

EASTERN UNIVERSITY, SRILANKA
 FACULTY OF COMMERCE AND MANAGEMENT
 FINAL YEAR FIRST SEMESTER EXAMINATION IN COMMERCE -2009/10
 Special Repeat Examination -July 2011



DBE 4123: MANAGERIAL ECONOMICS

Answer all questions

Time: Three Hours

1. (i) “Managerial Economics uses the theories of economics and methodology of decision sciences for managerial decision making” explain the statement.
 (06 Marks)
- (ii) Explain basic managerial decision process with a diagram.
 (06Marks)

(iii) Determine the partial derivatives with respect to all of the variables in the following function

(a) $TC = 50 + 5Q_1 + 10Q_2 + 5Q_1Q_2$

(b) $Q = 1.5L^{0.5} K^{0.5}$

(08 Marks)

2. (i) Why is forecasting so important in the business decision making of firms and other enterprises?

(05Marks)

(ii) The table shows the price and quantity data of pens sold by a company

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Price	2	1	2	4	5	4	3	8	6	5
sales (’000 units)	9	10	8	7	5	6	8	3	4	7

- a. Fit the demand function and estimate the demand when the price is Rs 7/-
 b. Forecast the demand for the year 2011

(15 Marks)

3. i. Explain the pricing decision under the condition of perfect competition. Can a firm make profit in both short and long run?

(05 Marks)

ii. The cost function of a chocolate company is $C_1 = 75Q_1 - 8Q_1^2 + Q_1^3 - 85$. It operates in a perfectly competitive market. The industry demand and supply functions of the company are $Q = 360 - 2P$ and $Q = 10 + 3P$ respectively (P – Price, Q- Demand/ Supply and C_1 , Q_1 are total cost and supply of the firm)

- Calculate the equilibrium price and quantity of chocolate
- Estimate the profit maximizing output of chocolate
- Calculate the profit made by the company in the short run

(15 Marks)

4. A firm wishes to maximize its profit given by

$$\pi = 20X + 15Y$$

Subject to the constraints imposed by the following limitation

$$\text{Input A} \quad 4X + 3Y \leq 90$$

$$\text{Input B} \quad X + 2Y \leq 40$$

$$\text{Input C} \quad 2Y \leq 30$$

$$X \geq 0 \text{ and } Y \geq 0$$

- Graph the inequality constraints
- Using graphical method, find the level of **X** and **Y**, and interpret your answer
- Obtain the profit level

(20 Marks)

5. Briefly explain the following

- Homogeneous Products and Product differentiation
- Marginal cost curve and firm's supply curve
- Breakeven point
- Experts opinion method

(20 Marks)