CHUKA UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATIONS FOR THE AWARD OF DEGREE OF BACHELOR OF

ECON 212: INTERMEDIATE MICROECONOMICS

STREAMS: **TIME: 2 HOURS**

DAY/DATE: WEDNESDAY 08/8/2018 **11.30 A.M. – 1.30 P.M.**

INSTRUCTIONS: Answer question ONE and any other TWO questions

QUESTION ONE

(a) Define the following terms [5 marks]

(i) Budget constraint

(ii) Neutral goods

(iii) Substitution effect

(iv) Budget line

(v) Microeconomics

(b) With help of diagrams discuss different shapes of indifference curves [5 marks]

(c) Given the utility function $U = X_1 X_2$ and the budget constraint of the consumer is

$$P_1 X_2 + P_2 X_2 \leq m$$

(i) Define the problem of the consumer [1 mark]

(ii) Find the Marshallian demand functions [6 marks]

(iii) Determine the maximum utility of the consumer [3 marks]

(d) Suppose the price of good x is ksh 2 and that of good y is ksh 5. If the price of good X increases to ksh 3 with the price of good Y remaining constant and the consumer income also remaining constant at ksh 120 per day. Calculate the consumer total effect,

substitution effect and the income effect after the price change given the consumer demand function for good x to be;

$$X = 2P_y + \frac{M}{10P_x}$$ [10 marks]

QUESTION TWO

(a) Compare and contrast Monopolistic market and oligopoly markets [10 marks]

(b) Given that the market demand $P = 200 - 0.8q \wedge the\ cost\ function\ is\ C_1 = 10q_1^2, C_2 = 80q_2$

. Find the equilibrium price and output [10 marks]

QUESTION THREE

(a) Given the cobb-Douglas production function

$Q = L^2 K^3$, calculate the following:

(i) Marginal product of factors [2 marks]
(ii) Marginal rate of technical substitution [2 marks]
(iii) Degree of homogeneity and comment on returns to scale [5 marks]
(iv) Elasticity of substitution

(b) With the aid of a diagram explain the substitution and income effect of a price increase in a case of normal good [10 marks]

QUESTION FOUR

(a) Given the production function $Q = L^{\frac{1}{2}} K^{\frac{1}{2}}$, compute the conditional demand functions hence the minimum cost [10 marks]

(b) List the assumptions of ordinal utility approach [5 marks]

(c) Why do you think cartels in practice rarely achieve joint profit maximization [5 marks]
