MUEO

MOI UNIVERSITY

OFFICE OF THE DEPUTY VICE CHANCELLOR, ACADEMIC AFFAIRS, RESEARCH & EXTENSION

UNIVERSITY EXAMINATIONS

2014/2015 ACADEMIC YEAR

SECOND/THIRD YEAR END OF SEMESTER EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF BUSINESS MANAGEMENT

EXAM CODE:- **ECO 310/BBM 211**

COURSE TITLE:- **INTERMEDIATE MICROECONOMICS**

DATE:- 15TH APRIL, 2015 **TIME:- 9.00A.M. – 12.00NOON.**

INSTRUCTION TO CANDIDATES

- SEE INSIDE.

THIS PAPER CONSISTS OF (2) PRINTED PAGES **PLEASE TURN OVER**

Instructions to Candidates;-

Attempt **Any Two** Questions.

All Questions Carry **Equal** Marks

QUESTION ONE

(a) A consumer's utility function is of the form:

$U = 40q_1q_2$

The consumer's money income is Y and the respective prices of q_1 and q_2 are p_1 and p_2

(i) Derive the Uncompensated and compensated demand functions for the two commodities (12 marks)

(ii) Suppose the consumer's money income is Ksh 40000 and that the price of q_1 is Ksh 30 while that of q_2 is Ksh 60. Find the consumer's optimal consumption bundle. (6 marks)

(b) Discuss the characteristics of Microeconomic models show the relevance of this model to the real situation. (7 marks)

QUESTION TWO

a) A firm produces identical outputs at two different plants. If the marginal cost at the first plant exceeds the marginal cost at the second plant, how can the firm reduce costs and maintain the same level of output? (15 marks)

b) Suppose that a cost minimizing firm uses two inputs that are perfect substitutes. If the two inputs are priced the same, what do conditional factor demands look like for the inputs? (10 marks)

QUESTION THREE

a) Show mathematically that a monopolist always sets its price above marginal cost (10 Marks)

b) What kinds of economic and technological conditions are conducive to the formation of monopolies? **(15 Marks)**

QUESTION FOUR

a) Explain the concept of consumer surplus and show how it is used to measure consumer's welfare changes (10 Marks)

b) Discuss the Importance of the marginal rate of substitution in production theory. The production function of a firm is represented by a combination of labor, L and capital K to produce a given level of output Q. If the has a given cost outlay, C and the wage rate is w while the rental value of capital is r, Derive the firm's output maximizing point (15 marks)

MR = MC

MRS

QUESTION FIVE

a) A producer faces the following demand function:

$$p = 300 - \frac{2}{3}Q^2$$

TR = P.Q

If his TC function is

$$TC = \frac{1}{6}Q^3 - \frac{1}{2}Q^2 + 2Q + 200$$

Determine

i. VC and FC

ii. The profit maximizing output

iii. The profit of the producer (5 marks each)

b) Given the following Gobb-Douglas type of production function. Determine the return to scale and explain your answer.

$$Q = L^{2/3}K^{1/6}$$

(10 Marks)

QUESTION SIX

a) Do oligopolies produce an efficient level of output? Explain (10 Marks)

b) Are dominant strategy equilibria always Nash equilibria? Are Nash equilibria always dominant strategy equilibria? Explain **(15 Marks)**

....**END**......................................