



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2015/2016

**SECOND YEAR SECOND SEMESTER EXAMINATION FOR THE
DÉGREE OF BACHELOR OF BUSINESS ADMINISTRATION WITH
INFORMATION TECHNOLOGY**

CITY CAMPUS – REGULAR/EVENING

AEC 201: INTERMEDIATE MICRO-ECONOMICS

Date: 14th December, 2015

Time: 5.30 - 7.30 pm

INSTRUCTIONS:

- Answer question ONE and any other TWO questions.
- Question ONE carries 30 marks. Other questions carry 20 marks.



QUESTION ONE

- (a). Assuming a utility function given as $U = f(X_1^{0.4}, X_2^{0.4})$, if the utility curve passes through points (30, 60), determine the consumer's marginal rate of commodity substitution. (5mark)
- (b). The demand function for a firm is given as $P = 60 - 8Q$, if the firm's marginal cost is 4 and its fixed cost is 10, determine the firm's profit. (5 marks)
- (c). Explain the difference between the following micro economics concepts:
- (i) A producer surplus and a consumer surplus. (4marks)
 - (ii). Income consumption curve and an Engel curve. (4marks)
 - (iii). An Isoquant and an Isocost. (4marks)
 - (iv). Change in demand and change in quantity demanded. (4marks)
- (d). Geometrically derive the average variable cost curve and explain its shape. (4marks)

QUESTION TWO

- (a) (i) Explain the meaning of an indifference curve (2 marks)
(ii) Explain the main characteristics of indifference curves (6 marks)
- (b) (i) Briefly explain two exceptions to the definition of an indifference curve. (4 marks)
(ii) Explain any four uses of indifference curve analysis. (8 marks)

QUESTION THREE

- ((a). Critically examine the cardinal utility theory. (8marks)
- (b). Illustrate and explain the consumer equilibrium under the cardinalist approach (7 marks)
- (c). Explain how you would derive the demand curve for a given good from the total utility curve. (5marks)

QUESTION FOUR

- (a) Explain the meaning of production in economic sense. (4marks)
- (b) (i) Explain the meaning of the term 'production function' (4marks)
(ii). What combination of products "x" and "y" should a farmer produce to minimize costs when his joint cost function is given as
 $C = f(x, y) = 6x^2 + 10y^2 - xy + 30$ and he has a production quota of $x + y \leq 34$. (8marks)
- (c). Estimate the effect on costs if the production quota is reduced by one unit. (4marks)