

Jagan Institute of Management Studies
End-Term Examination, September-October, 2017
Trimester I – PGDM (RM) 2017-19

Managerial Economics
ET_RM_ME_2809

Time: 3 Hrs.

M. Marks: 70

INSTRUCTIONS: Attempt any FIVE questions including Q1 & Q7 which are compulsory.

- Q 1** Attempt any **THREE** of the following:
- a) Identify the nature of economic analysis you would employ to study inflation problem, textile industry, unemployment and monetary policy of RBI. Also comment upon the interrelationship of these economic variables.
 - b) Other things remaining the same, what would happen to the supply of a particular commodity if the following changes occur?
 - i) The price of the commodity decreases.
 - ii) A technological breakthrough enables the good to be produced at a significantly lower cost.
 - iii) The price of inputs used to produce the commodity increase.
 - iv) The managers of the firms that produce the good expect the price of the good to rise in near future.
 - c) Would you expect the cross-elasticity coefficients between each of the following pairs of products to be positive or negative? Why?
 - i) Personal computers and software.
 - ii) Electricity and natural gas.
 - iii) Bread and washing machine.
 - d) In the following list are a number of well-known companies and the products that they sell. Which of the four types of markets (perfect competition, monopoly, monopolistic completion and oligopoly) best characterise the markets in which they compete? Also justify your answer.
 - i) McDonald's hamburger
 - ii) L'Oreal shampoo
 - iii) Intel – Computer chip for the PC.
 - iv) HPCL – Cooking gas.
 - v) Samsung – LED TVs.

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- Q 2 a)** The Teenager company makes and sells skateboards at an average price of Rs. 700 each. During the past year, they sold 4000 of these

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skateboards. The company believes that the price elasticity for this product is about (-) 2.5. If it decreases the prices to 660 what should be the quantity sold? Will the revenue increase? Why?

- b) Show with the help of a diagram the changes in the total product, marginal product and average product as we apply more and more units of variable factor on a given fixed factors. 8

Q 3 a) Marginal Cost and Marginal Revenue provides a yardstick to managers for determining the level of output to be produced. Is this true? If yes, prove the statement with a hypothetical set of data. 7

- b) Suppose that the demand and supply functions for good X are

$$Q_d = 50 - 8p$$

$$Q_s = -17.5 + 10p$$

- i) What are the equilibrium price and quantity?
 ii) What is the market outcome if price is \$2.75? What do you expect to happen? Why?
 iii) What is the market outcome if price is \$4.25? What do you expect to happen? Why?
 iv) What happens to equilibrium price and quantity demanded when the demand function becomes $Q_d = 59 - 8p$? 7

Q 4 “The best forecasting method is the one that gives the highest proportion of correct predictions.” In the light of this statement suggest few suitable techniques for forecasting the demand for durable goods in the next year. 14

Q 5 Assume firms in the short run are earning super normal profits. What will happen to these profits in the long run for the following markets? Justify your answer with diagrams both in the short run and in the long run.

- a) Monopoly
 b) Perfect Competition. 14

Q 6 You have the following data for the last 12 months’ sales for the PRQ Corporation (in thousands):

| Months | Sales (in thousands) | Months | Sales (in thousands) |
|----------|----------------------|-----------|----------------------|
| January | 500 | July | 610 |
| February | 520 | August | 620 |
| March | 520 | September | 580 |
| April | 510 | October | 550 |
| May | 530 | November | 510 |
| June | 580 | December | 480 |

- a) Calculate a 3 month centred moving average.
- b) Use this moving average to forecast sales for January of next year.
- c) If you were asked to forecast January and February sales for next year, would you be confident of your forecast using the preceding moving average? Why or Why not?

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Q 7 [Read the case and answer the questions given at the end.](#)

In one of the monthly meetings of the general managers of Delta Tyres Ltd.(DTL) , the following conversation took place:

“But there appears to be a problem. Four years down the road, we find that we are getting nowhere. Sales are simply not picking up. We are spending lot of money, but there is nothing to show for it. The market does not seem to be growing, customers don’t seem to be interested in radical tyres, and the price seems to be major deterrent. I am convinced that the efforts of the marketing cell, which I believe has the right strategy, are not being adequately complemented by the field force. We need to look at our market plant at the territory level to determine corrective action”, said Gupta, General Manager (West), Delta Tyres Ltd.

B.D.Sharma, the GM (South), however disagreed: “That’s not entirely true. I think that the radical tyre could be an idea that is ahead of its time in this country. And that, by the way, is the general feeling among the field force.”

“I don’t believe that radical tyres are ahead time”, said Gupta.”If that were so, how would you account for the fact that the market leader, National Tyres Ltd (NTL) sold 1,20,000 radical tyres last year? That’s twice what we have been able to manage so far”.

“Much of that success is because of NTL’s distribution strengths”, replied Sharma, “we must also bear in mind the fact that the proportion of radical sales is quite low in relation to NTL’s volumes. Moreover, we can’t overlook Indian roads and driving conditions. Our roads are badly maintained and overloading is a common problem. Since the level of overloading in the case of commercial vehicles is between four and six tonnes, it places a tremendous load on the tyre, leading to a shorter life. Can radical tyres work in such a market”, he quipped.

“And let us not forget the price factor”, added A K Singh, Sales Manager (North). “An automobile owner has to change all his tyres to radicals, given the fact that it is inadvisable to use radical tyres along

with conventional cross-ply tyres. Therefore, if a customer wants to shift preferences, he cannot buy one or two tyres at a time. This translates into a large investment, which many customers are not willing to make. So, unless the automobile manufacturers start supplying vehicles fitted with radical tyres as part of standard equipment, replacement demand will always be low”.

Questions:

- a) According to you which factors (external or internal) are more influencing the sales of Delta Tyres?
- b) What is replacement demand in this case? Which factor is a major deterrent for replacement demand for radical tyres?
- c) “I think radical tyre could be an idea that is ahead of its time in this country”, Comment.
- d) In a given situation, is this possible for the company to increase sale of its product? If yes, suggest few feasible measures.

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