of goods in the market, say X and Y, the consumer will be in a position to make an informed choice by buying both goods in order to satisfy his utility. Assuming that the consumer's income increases gradually, a situation which compels him to also gradually increase the amount of good X and Y that he buys, draw a well labeled curve (income consumption curve) demonstrating such a situation. **[12 marks]**

QUESTION FIVE

(a) What do you understand by price effect? **[3 marks]**

(b) Describe price effect with the use of a well labeled figure **[12 marks]**

QUESTION SIX

Write short notes on the following:

(a) Characteristics of indifference curves **[5 marks]**

(b) Consumer equilibrium **[5 marks]**

(c) Budget line **[5 marks]**