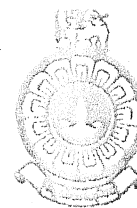


THE OPEN UNIVERSITY OF SRI LANKA  
BACHELOR OF MANAGEMENT STUDIES  
LEVEL 03

MCU 1205 – MICRO ECONOMICS

ASSIGNMENT TEST - 2006

DURATION: TWO (02) HOURS



Date : 30<sup>th</sup> September 2006

Time: 2.00 p.m. – 4.00 p.m.

**INSTRUCTIONS :**

**Answer any four (04) questions.**

**Non programmable calculators are allowed.**

01. The demand and supply functions of an agricultural product are given as,  
 $Q_d = 50 - 5p$ ,  $Q_s = -14 + 3p$ .  
(Price in Rs. and quantity in 1000kgs)
- Find the equilibrium price and quantity.
  - Suppose that the price of substitutes increases and as a result demand changes by 4 units, find the new equilibrium condition.
  - Suppose that the government introduces a legal price at 7/-, what will be the economic consequences of this decision?
  - Suppose that the price of inputs declines and as a result supply changes by 8 units, find the new equilibrium condition.
  - How will the market condition change under favourable and unfavourable weather conditions?

Note: Use the initial demand and supply equations for each step

(5 marks x 5 = 25)

02. a. Explain what happens when a tax of 't' is imposed on the supply of a good that has ,
- a perfectly elastic demand curve
  - a perfectly elastic supply curve
  - a perfectly inelastic demand curve.

(3 marks x 3 = 9)

- b. i. What are the determinants of price elasticity of demand? (4 marks)

- ii. The price and quantity relationship of two goods are given below.

Price (Rs.)	Quantity (units)	
	good x	good y
12/-	120	60
16/-	108	28

- a. Find the price elasticity of demand of goods x and y. (6 marks)

- b. How can the firm change the prices if they wish to increase the revenue from goods x and y? (6 marks)

03. Write brief notes

- Cross price elasticity of demand
- Marginal Rate of Substitution (MRS)
- Short and long run production functions
- Optimum expansion path
- Average fixed cost

(5 marks x 5 = 25)

04. a. Explain why,

- Indifference curve is convex to the origin?
- Indifference curves cannot intersect each other?

(10 marks)

- b. i. According to marginal utility analysis how can the consumer maximize his/her satisfaction?

(5 marks)

- iii. Suppose the marginal utilities of the goods x and y are given as,  
 $MU_x = 24 - 2q_x$  and  $MU_y = 40 - 4q_y$ . Price of x is Rs. 2/= and  
price of y is Rs. 4/=. The consumer's income is Rs. 28/=.  
Find the quantities of goods x and y that maximizes consumer  
satisfaction.

(10 marks)

5. a. Prove that the output elasticity of Labour is equivalent to the ratio of  
marginal and average productivity of Labour.

(10 marks)

- b. i. Explain the relationship among total productivity of labour ( $TP_L$ ),  
marginal productivity of labour ( $MP_L$ ) and average productivity of  
labour ( $AP_L$ ) in the short run. (i.e. the three stages of production)

(10 marks)

- ii. What stage should the rational entrepreneurs select? Why?

(5 marks)

- a. i. What is implicit and explicit cost?  
ii. How can you calculate the business profit and economic profit  
using the above?

(10 marks)

- b. The reasons behind the 'U' shape of the short and long run average cost  
curves are not the same. Do you agree? Explain.

(15 marks)

- Copyright reserved-