



MURANGA UNIVERSITY COLLEGE

(A constituent College of Jomo Kenyatta University of Agriculture & Technology)

MAIN CAMPUS

ORDINARY UNIVERSITY EXAMINATIONS

2015/2016 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER EXAMINATIONS

FOR THE DEGREE

OF

BACHELOR OF COMMERCE

COURSE CODE: HBC 2205

COURSE TITLE: INTERMEDIATE MICROECONOMIC THEORY

DATE: 17th DECEMBER, 2015

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

Question ONE (1) is compulsory

Answer TWO (2) questions

MRUC observes ZERO tolerance to examination irregularities

QUESTION ONE

- a) Consider the following production function presented by an economist from Gresta University

$$Y = 0.35\log X_1 + 0.41\log X_2$$

- i. Interpret the coefficient of the function (2 marks)
 - ii. Show the returns to scale. (3 marks)
- b) Clearly distinguish the following economic terms. Make use of equations and diagrams where necessary.
- i. Returns to scale and marginal productivity. (3 marks)
 - ii. Market segmentation and market separation. (2 marks)
 - iii. Marginal rate of substitution and marginal rate of technical substitution (2 marks)
 - iv. Budget constraint and utility function (2 marks)
- c) Highlight and explain the axioms of consumer preference (6 marks)
- d) Suppose the consumer has the following utility function
 $U = X^{0.5}Y^{0.5}$
Derive the demand function for X and Y respectively. (10 marks)

QUESTION TWO

A firm produces and sells a product in a domestic market. The market demand function is given as below

$$Q = 150 - 0.5P$$

$$TC = 150 + 20Q$$

Required

- i. Determine the price and quantities that maximize the firm's profit (8 marks)
- ii. What is the maximum profit for the firm? (4 marks)
- iii. With an aid of a well labeled diagram explain the impact of taxes on a monopolist. (8 marks)

QUESTION THREE

- a) With aid of well labeled diagram show and explain the Hicks Substitution effects. (10 marks)
- b) Explain the state of efficiency for general equilibrium to allocate resources efficiently

(10 marks)

QUESTION FOUR

- a) Describe and a monopolistic firm clearly explaining the sources of monopoly (8 marks)
- b) Microeconomics explains how decisions are made by individual agents of the economy.
Using a well labeled graph show and explain the consumer equilibrium. (7 marks)
- c) Discuss whether Matutu industry is a monopoly or a competitive market. (5 marks)

QUESTION FIVE

- a) Briefly explain your understanding of a Cobb-Douglas production function. Explain the properties of technology in the Cobb-Douglas function. (10 marks)
- b) Using the Edge worth box diagram show how analysis of exchange of two good between two individuals is achieved. (10 marks)