



MACHAKOS UNIVERSITY

University Examinations for 2016/2017 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

FIRST YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF EDUCATION(ARTS)

EET 100: MICROECONOMIC THEORY I

DATE: 31/7/2017

TIME: 11:00 – 1:00 PM

INSTRUCTIONS:

Answer Question ONE and any other TWO questions

QUESTION ONE (30 MARKS)

- a) Explain the conditions under which a perfect competitive firm operates (5 marks)
- b) Explain why indifference curves cannot intersect (3 marks)
- c) With the aid of indifference curve differentiate between perfect substitutes and perfect complements. (4 marks)
- d) With aid of a diagram, explain the following concepts as used in economics. (6 marks)
- i. Opportunity cost
 - ii. Isoquant
- e) Demand and supply functions of commodity X are as shown below,
 $Q_d = 100 - 2P$
 $Q_s = 40 + 4P$
Required:
compute the equilibrium price and quantity (6 marks)
- f) The total cost equation in the production of beef in Machakos is given as follows
- $$TC = 1000 + 100Q - 15Q^2 + Q^3$$
- Where TC is total cost, Q is quantity measured in kilogrammes

Compute the following;

- i) average fixed costs (2 marks)
- ii) average variable cost functions (2 marks)
- iii) Marginal cost function (2 marks)

QUESTION TWO (20 MARKS)

- a) What is meant by the term economies of scale? (2 marks)
- b) Briefly discuss the internal economies of scale (8 marks)
- c) With aid of diagram, briefly discuss three properties of an isoquant (6 marks)
- d) Differentiate between normal and inferior goods (4 marks)

QUESTION THREE (20 MARKS)

- a) State the main sources of monopoly power. (8 marks)
- b) Using diagrams, illustrate output levels for both profit maximising and the loss-making monopolist firm in the short run. (8 marks)
- c) Differentiate between laws of diminishing marginal returns and the laws of returns to scale (4 marks)

QUESTION FOUR (20 MARKS)

- a) Discuss the main types of economic systems. Which one(s) are relevant in our Kenyan situation? (10 marks)
- b) Discuss any three determinants of price elasticity of demand (6 marks)
- c) If the quantity demanded of product B has decreased from 1000 to 900 units as price increased from \$ 2 to \$ 4 per unit, calculate the price elasticity of demand and interpret your answer. (4 marks)

QUESTION FIVE (20 MARKS)

- a) Define the term cross elasticity of demand and explain its value for substitutes and complementary goods. (4 marks)
- b) Use the data in the table below to compute income elasticity through the arc elasticity method. (4 marks)

Quantity	Income(Kshs.)	Price(Kshs.)
100	5000	16
120	6000	16

- c) Discuss any three exceptions of the law of demand (6 marks)
- d) Write short notes on the following concept;
 - i) Consumer surplus (3 marks)
 - ii) Production Possibility Frontier (PPF) (3 marks)