

2102105 GDR ✓

**Eastern University, Sri Lanka**  
**Faculty of Commerce and Management**  
**Postgraduate Studies Unit**  
**First Year First Semester Examination in MBA**  
**August 2019 (Proper / Repeat)**  
**MBA1013: Economics for Managerial Decision Making**

Answer all questions

Time: Three Hours

1.

- i. What is meant by 'Managerial Economics'? How the aspects in Managerial Economics can assist managers for decision making. (06 Marks)
  - ii. List out the important principles for managers. (04 Marks)
  - iii. Graphically explain the characteristics of demand curve. (04 Marks)
  - iv. Define demand function, the law of demand and demand schedule (06 Marks)
- (Total 20 Marks)

2.

- i. What is meant by Elasticity? Briefly explain the determinants of types of elasticity of demand. (05 Marks)
- ii. State whether the following statements are True or False. Justify your Answer.
  - a) Demand for such products is relatively elastic or simply elastic if the consumers are highly responsive to price changes.
  - b) The price elasticity of demand = - 4 when the price rises from \$4 to \$6 and quantity demanded falls from 100 to 80.
  - c) High level of brand loyalty makes demand high price elastic.
  - d) Necessities generally have less price elastic compare to luxury.
  - e) The Cross Price elasticity would be positive if two commodities are complementary. (08 Marks)

- iii. The marketing department of an Apparel company that estimated the determinants of market demand for its T-Shirt production. The department estimations are given as follows:

NB: All variables were taken for natural logarithm

Variables	Coefficient	t-value	p-value
Constant	1.499	4.596	0.000
Price	-1.265	2.568	0.000
Price of rival's brand	0.568	1.365	0.098
Advertisement expenditure	1.985	2.005	0.050
Income of age group of 20-35	1.568	1.998	0.065
Income of age group of 35-55	0.986	1.112	0.365

R-square: 85.369  
Critical t-values are 2.356, 1.852 and 1.365 for 1%, 5% and 10% significant level, respectively

- Interpret each coefficient and R-square.
- Test significance level of each variable.
- What would the advice be of the marketing department to increase the demand for the T-Shirt? (Your advice may be subject to the important variables that are likely determining the demand for T-Shirt).

(Total

3.

- What is explained by a short-run production function? Briefly explain that under what circumstances a production unit can persist under Short-run production process.

ii.

Suppose you are given a short run production function as follows

$$TP = 10L - 0.5L^2$$

where TP is total product and L is labour hours

- Derive average and marginal production functions
- Calculate elasticity of production when the labour hours are 3, 5 and 14

- Miller company uses two inputs, X and Y, in its production function. The production function is;

$$Q = 40X^{0.5}Y^{0.5}$$

where inputs and output are in units per week.

The market price of input X is \$100 per unit and that of input Y is \$20 per unit. Miller has a budget constraint of \$16,000 per week.

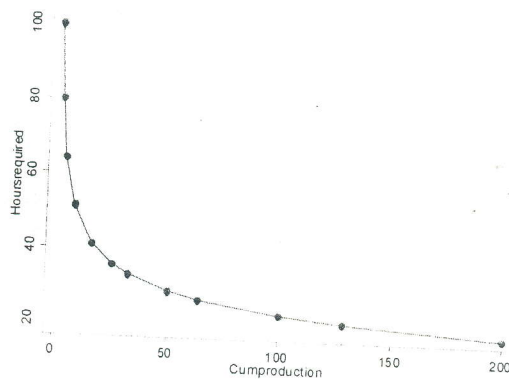
- a) Find the level of capital and labour at the optimum level.
- b) Measure the firm's output level at the optimum level.
- c) Suppose that the price of per output is \$3, find the profit.
- d) Find the value for lambda ( $\lambda$ ) and interpret it

(10 Marks)

(Total 20 Marks)

- i. What is meant by Learning Curve Effect? Briefly explain how far learning curve creates benefits for operations managers.
- ii. What is meant by 'Economies of Scale'? Explain the causes of economies of scale for a firm.
- iii. A Robot producing company measured learning curve for a group of workers in the assembling units as follows:

$$Y = 100x^{-0.322}$$



- a) Calculate the hours required when the group of workers assemble 50<sup>th</sup>, 100<sup>th</sup> and 155<sup>th</sup> unit of Robots.

- b) How would you interpret if the learning rate is 80% of this unit

(07 Marks)

(Total 20 Marks)

- i. Is a perfectly competitive market structure in the real world? How?
- ii. What is Lerner Index? Explain how the Lerner Index is related with Monopoly power
- iii. What is meant by product differentiation? Why it is essential to the companies that are in Monopolistic competitive market?

(03 Marks)

(05 Marks)

(05 Marks)

- iv. Consider the following table that comprises Four Firm Concentration Ratio and Herfindahl-Hirschman Index (HHI), and address the market status of each sector given.

<b>4 Firm Concentration Ratio and HHI (top 50)</b>			
<b>Sector</b>	<b>Total number of firms</b>	<b>4 Firm Concentration Ratio</b>	<b>HHI (top 50)</b>
Food Manufacturing	311	16.8	118.7
Malt Manufacturing	311213	91.4	2,192.4
Motorcycle Manufacturing	373	67.5	2037
Camera Manufacturing	165	45.0	1500

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Q  
(Total 20