MERU UNIVERSITY COLLEGE
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University Examinations 2010/2011

SECOND YEAR, FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF COMMERCE

HBC 2241: INTERMEDIATE MICROECONOMICS THEORY

DATE: DECEMBER 2010 **TIME: 2HOURS**

INSTRUCTIONS: *Answer question **one** and any other **two** questions*

QUESTION ONE – (30 MARKS) COMPULSORY

(a) Explain the term, technology. (3 Marks)
(b) Describe the relationship between production function and technology. (4 Marks)
(c) Explain the concept of elasticity of substitution. (5 Marks)
(d) Consider the following production function:
$Q= 40K^{½}L^{½}$
Determine:
(i) The marginal product of labour (MP_L) (2 Marks)
(ii) The marginal product of capital (MP_K) (2 Marks)
(iii) The marginal rate of technical substitution of capital for labour ($MRTS_{KL}$) (2 Marks)
(e) (i) Distinguish between market equilibrium and disequilibrium. (4 Marks)
(ii) Use the Cobweb theory to explain how the market moves from disequilibrium to an equilibrium position. (5 Marks)
(iii) Given the following market model:
$Qd = 19 – p^2$
$Qs = -8 + 2P^2$
Find the equilibrium price and quantity. (3 Marks)

QUESTION TWO – (20 MARKS)

(a) Explain the term, price discrimination. (3 Marks)
(b) Outline the three forms of price discrimination. (3 Marks)

(c) Under what conditions will a monopolist be able and willing to engage in price discrimination? (3 Marks)

(d) A monopolist firm sells in two distinct markets. The demand curves for the firm's output in the two markets are:

Market 1: $P_1 = 200 – 10\ Q_1$

Market 2 = $P_2 = 100 - 5\ Q_2$

Where P_1 = Price in the first market.

Q_1 = the amount sold in the first market

P_2 = price in the second market

Q_2 = the amount sold in the second market

The firm's marginal cost is:

$MC = 10Q$

Where Q is firms entire output (i.e. $Q= Q_1 +Q_2$)

Determine:

(i) How many units the firm should sell in the first market? (2 Marks)

(ii) What price it should charge in the first market? (2 Marks)

(iii) How many units the firm should sell in the second market? (2 Marks)

(iv) What price the firm should charge in the second market? (2 Marks)

(v) What price the firm should charge if the government outlaws price discrimination? (3 Marks)

QUESTION THREE – (20 MARKS)

(a) Explain the concept of market imperfections (4 Marks)

(b) Outline the causes of market failure. (10 Marks)

(c) Explain any six policies that are used for correcting market failures. (6 Marks)

QUESTION FOUR – (20 MARKS)

(a) Differentiate between:

(i) Market basket and equilibrium market basket of goods. (4 Marks)

(ii) Partial and general equilibrium. (4 Marks)

(b) Explain the term, pareto optimality. (4 Marks)

(c) David has 3 litres of soft drinks and 9 sandwiches. Jackline on the other hand, has 8 litres of soft drinks and 4 sandwiches. With these endowments, David's marginal rate of substitution (MRS) of soft drinks for sandwiches is 4 and Jackline's MRS is equal to 2. Determine:

(i) Whether this allocation of resources is efficient. (4 Marks)

(ii) If it is not, what exchanges will make both parties better off? (4 Marks)