

Eastern University, Sri Lanka
Faculty of Commerce and Management
Third Year Second Semester Examination in BBA 2016/2017
(July/August, 2019) (Proper/Repeat)
ECN 3023: Managerial Economics

er all questions

Time: Three hours

- Distinguish between Managerial Economics and Microeconomics (05 Marks)
- Briefly explain how far the Managerial Economics can be helpful to the managerial decision making. (05 Marks)
- How would you justify that the demand and supply are the two market forces in the economic system? (05 Marks)
- Write an extended demand equation with at least five independent variables for a hypothetically assumed product or service. (05 Marks)
- (Total 20 Marks)

Define with example the own price, cross price and income elasticity of demand. (06 Marks)

Some empirical studies have already disclosed elasticity values for goods and services as given below. Justify why those goods and services carry those values.

- a) Price elasticity of demand for Jeans is -0.25 whereas price elasticity for Levies' branded jeans is -2.46.
- b) Cross price elasticity of demand between Pepsi and Coca-Cola is 2.5 whereas cross price elasticity between Pepsi and 7up is 1.15.
- c) Tax elasticity of imports for beverage item is 0.35 whereas tax elasticity of imports for vegetables is 1.75.
- d) Advertisement elasticity of demand for Clogard branded tooth paste is 1.85 whereas advertisement elasticity of demand for potato is 0.05. (08 Marks)

Companies A and B are manufacturing drugs and television respectively. The companies decided to increase the prices in order to increase their Total Revenue based on their price elasticity values as -0.65 and -1.85, respectively.

- a) State whether their decision is correct or not. Why?
 - b) How would you give graphical justification for your answer given in (a)?
 - c) Suppose the price elasticity of demand for television is 1, how would you advise to the company B to increase its total revenue? (06 Marks)
- (Total 20 Marks)

3.

- i. Briefly explain under which circumstances a firm will stay in short-run production situation.
- ii. Consider the following short-run production function of a firm.

$$Q = 6L^2 - 4L^3$$

Where Q = Output, and L = Labour hours

- a) Find the value of L that maximizes output.
 - b) Find the value of L that maximizes marginal product.
 - c) Find the value of L that maximizes average product.
- iii. Consider the following regression results of Cobb-Douglas production function for a firm which is in long-run production function.

Variable	Coefficient	t-value (Computed value)
Labour (Hrs)	$\beta_1 = 0.8534$	2.4356
Machinery (Hrs)	$\beta_2 = 0.2561$	1.5984
Raw material -1(Tons)	$\beta_3 = 0.1254$	2.0061
Raw material -2(Tons)	$\beta_4 = 0.0254$	0.3569
Raw material -3(Liter)	$\beta_5 = 1.5621$	1.3248
R-square- 0.8657		
Critical Values are 1.289, 1.658 and 2.358 for 10%, 5% and 1% respectively		

- a) Interpret individual performance of each variable.
 - b) State about significance of the variables
 - c) Interpret R-square
 - d) State about the returns to scale of the firm
- iv. Suppose you are running a factory, producing some sort of widget that requires steel as a raw material. Your costs are predominantly human labor (h), which is \$20dollar per hour for your workers, and the steel itself (s), which runs for \$170dollar per ton. Your budget is \$20,000. Suppose your production is modeled as

$$Q = 200h^{2/3}s^{1/3}$$

- a) Write Lagrange function
- b) Find the optimum level of labour and steel
- c) Calculate the level of output
- d) Suppose the price for labour hour increases by 5% whereas price of steel and budget remain same, find the new affordable output of the factory.

- i. Graphically define the meaning of Learning Effect. (05 Marks)
- ii. Suppose an automobile company deployed A, B and C teams in automobile assembling task in order to study their learning effect and 80%, 65% and 70% learning effect were recorded, respectively. How would you interpret and justify the reason behind the differences in the learning effects of the teams? (05 Marks)
- iii. What is meant by 'Economies of Scale'? Briefly explain why enjoying economies of scale is important for firms. (05 Marks)
- iv. Briefly explain the causes of economies of scale for a firm. (05 Marks)

(Total 20 Marks)

- i. Explain why and how understanding about the market structure is important to the managers? (04 Marks)
- ii. What is meant by 'Market'? A firm in any market structure maximizes its profit where $MR = MC$. Why? (04 Marks)
- iii. What is meant by 'Monopoly power'? Briefly explain how Mark-up factor and Lerner Index can be the indicators of monopoly power of a firm. (04 Marks)
- iv. Briefly explain the following cases
 - a) The four firm concentration ratio of a soft drink industry is 60% in the USA whereas it is 95% in the UK
 - b) The Herfindahl-Hirschman Index (HHI) for biscuit industry in Sri Lanka is 800
 - c) Cargills (Ceylon) PLC, when they purchase milk, always bargains with milk producers in order to reduce the price of milk.
 - d) Market shares for Samsung, Apple, Huawei, LG and others were 38%, 30%, 20%, 10% and 2%, respectively in 2015, and it turns to 20%, 25%, 6%, 11% and 38%, respectively in 2019.

(08 Marks)

(Total 20 Marks)