MACHAKOS UNIVERSITY

University Examinations for 2017/2018

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

FIRST YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE IN STATISTICS AND PROGRAMMING
BACHELOR OF ECONOMICS AND STATISTICS
BACHELOR OF ECONOMICS AND FINANCE
BACHELOR OF ECONOMICS
BACHELOR OF ARTS
BACHELOR OF COMMERCE
BACHELOR OF EDUCATION(ARTS)

EET 100: MICROECONOMIC THEORY I

DATE: 15/12/2017 **TIME: 11.00-1.00 PM**

INSTRUCTIONS

Answer Question **ONE** and any other **TWO** questions

QUESTION ONE (COMPULSORY) (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 curves differentiate between perfect substitutes and perfect complements. (4 marks)

d) With aid of a diagram, explain the following concepts as used in economics

i. Opportunity cost

ii. Isoquant (6 marks)

e) Demand and supply functions of commodity X are as shown below,

Qd =100 – 2P

Qs = 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 function (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) Outline necessary conditions for a firm to successfully price discriminate (8 marks)

c) With aid of diagram, briefly discuss three properties of an isoquant (6 marks)

d) Differentiate between normal goods 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 firm under perfect competition in the short run. (8 marks)

c) Differentiate between law of diminishing marginal returns and the law 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 to the law of demand. (6 marks)

d) Write short notes on the following concepts;

i. Consumer surplus (3 marks)

ii. Production Possibility Frontier (PPF) (3 marks)