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MAIN EXAMINATION

MAY- AUGUST 2021

SCHOOL OF BUSINESS

DEPARTMENT OF GRADUATE BUSINESS STUDIES

REGULAR/EVENING/ODEL PROGRAMME

CEC 520/ECO 808: MANAGERIAL ECONOMICS

Date: AUGUST 2021	**Duration: 3 Hours**
INSTRUCTIONS: Answer Question ONE and any other THREE Questions	

QUESTION ONE

a) Assuming that a coffee producing firm estimated the following regression of the demand for its brand of coffee:

$Q_C = 1.5 \square 3.0P_C \square 0.8Y \square 2.0P_b \square 0.6P_S \square 1.2A$

where Q_c = sales of coffee brand C, in dollars per pound P_c = price of coffee brand C, in dollars per pound
Y = personal disposable income, in millions of dollars per year
P_b = price of the competitive brand of coffee, in dollars per pound P_s = price of sugar, in dollars per pound
A = advertising expenditures for coffee brand C, in hundreds of thousands of dollars per year.

Suppose also that this year, P_c = \$2, Y = \$2.5, P_b = \$1.80, P_s = \$1 and A = \$1.

i) Interpret the estimated demand function of the firm. **(02 Marks)**

ii) Determine the total quantity of coffee demanded **(02 Marks)**

iii) Compute point price elasticity of demand for the firm‟s brand of coffee with respect to its price. **(02 Marks)**

iv) Compute the cross-price elasticity of demand for coffee with respect to the price of competitive coffee brand b. **(02 Marks)**

v) At the current price level, would it be viable for the firm to increase the price level prof its brand of coffee? Support your answer. **(02 Marks)**

b) A company estimated that the relationship between its advertising expenditure in media X and media Y and the total revenue generated from the sale of its products could be represented as:

$TR = sh\ 500X + 3Y^2 + 8XY$

If the manager faces a budget constraint of Shs 1,139 and the costs of advertising each unit of its products in media X is Shs 70 and Shs 49 in media Y, respectively, determined the optional amount that should be spent on advertising in each media. What is the maximum revenue that can be generated from sales? **(03 Marks)**

c) Explain the reasons why managers prefer using linear revenue functions in estimating the break even quantity of output. What are some of the disadvantages of using the break-even analysis in managerial decision making? **(04 Marks)**

d) Some people consider Managerial Economics to be Microeconomics. Explain by citing relevant reasons why you think the two are similar or different. **(04 Marks)**

e) Demand forecasting is a versatile tool of economic analysis. Discuss the validity of this statement highlighting the various determinants of demand. **(04 Marks)**

QUESTION TWO

a) Given below is the estimated profit function of a Milk production company.

$\prod = -\ Sh\ 90{,}000 - 5{,}000Q + 75{,}000\ Q^2 - 9Q^3$

Based on the profit function given above; determine the level of output that will maximize profits. **(05 Marks)**

b) b) Using a diagram, explain the reasons why a rational producer will choose a volume of output where the MR=MC **(05 Marks)**

c) The total cost and the total revenue functions below were estimated from the historical sales and cost data of a certain company:

$TR = Shs\ 100Q – Shs\ 0.5Q^2$

$TC = Shs\ 2,000 –Shs\ 10Q + Shs\ 0.5Q^2$

Where

TR represents the total revenue,

TC represents the total cost and

Q represents the quantity produced and sold.

Required:

i) Determine the profit maximizing level of output for this company. **(02 Marks)**

ii) Examine the practical importance of cost control and management by firms **(03 Marks)**

QUESTION THREE

a) Explain the practical and theoretical importance of managerial economic theory **(04 Marks)**

b) Examine the practical managerial importance of demand analysis and forecasting. **(04 Marks)**

c) The Capital-Labour ratio has been increasing in the Kenyan manufacturing sector over sometime. Suggest possible explanations for the increase in capital intensity. **(04 Marks)**

d) Clearly distinguish between the use consumer clinics and market experiments as methods of demand forecasting. **(03 Marks)**

QUESTION FOUR

a) Explain the factors behind the establishment of monopoly power in a given market. **(04 Marks)**

b) Explain with the aid of a relevant diagram why a firm operating in a perfectly competitive market may incur losses in the short run and why it cannot continue to so indefinitely. **(04 Marks)**

c) A rational firm operating in a perfectly competitive market has its demand and total cost function given below.

$P=20-30Q$

$TC=50+25Q-40Q^2$

Required

i) Average fixed cost function **(01 Marks)**

ii) Average variable cost function **(01 Marks)**

iii) Marginal cost function **(01 Marks)**

iv) Profit maximizing level of output **(02 Marks)**

v) Maximum Profit **(02 Marks)**

QUESTION FIVE

a) Managerial economics is a discipline that deals with application of "economic theory to business management" discuss the validity of this statement taking into account the various managerial functions. **(10 Marks)**

b) Explain the "cost plus pricing strategy" as used by firms and highlight its limitations. **(05 Marks)**