

**THE OPEN UNIVERSITY OF SRI LANKA**  
**BACHELOR OF MANAGEMENT STUDIES – LEVEL - 05**  
**ASSIGNMENT TEST – 2010**  
**MANAGERIAL ECONOMICS – MCU 3207**  
**DURATION: TWO HOURS**



**DATE : 07<sup>th</sup> November 2010**

**TIME : 2.00 pm – 4.00 pm**

*Answer Part 'A' and any two questions (02) from part B.*

**PART – A**

- 1) a) "In achieving firms objectives firms have to function under various constrains"  
 Do you agree? Explain with examples. (6 marks)
- b) From economic point of view, for a firm Economic Profit is important than Business Profit. What is the difference between Economic & Business profit? Explain using examples. (6 marks)

- c) Consider the following price quantity relationship of good X.

<u>Price</u>	<u>Quantity demanded</u>
(Rs.)	(Units)
24/=	1420
30/=	1240

- i) Derive the demand function of good 'X'
- ii) Find the price elasticity of demand of good X, at price Rs.30/=, Comment on the elasticity coefficient.
- iii) If supply function of good X is given as

$$Q_s = -1060 + 34P$$

Find the equilibrium level of price and quantity. (8 marks)

- d) i) Explain whether the following statements are true or false. Use illustrations.
- "A company faced by an elastic demand curve will always benefit by increasing price".
  - "A company faced by an inelastic demand curve will always benefit by decreasing price".
- (6 marks)
- ii) Suppose equation for demand curve for good 'X' has been estimated as

$$Q = 240 - 8p + 0.2y$$

Q – quantity p – price y – income  
 Assume, p = Rs. 12/= and y = Rs. 80/=

- At price Rs. 12/=, what is the price elasticity?
  - At an income level of Rs. 80/=, what is the income elasticity?
  - Interpret the coefficients of Price and Income elasticity of demand.
- (08 marks)

- e) Suppose good X has an inelastic demand and good 'Y' has elastic demand and the supply curve for both goods has normal positive slope.  
If government imposes a unit tax of 't' on the supply of both goods, how will the tax be shared between the consumers and the suppliers. Explain using illustrations. (6 marks)

### PART B

- 2) "Managerial Economics helps a goal oriented manager in two ways. First given an existing economic environment the principles of managerial economics provide a framework for evaluating whether, the resources are being allocated efficiently within a firm. Second these principles help managers respond to various economic signals". Discuss the above statement with examples. (30 marks)
- 3) a) What is the Law of Diminishing Marginal Returns? Explain using illustrations. (8 marks)
- b) Define the following (16 marks)
- i) Marginal Rate of Technical Substitution.
  - ii) Marginal Revenue Product of Labour
  - iii) Optimum expansion path
  - iv) Returns to scale
- c) i) What is "ISO – COST" Curve ?  
ii) Prove that the slope of the "ISO – COST" curve is equivalent to the price ratio of the two factor inputs. (Ex:- labour & capital) (6 marks)
- 4) a) The Cost Function of a firm given as;  $TC = 240Q - 8Q^2 + 0.2 Q^3$
- i) Is this short or long run cost curve?
  - ii) Determine the average cost function and the rate of output that will minimize average cost.
  - iii) Determine the marginal cost function and the rate of output that will minimize marginal cost.
  - iv) What is the output at which average cost equals marginal cost? (10 marks)
- b) Explain the following (12 marks)
- i) Long Run Average Cost
  - ii) Break – Even analysis
  - iii) Operating Leverage
- c) i) Consider the following details of a firm  
Total fixed cost = Rs. 80,000, Variable cost per unit = Rs. 12/=  
Price of a unit of product 'X' = Rs.32/=
- Find the quantity of (X) that needs to be produced to achieve Break Even point?
  - What is the corresponding total revenue at this output rate?
- ii) What is the quantity that has to be produced to meet a profit target of Rs. 100,000? (08 marks)

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