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Department of Management **Roll No...**
Odd Semester Examination - January 2024
MBA- Semester I
MBA-FG-106, Managerial Economics

Duration: 3 Hour Max.Marks -60

Note: Attempt any Five Questions, All questions carry equal marks (12X5=60)

1. Kavita has a job as a pharmacist earning $30,000 per year, and she is deciding whether to take another job as the manager of another pharmacy for $40,000 per year or to purchase a pharmacy that generates a revenue of $200,000 per year. To purchase the pharmacy, Kavita would have to use her $20,000 savings and borrow another $80,000 at an interest rate of 10 per cent per year.
The pharmacy that Kavita is contemplating purchasing has additional expenses of $80,000 for supplies, $40,000 for hired help, $10,000 for rent and $5,000 for utilities. What would be the business and economic profit if Kavita purchased the pharmacy?

2. (a) When price of a commodity X falls by 10 per cent, its demand rises from 150 units to 180 units. Calculate its price elasticity of demand. How much should be the percentage fall in its price so that its demand rises from 150 to 210 units?

(b) Manoj Jain, the research manager for marketing at the Nexon Division of the Tata Motors, has specified the following general demand function for Nexon in India:
$Q_N = f(P_N, I, P_M, P_P, A, N)$

Where Q_N is the quantity demanded of Nexon per year, P_N is the price of Nexon, I is the disposable income, P_M is the price of Maruti automobiles, P_P is the price of petrol, A is the amount of advertising and N is population.
Indicate whether you expect each of these variables to be directly or inversely related to the quantity demanded of Nexon and the reason for your expectation.

3. (a) Choose a product and explain the following:
   i. Shift in Demand
   ii. Change in quantity Demanded

   (b) What are the main underlying determinants of demand for the following:

   i. Luxury cruise
   ii. Organic food
   iii. Baby products

4. Suppose Mr Bill is on a low-carbohydrate diet. He can eat only three foods: Rice Krispies, Cottage Cheese and Popcorn. The marginal utilities for each food are tabulated below. Bill is allowed only 167 grams of carbohydrates daily. Rice Krispies, cottage cheese and popcorn provide 15, 6 and 10 grams of carbohydrates per cup respectively.

Units of Food (cups/day)	**Marginal Utility of Rice Krispies**	**Marginal Utility of Cottage Cheese**	**Marginal Utility of Popcorn**
1	175	72	90
2	150	66	80
3	125	60	70
4	100	54	60
5	75	48	50
6	50	36	40
7	25	30	30
8	25	18	20

Referring to the above table, respond to the following questions:

(a) Given that Bill can consume only 167 grams of carbohydrates daily, how many cups of each food will he consume daily? Explain with your calculations

(b) Suppose Bill's doctor tells him to further reduce his carbohydrate intake to 126grams per day. What combination will he consume?

5. After two quarters of increasing levels of production, the CEO of Canadian Fabrication and Design was upset to learn that, during this time of expansion, productivity of the newly hired sheet metal workers declined with each new worker hired. Believing that the new workers were either lazy or ineffectively supervised (or possibly both), the CEO instructed the shop foreman to "crackdown" on them to increase their productivity.
   a) Explain carefully in terms of production theory why it might be that no amount of "cracking down" can increase worker productivity at CF&D.
   b) Provide an alternative to cracking down as a means of increasing the productivity of the sheet metal workers.

6. In what way are the three degrees of price discrimination different from each other? Cite examples of each of the three. Which is the common type of price discrimination?

7. (a) What is the distinguishing characteristic of Oligopoly in relation to the other forms of market organizations? What is its significance?

   (b) Can a monopolist incur losses in the short run? Why? Under what condition should a firm continue to produce in the short run if it incurs losses at the best level of output?

8. Explain any three of the following
   a. Marginal Analysis
   b. Breakeven Point
   c. Economies of scale
   d. Marginal rate of technical substitution