



**UNIVERSITY EXAMINATIONS: 2013/2014**

**EXAMINATION FOR THE MASTERS OF BUSINESS ADMINISTRATION**

**(MBA) CORPORATE MANAGEMENT**

**ECO 5011 MANAGERIAL ECONOMICS (EVENING)**

**DATE: APRIL, 2014**

**TIME: 3 HOURS**

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**INSTRUCTIONS: Answer Question One and Any Other Three Questions**

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**QUESTION ONE**

- a) Suppose you are a manager of a sugar company and you estimate a linear demand function of the form:  $Q = 100 - 2P$  using a cross-sectional data from the company; where  $Q$  = quantity demanded and  $P$  = price of sugar on the market. Use the estimated demand function to answer the following questions;
- (i) What will be the value of the quantity of sugar demanded if  $P = 20$ ? (1 Mark)
  - (ii) How much would the quantity demanded change if the price were decreased to  $P = 10$  if other factors were held constant? (2 Marks)
  - (iii) Is demand for sugar *elastic* or *inelastic*? What effect would price increase have on total revenue? (5 Marks)
  - (iv) State and explain two main application of Price Elasticity of Demand in Managerial Economics (2 Marks)
- b) Consider yourself as a manager in a fish firm responsible for making pricing decisions in the firm. With reference to a FISH market equilibrium, explain the change(s) in the fish market equilibrium under each of the following events on the market. (Consider each event separately and use diagrams to illustrate your answer).

- (i) Fall in the price of fish (2 Marks)
  - (ii) Fall in the price of meat (assume fish and meat are perfect substitutes) (2 Marks)
  - (iii) Increase in price of fish nets (2 Marks)
- c) With the aid of an appropriate diagram, explain how a monopoly firm arrives at its equilibrium in the short-run with the help of MR and MC curves. (5 Marks)
- d) Consider the following Cobb-Douglas production function from manufacturing sector:
- $$Q = 10L^{0.75}K^{0.45}$$
- (i) What are the marginal products of Labour and Capital (2 Marks)
  - (ii) What is the marginal rate of technical substitution of capital for labour (2 Marks)
  - (iii) Calculate the factor intensity and explain the technique of production that is being used in the production process (2 Marks)
  - (iv) How would you characterize this manufacturing sector in terms of the returns to scale. Explain the significance of this information in decision making. (4 Marks)

## QUESTION TWO

Suppose that; Mr. Moreno is a Strategic and Risk Manager in Salsa Bongo Corporation (SBC), a multinational telecommunication corporation operating in the Republic of Kenya. He is faced with managing various investment portfolios and projects in telecommunications carried out by the corporation on a daily basis.

- a) Define Managerial Economics and Strategy as used in decision making (2 Marks)
- b) Examine the argument that good oriented managers, like Mr. Moreno, will always require a good well polished background on Managerial Economics in decision making. (7 Marks)
- c) Explain how Mr. Moreno can engage in strategic behavior to deter new entry into telecommunications industry in the republic of Kenya (7 Marks)
- d) Explain how Mr. Moreno can help Salsa Bongo Corporation (SBC) to manage its risks that results from the corporation's various investments portfolios in the republic of Kenya. (7 Marks)

## QUESTION THREE

Suppose you were hired as a manger to a firm producing bread. This firm is a monopolist which sells in two distinct markets, one of which is completely sealed off from the other. The demand curve for the firm's output in the first market is  $P_1 = 160 - 8Q_1$ ; where  $P_1$  = price of the product in the first

market and  $Q_1$  = amount sold in the first market. The demand curve for the firm's output in the second market is  $P_2 = 80 - 2Q_2$ ; where  $P_2$  = price of the product in the second market and  $Q_2$  = amount sold in the second market. The firm's cost curve is  $C = 5 + 10Q$ ; where  $Q$  = the firm's entire output destined for either market. The firm asks the manager to suggest what its pricing policy should be.

- a) How many units of output should the firm sell in each market and what price should the firm charge in each market? (5 Marks)
- b) Comment on the price elasticities of demand for two markets and the price levels in each market. (5 Marks)
- c) Compute the profit of the firm with price discrimination and without price discrimination. Show that the firm which is a monopolist will earn extra profits if it practices price discrimination than if it charges a uniform price in the two markets. (5 Marks)
- d) State and explain five conditions under which a monopolist will discriminate the prices he/she charges for a particular product (8 Marks)

#### QUESTION FOUR

- a) With a clearly labeled diagram, explain how a fixed per unit tax on the producers of a competitively produced good would affect the price at which it was sold and the quantity traded. How is the burden of the tax distributed between consumers and producers? (14 Marks)
- b) Suppose you are a manager of the firm that produces the good being taxed by the government (in part (a)), outline three reasons why the information of tax sharing between consumers and producers is important to decision making at the firm. (3 Marks)
- c) Using a relevant diagram, explain which kind of goods a government should tax if its objective is to maximize tax revenue. (6 Marks)

#### QUESTION FIVE

Write short notes on any FOUR of the following concepts as used in Managerial Economics:

- a) Breakeven analysis and operating leverage (6 Marks)
- b) Product bundling pricing scheme and peak-loading pricing scheme (6 Marks)
- c) Economies of scope and Economies of scale (6 Marks)
- d) Incremental cost and marginal cost (6 Marks)

**QUESTION SIX**

The following is some data about costs for a single firm.

<b>Output</b>	<b>Total Variable Cost</b>	<b>Total Cost</b>
0	0	20
1	15	35
2	25	45
3	34	54
4	42	62
5	51	71
6	61	81
7	76	96
8	106	126
9	156	176

- a) Identify the level of fixed costs for this firm. (3 Marks)
- b) Derive average cost and marginal cost schedule from the data given. (5 Marks)
- c) If this firm is able to sell all of its output at a fixed price of £15 per unit, how many units should it sell to maximize profits and what will its level of profits be? (5 Marks)
- d) If the fixed selling price fell to £8 per unit how should the firm respond?
- (i) In the short-run
- (ii) In the long-run

(10 Marks)