

KABARAK



UNIVERSITY

UNIVERSITY EXAMINATIONS

2009/2010 ACADEMIC YEAR

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN
ECONOMICS & MATHEMATICS**

COURSE CODE: ECON 210

COURSE TITLE: INTERMEDIATE MICROECONOMICS

STREAM: Y2S1

DAY: MONDAY

TIME: 2:00 – 4:00P.M.

DATE: 07/12/2009

INSTRUCTIONS:

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

PLEASE TURN OVER

1. (a) Distinguish between
 - i) Microeconomics and macroeconomics (2mks)
 - ii) Positive economic and normative economics (2mks)
- (b) Suppose all of an individual weekly income is spent on two goods, x and y.
 - i) Draw the individual's budget line if his or her income is shs. 150 per week, the price of x is shs. 10 per unit and the price of y is shs. 15 per unit. (2mks)
 - ii) Draw the new budget lines
 - (a) If the price of x doubles (2mks)
 - (b) The price of y halves (2mks)
 - (c) If the individuals income rises to shs. 250 per week (2mks)
- (c) Explain why indifference curves do not intersect (3mks)
- (d) A consumer spends all her income on food and clothing. At the current prices of food (p_x) = shs. 10 and price of clothing (p_c)=shs. 5, she maximizes her utility by purchasing 20 units of food and 50 units of clothing.
 - i) What is the consumer's income? (3mks)
 - ii) What is the consumer's maximal rate of substitution of food for clothing at the equilibrium position (4mks)
- (e) Using indifference curve analysis, show the substitution and income effects for a normal good incase of a price decrease (8mks)
2. (a) Explain the following terms:
 - (i) Increasing returns to scale (4mks)
 - (ii) Constant returns to scale (4mks)
 - (iii)Decreasing returns to scale (4mks)
- (b)Capital – Labour ratio has been increasing in the Kenyan manufacturing industry over time. What possible explanation can you offer for this increase capital intensity? (8mks)
3. (a) (i) Explain the factors which influence consumers demand for a good (6mks)
- (ii) Define the law of demand and identify the exceptions to this law (3mks)

- (b) There are two commodities x_1 and x_2 on which a consumer spends his entire income in a day. He has utility function $V = \sqrt{x_1 x_2}$. Find out the optimal quantities of x_1 and x_2 are shs. 5 and shs. 2 respectively and his daily income equals shs. 500 (11mks)
4. (a) Identify the conditions under which price discrimination is possible (6mks)
- (b) Explain the various features of a perfectly competitive market (8mks)
- (c) Write the help of a diagram explain the short-run equilibrium of a firm in case of losses (6mks)
5. (a) (i) Define isoquant (1mk)
- (ii) Explain the general properties of isoquants (3mks)
- (b) Write brief notes on the following:
- (i) Average physical product (2mks)
- (ii) Marginal physical product (2mks)
- (iii) Total physical product (2mks)
- (c) Consider the following short-run production function (where L is the variable input and Q is the output)
- $$Q = 6L^2 - 0.4L^3$$
- i) Determine the marginal production function (MP_L) (2mks)
- ii) Determine the average product function (AP_L) (2mks)
- iii) Find the value of L that maximizes Q (3mks)
- iv) Find the value of L at which its average product takes on its maximum value (3mks)