

THE OPEN UNIVERSITY OF SRI LANKA  
 BACHELOR OF MANAGEMENT STUDIES (BMS) DEGREE – LEVEL 05  
 FINAL EXAMINATION – 2015  
 MCU 3207 – MANAGERIAL ECONOMICS



**Duration: Three Hours**

**DATE: 30.07.2015**

**TIME: 1.30 P.M. – 04.30 P.M.**

Answer any four (04) questions.

Use of a non-programmable calculator is allowed.

**Question No. 1**

(a) The Demand Function of a good is given as;

$$Q = 50 - 0.5P$$

P – Price      Q- Output

Complete the following table

Quantity	Price	Total Revenue	Average Revenue	Marginal Revenue
1				
2				
3				
4				
5				
6				

(06 marks)

(b) (i) At price zero the quantity demanded of good X is 240 units and every one rupee increase in price, will reduce the quantity demanded of X, by 8 units. The quantity supplied of 'X' at price zero is 40 units and, every one rupee increase in price will increase the quantity supplied of X by 12 units.

- i. Derive the Demand and Supply equations of good X.
- ii. Find the equilibrium price and quantity of good X.
- iii. If the government imposes a tax of Rs. 3/= on every unit that is being supplied, find the new equilibrium price and quantity.

(09 marks)

- (c) “It is assumed that the objective of the firm is to maximize the present value of all future returns, but in this complex world, firms may have objectives that are not strictly economic”.
- What could be the non economic objectives of present day firms? Explain with examples.
  - How do you work out the Present Value of future returns? Explain.
  - Profits play two primary roles in the Free-Market System. What are they?

(10 Marks)

**Question No. 02**

- (a) A Firm is producing two goods ‘X’ and ‘Y’ and the demand equation for good X is  $Q_x = 88 - 4P$  and good Y is  $Q_y = 120 - 8P$ . Currently good X is priced at Rs. 8/= and Y is at Rs. 10/=. The management is contemplating on changing the price of goods X and Y to increase revenue earned from them. Should the price of X and Y be increased or decreased? Explain your answer using illustrations.
- (08 marks)
- (b) Consider the following given details in relation to demand for air travel to Thailand

Price (Rs)	Quantity demanded	
	Holiday Markers	Business Travelers
Rs. 36,200/-	92,600	48,400
Rs. 44,200/-	58,200	42,600

- Calculate the Price Elasticity of Demand for both groups of travelers.
  - Interpret the Elasticity Coefficients. (10 marks)
- (c) Whenever the government wants to increase revenues it usually trend to increase taxes on goods that have inelastic demand than elastic demand. Why? Explain using examples.
- (07 marks)

**Question No. 03**

- (a) “From one industry to another, the actual period of time encompassing the long run is likely to vary” Do you agree? Explain using examples.

(06 marks)

- (b) Consider the following given production schedule.

$Q_L$	$TP_L$	$AP_L$	$MP_L$
1		10	
2			14
3	45		
4		15	
5			10
6		13	
7	78		
8		9	

$Q_L$  - Quantity of Labour

$TP_L$  - Total Product of Labour

$AP_L$  - Average Product of Labour

$MP_L$  - Marginal Product of Labour

- (i) Fill in the table
- (ii) Identify the stages of production and explain the same using illustrations?
- (iii) Can a rational firm limit its production within stage I? Explain.
- (iv) Suppose the given item is sold at Rs.200/= and the labour wage rate is Rs. 3000/=, how many labourers should the firm hire? Explain your answer.
- (v) Explain the relationship between Average and Marginal Product of labour. (19 marks)

#### Question No. 04

- (a)
  - (i) "When working out the profit, an economist includes costs that could be excluded by an accountant" Do you agree? Explain with examples.
  - (ii) What are the practical reasons for the 'U' shape of the Long Run Average Cost Curve? (12 marks)
- (b) The total cost function of a firm given as;
 
$$TC = 2400 + 12Q - 0.8Q^2 + 0.02Q^3$$
  - (i) Is this short or long run cost function? Explain.
  - (ii) Find the Total Fixed Costs and Total Variable Costs.
  - (iii) Determine the Average Variable Cost and the output that will minimize the Average Variable Cost.
  - (iv) Determine the Marginal Cost and the output that will minimize the Marginal Cost.
  - (v) At what output rate, the Average Variable cost equals Marginal cost. (13 Marks)

**Question No. 05**

Explain whether you “agree” or “disagree” with the following statements. Use illustrations to explain your answer.

- (i) Firms operating in Perfectly Competitive markets can always determine the price.
- (ii) Even a loss making Perfectly Competitive firm can continue to produce, if its price is higher than its Average Variable Costs.
- (iii) Perfectly Competitive firms are able to make economic profits in the long run.
- (iv) Under Monopoly, the society is getting a lower output and paying a higher price, than when compared to Perfect Competition.

(25 marks)

**Question No. 06**

- (a) Firm operating in a Monopolistically Competitive market has the following short run demand and cost equations.

$$Q = 240 - 5P \quad TC = 280 + 8Q$$

- (i) Find the profit maximizing price and output.
- (ii) Calculate the firm's Profit.
- (iii) Considering the answer to part (ii), what do you think would start to happen in the long run? Explain using illustrations.
- (iv) Can the Monopolistically Competitive firms achieve allocative efficiency in the long run? Explain.

(16 marks)

- (b) “The key to the Pricing Power of Firms in Monopolistic Competition and Oligopoly is their ability to differentiate their product, therefore they are not mere price takers”. Do you agree? Explain your answer with example.

(09 marks)

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