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PGDM (RM), 2021-23

Managerial Economics for Retailers

RM-104

Trimester – I, End-Term Examination: October 2021

Time allowed: 1 Hrs 30 Min

Max Marks: 30

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*5	15
B	Compulsory Case Study with minimum of 2 questions	15	15
			30

Section A

QA1 (CILO-1) According to a Honda press release on October 23, 2006, sales of the fuel-efficient four-cylinder Honda Civic rose by 7.1% from 2005 to 2006. Over the same period, according to data from the U.S. Energy Information Administration, the average price of regular gasoline rose from $2.27 per gallon to $2.57 per gallon. Using the midpoint method, calculate the cross-price elasticity of demand between Honda Civics and regular gasoline. According to your estimate of the cross-price elasticity, are the two goods gross complements or gross substitutes? Does your answer make sense?

Or

QA1 (CILO-1) What happens when a manager increases the inputs by 30 % and the output increases by 10% in the long run. Explain this with the help a suitable diagram and elucidate the reasons for the same.

QA2a (CILO-2) Assume that BASF is the only producer of vitamin D and acts as a monopolist. It currently produces 40 tons of vitamin D at $4 per ton. If BASF were to produce 10 more tons, what would be the effect on quantity and price? Show the impact of an increase in supply and would BASF have an incentive to produce those 10 additional tons?

Turn Over

Or

QA2b (CILO-2) Consider two distillers, Laphroaig and Knockando. If they advertise, they can both sell more and increase their revenue. However, the cost of advertising more than offsets the increased revenue so that each distiller ends up with a lower profit than if they do not advertise. On the other hand, if only one advertises, that distiller increases its market share and also its profit.

a. Construct a payoff matrix using the following hypothetical information: If neither distiller advertises: each earns a profit of $35 million per year. If both advertise: each earns a profit of $20 million per year. If one advertises and the other does not: the distiller who advertises earns a profit of $50 million and the distiller who does not advertise earns a profit of $9 million.

b. If the two distillers agree to coordinate their strategies, what is the outcome?

QA3a(CILO-3) Marty's Frozen Yogurt is a small shop that sells cups of frozen yogurt in a university town. Marty owns three frozen-yogurt machines. His other inputs are refrigerators, frozen-yogurt mix, cups, sprinkle toppings, and, of course, workers. He estimates that his daily production function when he varies the number of workers employed (and at the same time, of course, yogurt mix, cups, and so on) is as shown in the accompanying table.

Quantity of labor	Quantity of frozen yogurt
0	0
1	110
2	200
3	270
4	300
5	320
6	330

a) What are the fixed inputs and variable inputs in the production of cups of frozen yogurt?
b) Draw the total product curve. Put the quantity of labor on the horizontal axis and the quantity of frozen yogurt on the vertical axis.
c) What is the marginal product of the workers? Why does marginal product decline as the number of workers increases?

Or

QA3b(CILO-3.) Market structures describe important features of the economic environment in which firms operate. A firm's decisions about how much to produce or what price to charge depend on the structure of the market.

Turn Over

Perfect competition is the most basic of market structures; if it exists, an individual buyer or seller has no control over the price. Explain the short term & long term behavior of a firm in such kind of a market.

Section B

Case Study: Demand Function in the Indian Auto Industry

In an economy, growing with the rapid growth of the middle class, the consumption of consumer durables is an indicator of the level of urbanization, modernization and lifestyle. The purchase of automobiles, one of the most significant consumer durables, is an important indicator of consumer buying behaviour. Moreover, the contribution of auto-industry to the GNP has been increasing steadily ever since the sector had been delicensed in 1993. This adds around 3 to 5 per cent to the GNP. The size of the passenger car is about 4 lakh at present, which is miniscule when compared to the US, Europe or the Japanese market. The verdict, there is immense potentiality in this market, grab the opportunity. Global car manufactures are paying heed to it and have flocked to the country. But in order to establish themselves, they have specific tastes, eferences and other generic demand determinants. We will start our discussion with the greatly untapped market—the non-urban car market in India, which contrary to popular belief, has potential. To begin with, since cars are still a high-priced commodity (although the Maruti 800 has changed this perception), the level of income is presumably the most important determinant. More appropriately, per capita real GNP itself. Given that inflation is more or less under control, which in turn is because of the active support to agriculture by the government which sets floor prices for agricultural products and gives huge amounts of subsidies to buy fertilizers and electricity, making the non-urban sector a big, potential market. There has been a huge increase in the real per capita non-urban (specifically non-metro) income. Non-urban society thus becomes the next potential market for car manufacturers after the urban metros. But can we treat the whole non-urban/no-metro society as a uniform group exhibiting a similar kind of demand in the market? Certainly not, because the non-urban area is divided into rich farmers, plantation owners and absentee landlords who have diversified into other kinds of businesses, including exports.

three groups will form potential buyers for the passenger car. Thus we get the first kind of market segment, on the basis of income group, and within the segment the sub-segment, i.e. from where the income is generated, rural or urban area, local or global market, income is generated, rural or urban area, local global market. Logically, buying behaviour in terms of attitudes towards the price or price sensitivity, brand-consciousness and taste will be different for non-urban buyers when compared to their urban and metro counterparts. Car manufactures have already divided the car market on the basis of income. There are cars in the economy segment, mid-segment premium segment, within the mid-segment, one can find a lower mid-segment, comprising of the Maruti 1000 and the upper mid-segment, comprising of the Accent and Ikon. The premium segment is likewise, divided into the luxury segment and super-premium segment. But the kind of car to be purchased within that segment depends on other determinants. Let us take the case of a rich sugar farmer form UP.

Turn Over

He might have the same purchasing power as that of an urban upper middleclass man, but may not prefer a delicate car like the Maruti, because of bad road conditions in his village. Further market research proves that people from semi-and non-urban India envisage heavy-looking, brightly coloured goods as a sign of strength, durability and sturdiness. Thus, the demand with the same purchasing power will be entirely different. The next crucial question is, how price sensitive are the buyers? Here the approach that has to be followed will vary greatly between urban and non-urban areas. Generally speaking, the demand is going to be elastic since cars are still considered luxury items, especially in small towns and rural areas. Heavy advertising and easier B2C communication in urban areas are helping auto-manufacturers develop a brand image easily, educating the customer on brand equity and acquiring brand loyalty. We all know that price sensitivity and brand loyalty are negatively related. Thus, an urban buyer tends to be less price sensitive. In the metros, other related factors like a busy lifestyle, makes depending on the unreliable public transport system a strictly avoidable situation. This makes the metro buyers price-insensitive as a car is treated more like an essential commodity. Non-urban buyers in general, tend to be less brand conscious (unless the brand becomes a logo for them which is possible only in the long term) and more value-conscious. Further, in the cities one finds and equal number of women drivers who prefer delicate-looking cars.

Questions

B1(CILO1) Discuss in detail the various determinants of demand for passenger cars in India

B2(CILO2) What role does non-urban India play in forming the demand in the auto-market? Explain the impact of an increase in demand in the auto market on price & quantity with the help of a diagram

B2(CILO3) Imagine that you are a new global auto maker planning to enter the Indian market. List the various demand aspects you think are important.