

**Eastern University, Sri Lanka**  
**Faculty of Commerce and Management**  
**Postgraduate Studies Unit**

**Year First Semester Examination in Master of Business Administration-2016/2017**  
**(July 2017) (Proper/Repeat)**

**MBA 1013: Economics for Managerial Decisions**

**Answer all questions**

**Time: 03 Hours**

- 
- i. What is meant by Managerial Economics? (04 Marks)
- ii. List out the ten principles for managers and briefly explain any two of them. (06 Marks)
- iii. Define Demand and Supply. (04 Marks)
- iv. Graphically show the equilibrium price and quantity, and excess of demand and supply. (06 Marks)
- (Total 20 Marks)**
- i. Define and give appropriate formulas for own price, cross price and income elasticity for demand. (05 Marks)
- ii. Interpret and give reasons for being elasticity coefficients of the following goods and services.
- a. Price elasticity for Salt is 0.1
  - b. Price elasticity for Cigarette is 0.2
  - c. Price elasticity for Air ticket is 2.5 in off peak whereas 0.80 is in peak season.
  - d. Price elasticity for Jeans is 0.5 whereas specific brand Jeans have 1.5
- (06 Marks)
- iii. Briefly explain the factors that likely influence to vary the degree of price elasticities of goods and services. (04 Marks)
- iv. Suppose that a group of companies A-D are preparing to increase their total revenue. Each company has some information of the status of their products. Assist them to increase their total revenue based on the information they have.
- a. Own price elasticity of the product of company A is inelastic.
  - b. Own price elasticity of the product of company B is elastic
  - c. Total market share of the company C is 85%
  - d. Own price elasticity of Company D is 0.56 and 1.5 in peak and off-peak seasons respectively. (05 Marks)
- (Total 20 Marks)**

3.

- i. Briefly Explain how the Regression analysis can assist firm's management to investigate about determinants of demand of their product. (03)
- ii. Suppose that the operations research department of the company Z that is producing Video Games for kids estimated the following regression results for its demand equation.

Source	SS	df	MS	Number of obs = 9		
Model	558376762	4	139594190	F( 4, 4) =	24.09	
Residual	23178793.6	4	5794698.4	Prob > F =	0.0046	
				R-squared =	0.9601	
				Adj R-squared =	0.9203	
Total	581555556	8	72694444.4	Root MSE =	2407.2	

  

qf	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
pf	-2979.179	1344.287	-2.22	0.091	-6711.517	753.1593
pc	2785.712	1397.78	1.99	0.117	-1095.148	6666.571
ya	1.336906	.8249301	1.62	0.180	-.9534671	3.627279
a	.4670742	1.48767	0.31	0.769	-3.663361	4.597509
_cons	10749.36	9986.142	1.08	0.342	-16976.62	38475.33

Where *qf*, *pf*, *pc*, *ya* and *a* are quantity of video game, own price, price of competitor, average house hold income and advertisement expenditure, respectively.

- a. Write demand equation based on the estimated results and interpret each coefficient value. (04)
- c. Interpret R-Square. (02)
- d. Discuss about significant of the independent variables using t-values (03)
- iii. What is Economies of Scale? Explain under which conditions a production unit can enjoy the economies of scale. (03)
- iv. Suppose you are given a formula of learning curve as;

$$y = 4000 x^{-0.23694}$$

where *x* = cumulative production

*y* = hours required to produce the *x*-th unit

- a. Suppose (-b) in the above formula is matched with 80% learning curve of a labor, what message does it give to the management? (03)
- b. Suppose another labor has learning curve of 65%, how do you compare with the learning curve given in (a.)? (02)

(Total 2

Distinguish between short run and long run production functions. (03 Marks)

What is elasticity of production? Explain how elasticity of production can vary in terms of three stages in short run production. (04 Marks)

Prove that  $\alpha$  and  $\beta$  are the elasticity coefficient of Cobb-Douglas production function. (03 Marks)

A short-run production function is given as follows;

$$Q = 84L + 11L^2 - 0.67L^3$$

Where Q is output and L is Labour level

Derive Marginal and Average production functions. (04 Marks)

Calculate the level of output when the labor levels are 5, 10 and 15 respectively. (02 Marks)

Calculate and interpret the elasticity of production for labour input whereas marginal product is at maximum level, and also find the level of output at that level. (04 Marks)

**(Total 20 Marks)**

Briefly explain the important characteristics of Monopolistic Competitive market. (05 Marks)

What is Concentration Ratio? State how concentration ratio techniques assist to recognize market structure of goods and services. (06 Marks)

How would you justify the following circumstances in current world market scenario?

Some agricultural products are the products that are recognized as perfectly competitive market.

A drinking water supply company can enjoy natural monopoly.

Banking sector in Sri Lanka falls under the monopolistic market structure whereas the banking sector in India falls under the Oligopoly.

Ice cube producers who supply to the fishermen face monopsony market characteristics for their products.

The learner index of the City Bank was 0.86 in 2010 and recorded as 0.56 in 2016.

Ceylon Electricity Board (CEB) practices different billing system among the domestic and business units. (09 Marks)

**(Total 20 Marks)**