MBA FT I Year I Semester
Managerial Economics
Paper: F-6103
November, 2014
Maximum Time: 3 Hours
Maximum Marks: 50

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

Question 1

a) Explain the concept of dead weight loss associated with introduction of tariff on an imported commodity. Do domestic producers gain or lose by imposition of such a tariff?

b) Homespread department store sells household goods and clothing. As of now it is facing an oversupply of king size sheets and is contemplating putting them on sale in February. However, the next day, Comfort mattresses, a mattress shop next door put up its king size mattresses on sale for a period of one month.

   i. Explain in words what effect, if any, the action of Comfort mattress will have on the decision of Homespread department store about a sale on its king size sheets.

   ii. The cross price elasticity of mattress prices on sheet demand is –1.5. According to the advertisement for the mattress sale, the store is reducing the price on its king size mattress from \$400 to \$360. At \$400 per mattress, the company was able to sell 50 king size mattresses last week. Homespread department store currently sells 100 sets of king size sheets per week at a price of \$40 per set. How might the Homespread department store manager estimate what effect this sale will have on the demand for its king size sheets? Based on your calculations, what will be the effect on the quantity of sheets sold (You may assume that it is possible to buy fractions of sheets or mattresses)?

   iii. The price elasticity of supply for sheets is 2.5. Given your answer in part b), what will be the new price for king size sheets sold at Homespread department store? Use a diagram to help explain your answer.

Marks: 5+5

Question 2

a) What are the main characteristics of an oligopolistic market structure? By colluding to avoid price competition, firms in oligopolistic markets can increase the total profits to be shared. How does this happen?

b) Is cartel formation legal in India? How can antitrust enforcement bodies, such as the Competition Commission of India, identify cartels using economic evidence?

Marks: 5+5

Question 3

a) Give at least five examples of price discrimination. Why is the perfectly discriminating monopolist's MR curve identical to the demand curve it faces?

b) An automobile company faces a kinked demand curve with a demand equation

$$Q_1 = 210 - 30P_1$$

For prices above the present price and

$$Q_2 = 90 - 10P_2$$

For prices below the present price

The firm's TC is given by

$$TC = 3.5Q + Q^2/60$$

i. Determine the best level of output and price for the firm.
ii. Within what range can the MC curve shift without causing a change in P and Q.
iii. Represent the information graphically also (graph need not be to scale).

Marks: 5+5

Question 4

a) The production function for SteelTeck International is $Q = 20\,K^{0.5}L^{0.5}$ with marginal production functions; $MP_K = 10\,\frac{L^{0.5}}{K^{0.5}}$ and $MP_L = 10\frac{K^{0.5}}{L^{0.5}}$.

i. If the price of capital is Rs. 5 per unit and the price of labour is Rs. 4 per unit, determine the expansion path for the firm.
ii. The firm is currently producing 200 units of output per unit using input rates of L = 4 and K = 25. Is this an efficient input combination? Why?

b) An employer is seeking to fill a vacant position. Would he be more concerned with the average product or the marginal product of the last person hired? If the average product is just beginning to decline, should more workers be hired? Illustrate graphically.

Marks: 5+5

Question 5

Part a

Two airlines, Air City and Air Experience, are major rivals on routes between the United States and Europe. This year, travel has been especially slow during the spring, known as a "shoulder season" in the business—a time when traffic is moderate but far from that expected during peak periods. Both airlines are considering offering a mileage bonus to members of their frequent flyer programs for transatlantic flights taken between March 1 and May 31. The issue for each is whether to offer 10,000 bonus miles for each round-trip flight taken during that period or 20,000 bonus miles per flight. The payoff matrix for this game follows. (Payoffs are in market share as percent of total transatlantic passengers, and there are other firms that fly the routes but will not be players in the game.)

Market Share Payoff Matrix for U.S.-Europe Routes (payoffs in percent of total market)
(First pay-off is for Air City and the second for Air Experience)

		Air Experience			
		20,000 Bonus Miles		10,000 Bonus Miles	
Air City	20,000 Bonus Miles	30	30	32	22
	10,000 Bonus Miles	22	26	24	28

Assuming in 1 through 3 below that play is simultaneous, answer the following and explain:

1. Does Air Experience have a dominant strategy?
2. Does Air City have a dominant strategy?
3. Is there a Nash equilibrium in this game?
4. If play is not simultaneous, is there a first-mover advantage in this game?

Part b

Explain the relationship between MR, TR, AR and price elasticity of demand.

OR

Agricultural commodities are known to have a price inelastic demand and to be necessities. Using this fact explain why the income of farmers falls (i) after a good harvest and (ii) in relation to incomes in other sectors of the economy.

Marks: 5+5

Question 6

Write notes on **any two** of the following:

a) Necessary and sufficient conditions for profit maximization and sales maximization.

b) Relevance of Planning Curves (long run average cost curves) for managerial decision making.

c) Relevance of Ridge Lines for managerial decision making

Marks: 5+5

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