Eastern University, Sri Lanka
Faculty of Commerce and Management
Third Year Second Semester Examination in BBA/BECON
2017/2018 (January, 2020)
(Proper/ Repeat)
ECN 3023: Managerial Economics

Answer all questions   **Time: 03 Hours**

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i.   Distinguish between Managerial Economics and Microeconomics   (04 Mark

ii. Brief the use of Managerial Economics for managerial decision making   (05 Mark

iii. What is meant by Elasticity? Explain with example how can any two variables be   (05 Mark
     used and interpreted in elasticity measure.

iv. How would you justify the following cases?

  a. Price elasticity of demand for wireless mobile phone service in 2001 was very less in   (02 Marks
     Sri Lanka but became high in 2019.

  b. Price elasticity for Toyota vehicles has become relatively less in Sri Lanka compared   (02 Marks
     to other brands.

  c. Mr.Kugan was using public transport till 2017 to go to the office. He was promoted   (02 Marks
     in 2018 and now uses his own vehicle after his promotion. The respective income
     elasticities for public transport of him are 0.75 and -0.85 in these two periods.

(Total 20 Marks

i.   What is meant by Cross Price Elasticity? Graphically show the weak and close
     complementary and substitutable relationships between the goods.
                                                                                       (04 Marks)

ii. Briefly explain how the Regression technique is useful for slope and elasticity
     measures of a demand function.
                                                                                       (03 Marks)

iii. The Chicken producer **Maxies** received a report as below on the factors that are likely
     influence on its monthly demand in the Colombo market.

Variables	Slope Coefficient	Elasticity	t-value
Price of Maxies chicken	-1558.968	-1.28	2.85
Price of Delmo chicken (Rs.)	265.035	1.35	1.86
Price of Keels chicken (Rs.)	156.235	0.76	1.98
Price of Beef (Rs.)	26.869	0.25	1.02
Advertisement (in million Rs)	500.236	1.12	2.15
Number of health warnings against broiler chicken	-56.001	-0.56	1.88
Average household income	33.005	0.89	2.35
R-square = 0.845 n = 250			

a. Interpret each slope coefficient and elasticity of the variables

b. Perform t-test and address the significant levels of the variables

c. How would you compare the influence of Delmo, Keels and Beef on the demand of Maxies

iv. Following a health warning given by the World Health Organization (WHO), the government of Vietnam increased tax on locally produced cigarettes by 150% in order to keep high price. The government when imposed tax had two objectives. One is to reduce number of smokers including adults and teenagers, and the second one was to increase tax revenue. However, the Vietnamese government could reach its objectives partially. *Answer the followings*

a. Though the tax was very high, the number of smokers has not been reduced among adults. Explain why?

b. The government could not collect tax revenue as expected. Explain why?

(Total 2

3. i. What is explained by a short-run production function? Graphically show the three stages of a short-run production process of a firm.

ii. *"Too many cooks in the kitchen will spoil the soup"*. What theory is matched with this testament in the short-run production? Explain How?

iii. Consider the following Short-run production function

$$Q = -0.1L^3 + 6L^2 + 12L$$

Where Q = level of output and L = number of labour hours

Calculate the followings
a. Marginal and Average products when labour level is 5
b. The level of labour when the law of diminishing marginal returns begins
c. The level of Total Product at the end of stage I
d. The labour elasticity of production when the labour level is 33

iv. The KFC Company estimates its production function with two inputs; Capital (K) and Labor (L) as follows:

$$Q = 40K^{0.5}L^{0.5}$$

The market price of K is $100 per unit and that of input L is $20 per labor hour. KFC has a budget constraint of $16,000 per week.

a. Find its best input combination and the maximum weekly output it can produce.

b. Find the value of multiplier and interpret it.   (02 Marks)

c. Suppose that price of capital increases by 20% whereas wage rate decreases by 25%.
    There is no change in the budget allocated for inputs. Find new input combination   (02 Marks)
    and output.

                                                                          (Total 20 Marks)

i. What is meant by Economies of Scale? Briefly explain the possible causes that make
    a production unit to enjoy economies of scale.   (07 Marks)

ii. What is meant by learning effect? Briefly explain how employees' learning is
    associated with productivity and average cost.   (06 Marks)

iii. Suppose Nissan Automobile estimates its learning curve for manual assembling
     process of a vehicle. The estimated formula of learning curve is 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 the team,
    what message does it give to the management?   (03 Marks)

c. Suppose another team has a learning curve of 65%, how do you compare with the
    learning curve given in (a.)?   (02 Marks)

d. Calculate the required hours for the assembling team to handles the 100th vehicle.   (02 Marks)
                                                                          (Total 20 Marks)

i.   What is meant by market? How does the monopoly power vary between different   (05 Marks)
     market structures?

ii. Briefly discuss with examples whether the perfectly competitive market structure   (05 Marks)
     exists in real world.

iii. Define Learner Index and Markup Factor. Briefly explain how far monitoring the   (05 Marks)
     level of these indices would be assisting a production unit to map-out their market.

iv. What is meant by Market Concentration? Explain with hypothetical example the   (05 Marks)
     Four firm concentration ratio and Herfindahl-Hirschman Index (HHI)

                                                                          (Total 20 Marks)