## SECOND EXAMINATIONS IN BACHILOR OF BUSINESS ADMINISTRATION (EXTERNAL) - 2010/2011 HELD IN APRIL / MAY 2013

## BBA 26 - Managerial Economics

Answer all Questions

01. a) Define indifference curve and explain its properties

(04 marks)

Duration: 03 hours

b) Consider an individual who consumes two goods I and S. his utility function takes the form

UIS =  $I^{0.5}$  S<sup>0.5</sup> and budget constraint M=PI. I+Ps

Where M= Income, I, S are good S, PI = Price of goods assume utility is maximized by Choosing I and S

Find out the following

i) Consumer equilibrium level

(06 marks)

ii) Marshalian demand function for goods I and S

(04 marks)

iii) Using demand function above, find out the optimum combination of goods I and S assuming the unit prices of I and S are Rs 1000/-and Rs 500/- respectively and the level of disposable income is Rs 50,000/-

(03 marks)

iv) Consider the following, there are no changes in consumer's income and price of good I. But, prices of good S and changed as Rs 6000/-, 850/-, 900/-, 980/-, 1020 prepare the price demand schedule for good S using demand function of good S

(03 marks)

02.)	a) Assume that you have been appointed as a decision maker in any firm in Sri Lanka,
	how can you use the following basic concepts of Managerial Economics to make
	decision?

- Resource allocation
- opportunity cost
- Externalities
- Marginal analysis
- Factors of production

(10 marks)

b) What is meant by "pricing"? Briefly outline the objectives of pricing

(05 marks)

c) <u>firm</u> <u>production</u>

AX Cinema film

BY Motor vehicle

CZ Fertilizer

Explain briefly what kinds of pricing can be adopted by firm AX, BY and CZ

(05 marks)

03. a) Briefly explain the importance of demand forecasting and the essential of good forecasting in today's business firm.

(05 marks)

b) What are the methods available for the demand forecasting?

(05 marks)

c) The following is the quantity data of refrigerator sold by a company.

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Quantity	180	200	160	140	100	120	160	180	170	140

forecast the demand of biscuit packets for the following years 2013, 2014, 2015, 2020 (10 marks)

04. a) Briefly explain the factor substitution effects of the price changes of a factor (Use graph)

(03 marks)

b) Consider the following Cobb-Douglas production function.

$$Q=AL^{\beta 0}K^{\beta 1}$$
  
Find out the following

- i) Average production of factors of production?
- ii) Marginal production of factors of production?
- iii) Elasticity of factors?
- iv) Marginal rate of technical substitution of factors.
- v) factors density
- vi) Returns to scale of production

(04 marks)

c) consider the following production function of a firm which produces using two factors and production

$$Q = 10X_1^{0.25} X_2^{0.75}$$

Constraint function C=W<sub>1</sub>X<sub>1</sub>+W<sub>2</sub>X<sub>2</sub>

Where:

$$\left. egin{array}{ll} X_1 \\ X_2 \end{array} 
ight. 
ig$$

W<sub>1</sub> Price of factors of production

 $W_2$ 

Find out the demand function for factors of X<sub>1</sub> and X<sub>2</sub>

(03 marks)

ii) Assume that  $W_1 = 50/-$ ,  $W_2 = 100/-$  production cost 2000/- Find out the quantity of factors  $X_1$  and  $X_2$  and optimum output level?

(03 marks)

iii) Now price of factors of production W<sub>1</sub> increases 80/- considering no change producer cost and price of factors of production W<sub>2</sub>. Find out the quantity of factor X<sub>1</sub> and X<sub>2</sub> and new optimum output level?

(02 marks)

iv) Illustrate graphically the results of question (ii) and (iii).

(02 marks)

v) Profit function: = P40  $K_1^{0.25} L_1^{0.75} - (WL_1 + RK_1)$ 

Factor demand function for  $K_1 = C/2R$ 

Factor demand function for  $L_1 = C/2W$ 

Price of Factor of production W= 100/-

Price of Factor of production R= 50/-

Total cost= 20,000/-

Selling price of output is Rs.80/- per unit. Determine the profit maximization level of output

(03 marks)

## 05. Consider the following

- Some capital mobility
- MR-Fixed exchange rate with sterilized intervention
- GR- Fixed exchange rate without sterilized intervention
- FR- Floating exchange rate

Evaluate the relative effectiveness under monetary policy and fiscal policy in small open economy countries, like Sri Lanka using some capital mobility and different exchange rate. Which regime of exchange rate may be suitable for the above mentioned countries? (Prove graphically and use the Mundell-Fleming model)

(20 marks)