



**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN

**UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR**

SECOND YEAR SECOND SEMESTER EXAMINATIONS

**FOR
BACHOLOR OF COMMERCE (B.COM)**

COURSE CODE: ECO 201

COURSE TITLE: INTERMEDIATE MICROECONOMICS

DATE: Thursday, 21-04-2022

TIME: 15:00 -17:00

INSTRUCTIONS TO CANDIDATES

ATTEMPT QUESTION ONE AND ANY OTHER TWO (Question one carries 30 marks and the rest 20 marks each)

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over

QUESTION ONE

- a) Define an Economic model and give the traits of a good economic model (5 marks)
- b) Distinguish between the following;
 - i) Utility and marginal utility (4 marks)
 - ii) Perfect competition and monopolistic competition (4 marks)
 - iii) General equilibrium and partial equilibrium (4 marks)
- c) Using a well Labelled graph, show the effect of innovation on a production function. (3 marks).
- d) Explain the assumptions under indifference curve theory (10 marks)

QUESTION TWO

- a) List the assumptions under cardinal utility (6 marks)
- b) State the limitation of the cardinal utility theory (6 marks)
- c) The consumer's utility function and budget constraints are given as:

$$\text{Utility function: } U = q_1^2 q_2^2$$

$$\text{Budget constraint: } 40 = 2q_1 - 4q_2$$

- i) Write the augmented objective function (1 mark)
- ii) Find the levels of q_1 and q_2 which maximize the consumer's utility (3 marks)
- iii) Check the second-order condition (2 marks)
- iv) What is the maximum utility? (2 marks)

QUESTION THREE

- a) With the aid of a diagram, explain the different stages in production (15 marks)
- b) Find the returns to scale for the following production function (2 marks)

$$Q = 4L^{\frac{1}{2}}K^{\frac{1}{2}}$$

- c) Calculate the elasticity of substitution for the following production function (3 marks)

$$Q = L^{0.5}K^{0.25}$$

QUESTION FOUR

- a) List the main features of a monopolist? (3 marks)
- b) Given the demand curve of the monopolist as $X = 50 - 0.5P$ and the cost function of the monopolist as $C = 50 + 40X$

- i) Calculate the profit maximizing output, price and the profit (12 marks)
- ii) Test if the second order condition is met (5 marks)

QUESTION FIVE

- a) Discuss why a monopolistic competitor's equilibrium leads to economic inefficiency relative to a perfect competitor (6 marks)
- b) Explain the assumptions under perfect competition. Distinguish between perfect competition and monopoly (14 marks)

