

THE OPEN UNIVERSITY OF SRI LANKA  
 BACHELOR OF MANAGEMENT STUDIES DEGREE PROGRAMME  
 LEVEL 05 2007/2008  
 FINAL EXAMINATION 2008  
 MANAGERIAL ECONOMICS – MCU 3207



047

DATE : 10.02.2008 TIME : 1.30 p.m. – 4.30 p.m.

**INSTRUCTIONS**

Duration: Three Hours

**PART A IS COMPULSORY AND ANSWER ANY FOUR (04) QUESTIONS FROM PART B.**

This question paper has seven questions.  
 Use of non-programmable calculators is allowed.

**Part A**

- (1) i) The demand function of a good is given as,  

$$Q_d = 30 - 0.20P$$
  
 P - Price Q - Output

Using the above demand function complete the following table.

Quantity	Price	Total Revenue	Average Revenue	Marginal Revenue
1				
2				
3				
4				
5				

(06 marks)

- ii) “Farmers may not prosper as much as those in other occupations during period of economic prosperity” Do you agree? Explain, using concept of Income elasticity of demand. (06 marks)
- iii) Would you expect demand for motor vehicles to be relatively elastic or inelastic? Give reasons. (06 marks)

- iv) Quantity Demanded for good X is given by following equation.

$$Q_d = 1000 - 5P_x + 4I$$

$$P_x = \text{Price} \quad I = \text{Income}$$

Assume initial price ( $P_x$ ) = Rs. 40/= and Income (I) = Rs. 100/=

- What effect a price increase would have on sales revenue?
- Evaluate how sales revenue of good X would change during period of rising income.

(6 marks)

- v) Total cost function (TC) of a firm in a Perfectly Competitive Market given as,

$$TC = 2Q^2 + 8Q + 16$$

$$Q = \text{Quantity}$$

The equilibrium price in the industry is Rs.208/=

- Find the output that maximizes the profit.
- Calculate the profit at profit maximizing output.
- Can the firm influence the market price? Give reasons.

(6 marks)

- vi) Define Implicit and Explicit cost with examples? How will this affect when calculating profit of a firm?

(6 marks)

(36 marks)

### Part B

- In pursuing firms goals and objectives firms will have to operate under various constrains. What are these constraints? (4 marks)
  - "The knowledge of economic theories and concepts help managers in making optimum decisions that would enhance the performance of the firm." Explain with examples. (12 marks)
- Explain, with examples how the product differentiation and advertising help a firm in a Monopolistically Competitive market to operate efficiently. (8 marks)
  - How will a Monopolistically Competitive firm achieve equilibrium in the long run? Comment on its efficiency. (8 marks)

- 4) (a) What forms of price competition might exist in an Oligopolistic market? (7 marks)
- (b) "Firm in an Oligopoly market must consider how rivals might react to its competitive moves" Do you agree? Explain with examples. Will the firms in the same market benefit, if they collude? How? (9 marks)

- 5) (a) How can the Break-even output of a firm be calculated? (3 marks)
- (b) Calculate the Break-even output of the following firms.

	Firm A	Firm B	Firm C
	Rs.	Rs.	Rs.
Fixed cost	80,000/-	107,360/-	150,000/-
Variable cost per unit	4.00	3.20	3.00
Selling price per unit	8.00	8.00	8.00

Comment on the findings. (7 marks)

- (c) What is Operating Leverage? How will this help in business decision making? (6marks)
- 6) (a) Using law of Diminishing Marginal Returns, explain why firms should stop adding the variable factor (labour), at some point in the short run. How can the rational entrepreneur make use of the above law in decision making? (10 marks)

- (b) Prove that the firm achieves optimum level of production in the long run, when,

$$\frac{MP_L}{MP_k} = \frac{P_L}{P_k}$$

$MP_L$  = Marginal Product of Labour

$MP_k$  = Marginal Product of Capital

$P_L$  = Price of Labour

$P_k$  = Price of Capital

(6 marks)

- 7) Write short notes on the following.

- (i) Natural Monopoly
- (ii) Sunk cost and Incremental cost
- (iii) Marginal Revenue product of Labour(MRPL)
- (iv) Economies of scale

(@4 x 4=16 marks)