



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)

University Examinations 2015/2016

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRIBUSINESS MANAGEMENT

SECOND SEMESTER EXAMINATION FOR DEGREE IN BACHELOR OF SCIENCE
IN AGRIBUSINESS MANAGEMENT

KBT 209: PRINCIPLES OF AGRICULTURAL MICROECONOMICS

Date: 18/4/2016

Time: 8:30 – 10:30 AM

INSTRUCTIONS

This paper consists of FIVE questions

Answer question one and other two questions in this paper

QUESTION ONE

- a) Differentiate the following terms used in economics (8 marks)
- Demand and supply
 - Variable costs and fixed costs
 - Monopoly and monopolistic competition
 - Positive externality and negative externality
- b) With the aid of a diagram, discuss how market forces play to determine the equilibrium price and quantities of maize (8 marks)
- c) In the table below, state what would happen to the total revenue from the following goods if the producers decided to apply the given price strategies (4 marks)

Good	Elasticity of demand	Price strategy	Effect on total revenue
1	0.13	Decrease price	
2	1.95	Decrease price	
3	0.65	Increase price	
4	3.82	Increase price	

- d) Consumers maximize utility subject to budget constraints. Using a mathematical expression, show how consumers maximize utility for a market basket consisting of beef and pork, given prices of the four products and fixed income (2 marks)
- e) Discuss the conditions that must exist for pure competition market structure (8 marks)

QUESTION TWO

- a) Explain the following concepts (5 marks)
- i. Marginal revenue
 - ii. Marginal physical product
 - iii. Free market economy
 - iv. Cartel
 - v. Price elasticity of supply
- b) List three classical factors of production and the payments made to each (3 marks)
- c) Explain the two approaches used in measuring utility (4 marks)
- d) Using an indifference map, show and explain the effect of changes in income on consumption (8 marks)

QUESTION THREE

- a) Define the following concepts (4 marks)
- i. Opportunity cost
 - ii. The law of diminishing marginal utility
 - iii. Marginal Rate of technical substitution
 - iv. Pareto superiority
- b) Suppose the meteorological department warned of a drought in the coming season. Illustrate and explain what might happen to the equilibrium price and quantity of seeds of a drought-tolerant maize variety if supply of the seed does not change (6 marks)
- c) Discuss five factors that may cause a shift in domestic supply of wheat in Kenya (10 marks)

QUESTION FOUR

- a) State the law of diminishing marginal returns (2 marks)
- b) Give three examples of oligopolistic industries in Kenya (3 marks)

- c) Graphically illustrate the relationship between total, average and marginal physical products. (7 marks)
- d) Graphically illustrate how a consumer would maximize utility of apples and oranges given product prices and fixed income. (8 marks)

QUESTION FIVE

- a) Explain the following concepts relating to economic resources (2 marks)
- i. Scarcity
 - ii. Choice
- b) List four economic goals that economies pursue (4 marks)
- c) You have two inputs – labor and capital, and a fixed budget to use in a production. Show graphically how you will choose the optimal combination of these inputs to maximize output (6 marks)
- d) Discuss factors that favor the existence of a monopoly. (8 marks)