

**FACULTY OF MANAGEMENT STUDIES**  
**UNIVERSITY OF DELHI**  
**Semester Examination 2016**  
**MBA FT**  
**Paper Name: Managerial Economics**  
**Paper No. 6103**  
**Nov/Dec, 2016**  
**Maximum Time: 3 Hours**  
**Maximum Marks: 50**

**NOTE: Attempt Five Questions. All Questions carry equal Marks**

**Question 1**

- a) It is often said that in an oligopolist market, entry is difficult. Explain the types of entry deterrence the potential entrants could face in an oligopolistic market structure. Illustrate with the help of an example.
- b) What is meant by the kinked demand curve? How does it help explain price rigidity?

**10 Marks**

**Question 2**

Demand and supply of cigarettes in a perfectly competitive market is given by:

$$Q_d = 10 - 0.5P$$

$$Q_s = -2 + P, \text{ when } P \geq 2$$

$$= 0, \quad \text{when } P < 2$$

- i. Draw the demand and supply curves. Find the equilibrium price and quantity analytically and graphically.
- ii. Now the Government imposes an excise tax of Rs. 6 per unit. How many units will be bought and sold now? What price will the buyers pay? What price will the sellers receive? What is the total tax revenue collected? Solve numerically. Also draw the appropriate graph and show the quantity and prices on the graph. Discuss the concept of Dead Weight Loss using this example.
- iii. Explain the concept of Incidence of Tax. How do we know whether the incidence of tax is higher on the buyer or the seller (in case of excise tax) in general? Explain. In this problem, which side is primarily bearing the incidence of tax? Explain why.

**10 Marks**

### Question 3

A private Power Distribution Company faces following two demand curves for power in two markets viz. 'C' and 'G' that he caters to:

For market C, the demand is:  $P_C = 14 - 2Q_C$ , and

For market G, the demand is:  $P_G = 10 - Q_G$

Further, the monopolist's TC function is:

$$TC = 2(Q_C + Q_G)$$

Where  $P_C$  and  $Q_C$  represent the price and quantity in market C, and  $P_G$  and  $Q_G$  represent the price and quantity in market G respectively.

- i. Explain the concept of price discrimination. Discuss three different types of price discrimination. If the power company decides to adopt price discrimination, which type of price discrimination would be most appropriate?
- ii. Find out the price discriminating prices and quantities for market C and D. Solve numerically. Also draw the appropriate graph/graphs and show the price and quantities on the graph. Graph need not be to scale. Explain the results you have obtained, particularly the price results, using the concept of price elasticity of demand.
- iii. If regulations now prohibit price discrimination, what would be the price in this market? What would be the quantities sold in market C and D? Also, draw the appropriate graph/graphs and show the price and quantities on the graph.

10 Marks

### Question 4

#### **Part a**

Consider the following Cobb-Douglas production function:

$$Y_t = A_t K_t^b L_t^{1-b}$$

Where Y represents output; K is capital; and L is labour hours worked. 'A' represents the total factor productivity, and b is estimated to be 0.3.

- i. Analyze how the marginal productivity of labour changes when: Only A increases by 10%; Only K increases by 10%
- ii. What kind of returns to scale does the production function exhibit?
- iii. Is each point on the production function economically efficient? If not, then which point would reflect the same?

## Part b

Explain the concept where *various input combinations yield the same total quantity of output*. What does the shape of the above curve signify? Also explain the relevance of ridge lines in this context?

5+5=10 Marks

### Question 5

- Derive and explain the equilibrium condition for a profit maximizing firm. It has often been observed that a sales maximizer produces more than a profit maximizer. In case you agree, substantiate your claim using both the TR-TC and MR-MC approaches.
- Explicitly illustrate the price charged by a profit maximizer and sales maximizer using the TR-TC approach. Can the price charged by them ever be the same? If so, when is it possible?

5+5=10 Marks

### Question 6

Attempt *Any Two* of the following:

- What is a shutdown point of a firm? With the help of short run cost curves, explain the relevance of minimum of AVC in the context of shutting down for a perfectly competitive firm. Does the shutdown point differ between the SR and LR? Is a producer always irrational if he continues to produce when incurring a loss? Why?
- Explain Game Theory with the help of an example. How useful is Game Theory? Also, explain the concept of Nash equilibrium.
- Can price elasticity of demand and the Total Revenue received by the producer ever be correlated? Substantiate your claim.

5+5=10 Marks

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