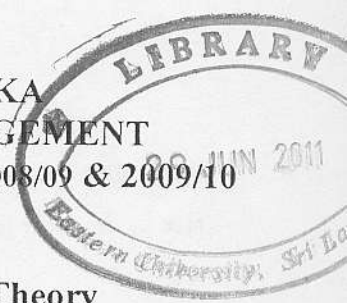


EASTERN UNIVERSITY, SRI LANKA  
FACULTY OF COMMERCE AND MANAGEMENT  
SPECIAL REPEAT EXAMINATION IN BBA /B.COM 2008/09 & 2009/10  
(FEB/MAR 2011)



**ECN 2114 – Advanced Micro Economic Theory**

Answer all Questions

Time: Three Hours

1. i. Distinguish between Total Utility and Marginal Utility. ( 5 Marks)
- ii. Graphically explain the conditions for Consumer Equilibrium (5 Marks)
- iii. You are given the following Demand and supply functions

$$Q_d = 100 - 2P$$

$$Q_s = 10 + 0.5P$$

Which is the price that makes  $Q_s$  and  $Q_d$  be equal? (5 Marks)

- iv. What are the main determining factors of market demand for a commodity? (5 Marks)

2. i. Explain the Long- run Production Process of a firm ( 6 Marks)

- ii. Consider the following production function

$$Q = K^{1/2} L^{1/2}$$

Calculate the Marginal Rate of Technical Substitution (8 Marks)

- iii. Determine whether the following production function exhibits Increasing, constant and Decreasing returns to scale

a.  $Q = 0.4X + 0.5Y$

b.  $Q = 1.5X^{0.7} Y^{4.5}$  ( 6 Marks)

3. i. Explain the basic assumptions of a perfect competition. (8 Marks)

- ii. Derive mathematically the basic conditions for the profit maximization in perfect competition. (4 Marks)

- iii. A perfect competitive firm faces the following cost function

$$TC = Q^3 - 7Q^2 + 12Q + 5$$

The average revenue is Rs 4 /=

Calculate the total profit of the firm.

(8 Marks)

4. i. In Long-run equilibrium, what will happen to price for a competitive firm if there is rise in demand for the product of the market? (05 Marks)

ii. Consider the following inverse demand and total cost functions of a monopolist:

Demand function:  $Q = 360 - 20Q$

TC function:  $TC = 6Q + 0.05Q^2$

- Determine profit-maximizing price and output of the monopolist.
- How much profits he will earn?
- Calculate his total profit level.

(15 Marks)

5. Briefly explain the followings.

- Marginal rate of technical substitution
- Producer Equilibrium
- Consumer Surplus
- Oligopoly market

(20 Marks)