Eastern University, Sri Lanka
Faculty of Commerce and Management
External Degree
Part III Examination in Bachelor of Business Administration / Commerce-2000/2001
(Proper /Repeat)–(June /July ,2007)
Com 404: Managerial Economics

Answer all questions **Time : Three hours**

(1)

(i) Interpret the components of a demand function

(03 Marks)

(ii) Under which circumstance the Arc elasticity calculation is needed for a firm.

(05 Marks)

(iii) Briefly explain determinants of price elasticity of demand.

(04 Marks)

(iv) **Advanced consumer** Electronics manufacturers high-resolution digital cameras, and its marketing department has estimated the following monthly demand function for the Cameras

$$Q_{ACE} = 270 - 0.8P_{ACE} - 3Pm + 0.4Pc + 0.006I + 0.03A$$

Q_{ACE} = the quantity of advanced consumer electronics cameras demanded per month
P_{ACE} = the price of an Advanced consumer electronics Camera.
Pm = the price of a memory card
Pc = the price of a competing Camera
I = annual average household income, and
A = monthly advertising expenditure

(a) Find the price elasticity of demand for ACE digital cameras if P_{ACE} = 600/- , Pm = 40/- , Pc = 500/- , I = 50 ,000 /- and A = 1000/-

(03 Marks)

(b) What is the cross price elasticity of demand between the quantity demanded of ACE digital Cameras and the price of the memory cards?

(03 Marks)

(c) Find income elasticity of demand for ACE digital cameras at the point specified in part (i)Are the cameras normal or inferior goods ?why?

(02 Marks)

(Total Marks 20)

(2)

(i) Total Costs function of a firm is given as
$TC = 210 + 55Q - 10Q^2 + Q^3$

(a) Identify total fixed cost and total variable cost

(02 Marks)

(b) Find the level of output of the firm where the average variable cost is minimum

(03 Marks)

(c) Find the level of output where the marginal cost is minimum.

(03 Marks)

(ii)

(a) Briefly explain under which circumstance a Monopoly firm could enjoy higher profit

(03 Marks)

(b) What does the Leners Index express in monopoly market ? Explain.

(03 Marks)

(iii) A Producer in Sri Lanka has possibility of discriminating between the domestic and Indian Markets for his product where the demand functions are respectively

Domestic Market $Q_1 = 21-0.1P_1$
Indian Market $Q_2 = 50 - 0.4P_2$

$TC = 2000 + 10Q$ Where $Q = Q_1+Q_2$

(a) Find whether the price discrimination practice gives more profit for the firm

(06 Marks)

(Total Marks 20)

(3) A firm making tables has the following costs and revenue information for one week. This firm sells 100 tables at 500/=.Its variable and fixed manufacturing costs are 20000/= and 5000/= respectively .Variable and fixed selling and administrative expenses are 10000/= and 5000/= respectively.

(i) Find the firm's breakeven quantity and interpret your answer

(06Marks)

(ii) Suppose that the firm targets its profit to be 10000/=, how many tables should the firm produce?

(04 Marks)

(iii) Find the firm's new breakeven output if it builds a new plant that will raise fixed manufacturing costs and fixed selling and administrative expenses by 50% and 75% respectively. But variable cost decreases to 250/= per unit, where others remain same.

(06 Marks)

(iv) Even now suppose that the firm wishes to maintain the same profit 10000/=, what would the firm's output be?

(04 Marks)

(Total Marks 20)