THE OPEN UNIVERSITY OF SRI LANKA
BACHELOR OF MANAGEMNT STUDIES DEGREE PROGRAMME
FINAL EXAMINATION – 2017 AUGUST
MCU3207 – MANAGERIAL ECONOMICS
DURATION – THREE (03) HOURS

DATE: 17.08.2017 TIME: 9.30 A.M. – 12.30 P.M.

Answer any four (04) questions.
All questions carry equal marks.
Less marks will be allocated for illeligible hand writing.
Usage of non-programmable calculator is allowed.

Question No. 01

a) "Firms operate in imperfectly competitive markets use non-price methods to compete with their rivals. These efforts are intended to influence non-price determinants of Demand".
   i. What is meant by "non-price competition"? Explain.
   ii. What are the non-price determinants of the Demand?
   iii. Using examples explain how the firms can influence non-price determinants of demand for a product through non-price competitive methods.

(12 Marks)

b) Consider the details of good 'x' given and answer the questions below. Use illustrations to explain your answer, where appropriate.

Price (Rs.)	Quantity demanded (Units)	Quantity supplied (Units)
12	120	20
20	40	140

   i. Develop the demand and supply equations, of good 'x'.
   ii. Find the price and quantity of good 'x' at equilibrium point.
   iii. Calculate the Price Elasticity of Demand and Supply at the equilibrium price. Comment on the elasticity coefficients.
   iv. If the government imposed a tax of Rs. 3/= on every unit that is being supplied, find the new equilibrium price and quantity. How is the tax shared between consumers and suppliers? Is there a relationship between how the tax is shared between the two parties and elasticities, calculated in part (iii)? Explain.

(13 Marks)

Question No. 02

a. Do you "Agree" or "Disagree" with the following? Explain your answers.

i. The Price Elasticity of Demand for fuel is more elastic in the long run.
ii. The broader the definition of a commodity, the lower its Price Elasticity tends to be.
iii. The higher the substitutability of products, higher the Cross Price Elasticity.
iv. The lower the cost of production, the higher is the Price Elasticity of supply.

(12 Marks)

b. The demand for product 'x', given as,

$$\mathbf{Q_X = 3176 - 20P_X + 0.2I - 16P_Y}$$

Price of good **(x)** = Rs.24/=
Price of related good **(y)** = Rs.36/=
Income per capita **(I)** = Rs.20, 000/=

i. Find the quantity demanded of good 'x', at initial prices and income.
ii. To increase the revenue earned from good 'x', should the price of 'x' be increased or decreased? Explain.
iii. How would the sale of good 'x' change during the period of rising and declining income?
iv. What is the nature of relationship between good 'x' and 'y'?
v. If the objective is to maintain the quantity of good 'x' demanded as computed in part (i), how would the price of 'x' be changed to compensate for Rs.12/= increase in price of 'y'.

(13 Marks)

Question No. 03

a. i. "Time period encompassing long run varies from industry to industry". Do you agree? Explain using examples.
ii. Define the law of Diminishing Marginal Returns? Is it short or long run phenomenon? Explain.
iii. How would the knowledge in the economic principle "the law of Diminishing Marginal Returns" help a rational producer in planning production? Explain using illustrations.
iv. Total production function of good 'x' given as,

$$\mathbf{Q = 60L - 2L^2}$$

L = Number of workers

If the wage rate is Rs. 800/= and price of good 'x' is Rs.200/=, find the number of workers that should be employed to maximize profit.

(15 Marks)

b. i. Using illustrations explain the phenomenon "Returns to Scale". Is it short or long run phenomenon? Explain.

ii. How would the "Returns to Scale" determine the shape of the long run total cost curve? Explain using illustrations.

(10 Marks)

Question No. 04

a. i. What is meant by "Break Even Analysis"? Explain using illustrations.

ii. Prove that the Break Even level of output can be found by dividing the Total Fixed Cost (TFC) of the firm by contribution.

(10 Marks)

b. Consider the details of three firms in the same industry given below.

	A	B	C
TFC (Rs.)	11200	16000	21600
AVC (Rs.)	20	16	12

TFC - Total Fixed Cost AVC - Average Variable Cost

i. If the price of the product is Rs.48/=, find the output that has to be produced to make a profit of Rs. 84,000/=.

ii. Find the Profit Elasticity for each firm at an output rate of 800 units.

iii. Analyze the findings in part (ii) and comment on the Operating Leverage of each firm.

iv. Can the Degree of Operating Leverage (DOL) be measured at the break even output? Why or why not?

(15 Marks)

Question No. 05

a. i. What is meant by Natural Monopoly? Explain.

ii. "A monopoly firm's ability to set its price is limited by the demand curve for it's product and in particular, the price elasticity of Demand for its product". Do you agree? Explain using illustrations.

(08 Marks)

b. Using illustrations differentiate the behavior of a Monopolist that aims at maximizing profit and a monopolist that aims at maximizing revenue.

(08 Marks)

c. The Demand equation of a Monopolist given as,

$$\mathbf{Q = 48 - 0.1P}$$

P = Price

The Total Cost equation of the firm given as,

$$\mathbf{TC = 820 + 10Q^2}$$

Q = Number of units

i. Derive the Total, Average and Marginal Revenue equations.
ii. Find the profit maximizing price and output.
iii. Calculate the Profit or Loss.
iv. Find the revenue maximizing price and output.

(09 Marks)

Question No. 06

a. i. In what kind of market Restaurants and Video Rental Stores operate? Justify your answer.
Would the firms that provide insurance and cellular services operate in same kind of market? Explain.

ii. Suppose a Restaurants in a city centre is making above normal profit in the short run. How will the market behave in the long run? Can the said restaurant continue to make above normal profit in the long run too? Using illustrations, explain.

(15 Marks)

iii. " There is no single theory that describes all aspects of Oligopoly behavior". How would the "Kinked Demand Curve Model" and "Entry Limit Pricing Model" explain the behavior of firms in Oligopoly? Explain using illustration.

(10 Marks)