



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2015/2016

**SECOND YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE
OF BACHELOR OF ARTS IN ECONOMICS AND BACHELOR OF
BUSINESS ADMINISTRATION WITH INFORMATION TECHNOLOGY**

MAIN CAMPUS

AEG 201: INTERMEDIATE MICRO-ECONOMICS

Date: 15th January, 2016

Time: 8.30 - 10.30am

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- Answer Question ONE and any other TWO Questions.
 - Question ONE carries 30 marks and the rest 20 marks each



QUESTION ONE

(a). Distinguish between the following concepts as used in micro economics:

- (i). Explicit and Implicit costs. (3marks)
- (ii). A market and a market structure. (3marks)
- (iii). Income consumption curve and price consumption curve. (3marks)

(b). The demand function for bread is given as $B = 40 + \frac{M^o}{2P_B}$, where B = quantity

demanded for bread, P_B = unit price of bread and M^o = the consumer's income.

- (i). If the consumer's income is Ksh 90,000 per month and the unit price of bread is Ksh 45, determine the demand for bread. (3marks)
- (ii). If due to the strengthening of Kenya shilling, the unit price of bread reduced to ksh 30, determine the substitution and income effects of the price change on the demand for bread. (8marks)

(c). Assuming the long run total cost function of a firm is given as $C = xe^{-0.02x}$, where x is the output level, determine the firm's marginal cost function and the output level that will optimize the cost. (7marks)

(d). Outline any three features of a perfectly competitive market. (3marks)

QUESTION TWO

- (a) (i) State the law of variable proportions (2 marks)
- (ii) What key assumptions underlie this law? (6 marks)
- (b) Discuss fully the three main stages associated with the law (12 marks)

QUESTION THREE

(a) Given a firm's demand function $Q - 90 + 2P = 0$ and its average cost function $AC = Q^2 - 8Q + 57 + 2/Q$, determine the level of output which optimizes profits and verify if it is the optimum or minimum profit. (8 marks)

- (b) (i) Explain why a firm in perfect competition may continue in the production of goods which it can only sell at a loss and why it cannot continue doing this indefinitely. (7 marks)
- (ii) Illustrate and explain the short-run supply curve of a firm in perfect competition (5 marks)

QUESTION FOUR

- (a). What is an edge worth box diagram? (2marks)
- (b). Using an edge worth box diagram, explain Pareto efficiency in consumption. (10marks)
- (c). Derive the Pareto optimal conditions for consumption. (8marks)

QUESTION FIVE

Given the following table:

PX	PY	PZ	PW	QX	QY	QZ	QW	Y
10	8	12	10	30	15	20	20	10000
12	8	12	10	26	15	20	20	10000
14	8	12	10	22	15	20	20	10000
16	8	12	10	24	15	20	20	10000
16	8	12	10	26	18	18	18	12000
16	10	12	10	28	16	16	18	12000
16	12	12	10	30	14	16	18	12000
16	12	12	12	30	14	14	21	12000

Where:

- PX: Price of good X QX: Quantity demanded of X
PY: Price of good Y QY: Quantity demanded of Y
PW: Price of good W QZ: Quantity demanded of Z
PZ: Price of good Z QW: Quantity demanded of W
Y: Consumer's income

Required:

- (a) What type of goods are X, Y, Z & W and why? (8 marks)
- (b) Identify substitutes and complements and justify your answer. (4 marks)
- (c) If there is a successful advertising campaign that convinces consumers to buy more of commodity Y, what would the effect of this be on consumption of commodities X and Z? (8 marks)