



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2016/2017

**FIRST YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF ARTS IN ECONOMICS WITH
INFORMATION TECHNOLOGY**

CITY CAMPUS

AEC 101: INTRODUCTION TO MICRO-ECONOMICS

Date: 2nd December, 2016

Time: 5.30 - 8.30 pm

INSTRUCTIONS:

- **Answer question ONE and any other TWO questions.**

QUESTION ONE (Compulsory)

a) A firm in a perfectly competitive market has the following demand, total variable costs (TVC) and total fixed costs (TFC) functions:

$P=12.1$ demand function

$$TVC = \frac{1}{20}Q^3 - 1.5Q^2 + 17.5Q$$

$$TFC = 50$$

Required:

- i) Find the Total Cost (TC), Total Revenue (TR) and profit(π) functions. (5marks)
 - ii) Find the output level at which profits are maximized. (5marks)
 - iii) Comment on the obtained marginal cost and marginal revenue at the profit maximizing output. (5marks)
- b)
- i) Discuss the reasons for the growth in the size of firms and outline the ways in which firms can grow. (10marks)
 - ii) Make a positive and a normative statement concerning the distribution of income and wealth in Kenya. (5marks)

QUESTION TWO

a) 'The rapid depletion of the Earth's natural resources by the present generation means that less is available for future generation.' Discuss in terms of equity criteria. (10 marks)

b). Using supply function presented below, find the price elasticity of supply and interpret the result. (10marks)

$$Q_s = \frac{1}{3}P, \text{ given that } P= 5.$$

QUESTION THREE

Consider a country which, using all its resources efficiently in food production can just produce 1,000 tonnes and, using all its resources efficiently in cloth production, can just produce 600 metres. Assuming constant opportunity costs:

- Draw the production possibility frontier (PPF) for this country. (6marks)
- Find the marginal rate of transformation. (6marks)
- Explain why PPF is unlikely in reality to exhibit constant opportunity costs (8 marks)

QUESTION FOUR

- Find the equilibrium price and quantity for the following market model with hyperbolic demand function and quadratic supply function. (10marks)

$$Q_d = \frac{a}{P}$$

$$Q_s = bP^2$$

- 'Pareto efficiency and equity are conflicting objectives'. Discuss the welfare policy that could be used to reconcile the conflicting objectives. (10marks)

QUESTION FIVE

- What criticisms can be levelled against the assumption of profit maximisation in the traditional theory of the firm? Describe two alternative models that have been developed in response to these criticisms. (10marks)
- Using a clearly labeled graph, discuss Pigou's tax as a method of dealing with externalities. (10marks)