

<PGDM IB, 2019-21>
<Managerial Economics>
<IB- 107>

Trimester – I , End-Term Examination: September 2019

Time allowed: 2 Hrs 30 Min
Max Marks: 50

Roll No: _____

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means**. All other instructions on the reverse of Admit Card should be followed meticulously.

Sections	No. of Questions to attempt	Marks	Total Marks
A	Minimum 3 question with internal choices and CILO (Course Intended Learning Outcome) covered	3*10	30
B	Compulsory Case Study with minimum of 2 questions	20	20
			50

Section A

QA1a(CILO-1) Worldwide, the average coffee grower has increased the amount of acreage under Cultivation over the past few years. The result has been that the average coffee plantation produces significantly more coffee than it did 10 to 20 years ago. Unfortunately for the growers, however, this has also been a period in which their total revenues have plunged.

- a) In terms of an elasticity, what must be true for these events to have occurred? Illustrate these events with a diagram, indicating the quantity effect and the price effect that gave rise to these events
- b) Show that on a linear demand curve, price elasticity of demand decreases continuously from infinity at the price axis to zero at the quantity axis

Or

QA1b (CILO-1) Define National Income and explain the different methods of measuring it.

QA2a (CILO-2) The first sushi(Japanese style fish) restaurant opens in town. Initially people are very cautious about eating tiny portions of raw fish, as this is a town where large portions of grilled meat have always been popular. Soon, however, an influential health report warns consumers against grilled meat and suggests that they increase their consumption of fish, especially raw fish. The sushi restaurant becomes very popular and its profit increases.

- a. What will happen to the short-run profit of the sushi restaurant? What will happen to the number of sushi restaurants in town in the long run? Will the first sushi restaurant be able to sustain its short-run profit over the long run? Explain your answers.
- b. Local steakhouses suffer from the popularity of sushi and start incurring losses. What will happen to the number of steakhouses in town in the long run? Explain your answer

Or

QA2b(CILO-2) Philip Morris and R.J. Reynolds spend huge sums of money each year to advertise their tobacco products in an attempt to steal customers from each other. Suppose each year Philip Morris and R.J. Reynolds have to decide whether or not they want to spend money on advertising. If neither firm

Turn Over

advertises, each will earn a profit of \$2 million. If they both advertise, each will earn a profit of \$1.5 million. If one firm advertises and the other does not, the firm that advertises will earn a profit of \$2.8 million and the other firm will earn \$1 million.

- Use a payoff matrix (prisoners Dilemma) to depict this problem.
- What is the cooperative solution to this game?
- What is the likely outcome

QA3a(CILO-3) The accompanying table shows a car manufacturer's total cost of producing cars.

Quantity of cars	TC
0	\$500,000
1	540,000
2	560,000
3	570,000
4	590,000
5	620,000
6	660,000
7	720,000
8	800,000
9	920,000
10	1,100,000

- What is this manufacturer's fixed cost?
- For each level of output, calculate the variable cost (VC), calculate the average variable cost (AVC), average total cost (ATC), and marginal cost (MC).

Or

QA3b(CILO-3) Distinguish between any two of following with the help of illustrations : (a) Increasing returns to scale and decreasing returns to scale (b) Economies and Diseconomies of scale (c) Long run and short run Price & quantity determination under Perfect Competition

Section B

Entering the Aspartame Market

Aspartame is a low-calorie, high-intensity sweetener. It was discovered (by accident) by a research scientist at G.D. Searle & Co. who was working on an anti-ulcer drug. Use of aspartame in soft drinks was approved by the US Food and Drug administration in 1983. Searle extended the original patent to 1987 in Europe and 1992 in the US. In 1985, Monsanto acquired Searle, including the aspartame patent, and began selling the softdrink version under the brand name "NutraSweet." The product had an enormous market as the sweetener in Diet Coke and Diet Pepsi, in Europe, Asia, and especially the US (approximately 10 times the size of the European market). In 1986, Holland Sweetener Company (HSC) began building an aspartame plant in anticipation of the patent's expiration. Analysts estimated that HSC's capacity was about 5% of the world market. When HSC began selling its own version of aspartame in Europe, Monsanto dropped the price of NutraSweet from \$70 to \$22-30 per pound. Since HSC had higher costs (production has a steep learning curve), HSC lost money at the new price and Monsanto had substantially lower profits in Europe. When the US patent expired, Coke and Pepsi signed long-term contracts with Monsanto.

B1(CILO1) Analyse the market structure and explain its various features .

B2(CILO2) Who benefited from HSC's entry? Why do you think Monsanto triggered a price war in Europe? Do you think this was a good strategy?