



THE OPEN UNIVERSITY OF SRI LANKA  
 BACHELOR OF MANAGEMENT STUDIES DEGREE PROGRAMME  
 LEVEL 05 2008/2009  
 FINAL EXAMINATION 2009  
 MANAGERIAL ECONOMICS – MCU 3207

DATE : 19.02.2009

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) (a) Short run production function of a firm is given below.

Quantity of labour	Total Production	Marginal Production	Average Production
1	12		
2			19
3	60		
4		12	
5			16
6		-02	

Fill in the table accordingly and identify the three stages of production.

(6 Marks)

- (b) When price of good X is Rs.20/=, 7200 units are demanded and at Rs. 24/=, 6000 units are demanded. When price changes by Rs.4/=, quantity demanded always changes by 1200 units.

i) Find the demand equation of good X.

ii) If supply function of good X is given as,

$$Q_s = -7800 + 400p \text{ find the equilibrium price and quantity.}$$

(6 marks)

- (c) If you are to start a business to produce soft drinks, in what kind of market will you have to operate? Justify your answer.

Will advertising and product differentiation help you in running the business successfully? Explain.

(6 marks)

- (d) Using the kinked demand curve explain why there could be price quantity stability in Oligopolistic markets.

(6 marks)

- (e) Price elasticity of good X is given as 0.4 and good Y is given as 2. How can a firm manipulate the price of goods X and Y to increase its revenue?

(6 marks)

- (f) Briefly explain why Break Even Analysis and Operating Leverage techniques are considered useful in making effective managerial decisions.

(6 marks)

## PART B

(2) “Managerial Economics is an application of the part of micro economics that focuses on the topics that are of greatest interest and importance to managers” Discuss with examples. (16 Marks)

(3) (a) “Relative to firms in Perfect Competition, Monopolists produce too little output and set a too high a price” Do you agree? Explain using illustrations. (8 Marks)

(b) The demand function of a monopolistic firm is given as;

$$0.25p = 20 - Q$$

(P – price, Q – quantity)

The firms total cost function given as

$$TC = 20Q + Q^2$$

- (i) Find the profit maximizing out put and price.
- (ii) Calculate the profit at profit maximizing out put.
- (iii) Find revenue maximizing out put.

(8 Marks)

(4) (a) Explain what is likely to happen in the long run, when a Perfectly Competitive firm makes positive economic profit in the short run, using illustrations. (9 Marks)

(b) Explain how the closing down point is determined by a loss making firm operating in a Perfectly Competitive industry. (7 Marks)

(5) (a) Explain how the scale economies determine the shape of the longrun average cost curve.

Provide practical reasons for such scale economies.

(7 Marks)

(b) Total Cost function of a firm given as

$$TC = 200Q - 3Q^2 + 0.1Q^3$$

(Q – quantity)

- (i) Find the marginal cost and rate of output that will minimize marginal cost.
- (ii) Find the average cost and the rate of output that will minimize the average cost.
- (iii) What is the rate of output at which average cost equals marginal cost?

(9 Marks)

(6) (a) Explain how the periods of economic expansion and recession affect firms selling luxury items and necessities. (5 Marks)

(b) Explain how the following factors determine Price Elasticity of demand.

- (i) Availability of substitutes
- (ii) Proportion of income spent
- (iii) Nature of the good
- (iv) Time period

(6 Marks)

(c) Suppose the demand function of good A give as;

$$Q_d = 20 - 5P_A + 2P_B + 0.2Y$$

Price of good A is Rs.20/=, Price of the alternative product,  $P_B$  is Rs. 40, and the consumer income is Rs.10,000/=.

- Find,
- (i) Own price elasticity of demand
  - (ii) Cross price elasticity of demand
  - (iii) Income elasticity of demand

(5 Marks)

(7) (a) Explain how the production theories help a firm achieving optimum level of production in the long run.

(6 Marks)

(b) Suppose wage rate of a firm has been raised by 12 percent. Explain how the relative substitution of one input for another takes place as a result of the increased price of labour, using theoretical principle of production. Consider other factor input as capital.

(5 Marks)

(c) Suppose the price of a unit of labour is Rs. 500/= and capital 1000/=

- (i) Determine the ISO cost equations corresponding to a total cost of Rs. 25,000/= and Rs. 30,000/=
- (ii) Find the slope of the ISO-Cost curve.

(5 Marks)

***-Rights Reserved-***