

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

Managerial Economics
ET_PG_ME_2809

Time: 3 Hrs.

M. Marks: 70

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

- Q 1** Attempt any **FIVE** of the following:
- a) Artificial intelligence is likely to improve the procedures and the output quantities of the auto-sector. *What would be the resultant change in a relevant PPC for apples and automobiles? Explain with the help of a graph.*
 - b) De Beers, a leading diamond company, is planning to spend more money advertising diamonds than any time in the past decade to win back wealthy shoppers. *Do you think offering discounts would have been a better attraction? Explain.*
 - c) Banana chips would become more expensive this Onam season as the price of coconut oil, in which they are customarily fried, has risen sharply by over 70% from a year ago. *Graphically present this change in the market situation of banana chips.*
 - d) *Frames Unlimited* has begun manufacturing papier mâché photo frames. Their fixed cost is ₹ 72000 and variable cost per unit is ₹ 15. If they decide to break-even at 8000 units of sales, *what should be the per unit selling price for the photo frames? If they wish to break-even earlier than at 8000 units, what should be the change in selling price?*
 - e) Aravalli hills region has been a natural conservation zone with a construction cap of 0.5%. *Give three examples of possible social costs arising due to manufacturing activities in this zone.*
 - f) An analytical studies by Jon P. Nelson finds the price and income elasticity of demand for wine as -0.45 and 1 respectively. *Interpret these values and discuss the contextual implications for future pricing of wine.*
 - g) If the total product function in the labour intensive handloom sector is given by $TP = 10L + 17K$, *find the marginal product of labour if the usage of capital is 2 and increments in it are not readily possible. What is the average productivity of 100 workers? At what level of marginal product would diminishing returns to labour turn into negative returns?*

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- Q 2** Managerial economics aims to aid better decision making in managerial workspace. After successful completion of management education, if you begin an entrepreneurial venture *where all can the subject matter of managerial economics help you in different business decisions?* Discuss by specifying the venture (any - manufacturing/selling/service provisioning) and at-least five concepts with their relevant application to your business. **10**
- Q 3** A number of agro-processing units across Uttar Pradesh have experienced an increase in total investment over 2000-2007 by nearly 94% and the output increased by more than 104%. The units have made the most of the encouragement given by the government and local administration and the results have been very favourable. The revenues have increased while the average expenses have fallen.
- a) Discuss the production phenomenon experienced by the agro-processing units.
- b) What could have been the possible reasons for a fall in their average expenditure? **10**
- Q 4** The UK, along with many other advanced economies, is facing a major housing affordability crisis. Average house prices are now on average nearly eight times that of incomes across England and Wales, and up to 39 times in parts of central London. A whole generation finds itself priced out of the market, struggling to make ends meet in the face of eye-watering rents. Over the past 15 years levels of home ownership have been falling sharply, particularly among young people. Homelessness is rising fast.
- a) Do you think a price ceiling by the Government in respective countries will set the market for housing in order? Explain with the help of graphical presentation.
- b) List the sectors/industries which derive their demand from the demand for housing.
- c) Discuss the factors that are most likely to influence long run demand forecasts for housing in urban areas. **10**
- Q 5** Indian Patents office has in effect accorded monopoly to US pharmaceutical corporation Pfizer, for pneumococcal conjugate vaccine (PCV) by granting a patent in August 2017 for its PCV13 product, marketed as Prevnar 13. This blocks Indian manufacturers from supplying a competing lower-priced version of this vaccine. Due to pneumonia nearly one million young lives are lost per year; whilst India, which carries the world's highest burden of pneumonia, accounts

for nearly 20% of these global infant pneumonia deaths. The PCV, which safeguards against 13 types of pneumococcal bacteria, also lowers antimicrobial resistance by significantly reducing common childhood infections and decreasing antibiotic use in infants and children.

- a) What is the opportunity cost of this decision (made by the Indian Patents office) to the Indian society at large?
- b) Elaborate the short run output and pricing decisions of Pfizer in respect of Penvar 13 given its monopoly position in PCV, with the help of graphical presentation.
- c) Comment on the price elasticity of Penvar 13, before and after granting of patent.

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Q 6 Local weekly markets or 'haat' or 'tehbazaari' is a traditional style of retailing, basically unorganized, where on a particular day of a week petty traders display their commodities on a makeshift arrangement in places authorized by the state municipal authorities against payment of some fixed remuneration. Commodities sold in these markets range from objects of daily use to vegetables, garments, toys, small electrical gadgets, etc. A good number of sellers for each product/product category participate in the 'haats' and a very good number of buyers visit it to buy requirements at competitive rates.

- a) 'Weekly haats' come close to perfectly competitive markets. Discuss the features of weekly haats which make them imperfect.
- b) As the selling participants in the weekly haat are price takers, do they ever make supernormal profits? Explain.
- c) Comment on the cross-price elasticity of products sold in 'weekly haats'.

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

Yoga-guru-turned-businessman Baba Ramdev has now set his eyes on the packaged drinking water market. His company, Patanjali Ayurved Ltd, is preparing to launch *Divya Jal* packaged drinking water sourced from the foothills of the Himalayas-across north India this Diwali. The company will make *Divya Jal* available nationwide over the next three to six months, said Ramdev's spokesperson, S.K. Tijarawala. The sales target for 2018-19 is ₹1,000 crore.

The company will start the bottling of drinking water at its factories in Haridwar and Lucknow, said Tijarawala. The Lucknow plant is capable of bottling 100,000 litres of water every day. Patanjali is not the first company to market drinking water that has been sourced from the foothills of the Himalayas. NourishCo, a joint venture between Tata group firm Tata Global Beverages Ltd and PepsiCo India Holdings Pvt. Ltd, sells *Himalayan* branded packaged drinking water that the company claims to have sourced from the foothills of the Himalayas. According to research from Euromonitor International, the packaged drinking water market in India was estimated at ₹ 7,000 crore in 2016 and is projected to reach ₹ 15,080 crore in 2021. That is the bottled water market in India is growing at a significantly high rate of 23–25%. In June 2016, the Food Safety and Standards Authority of India (FSSAI) raised concerns about quality and safety of packaged drinking water sold in the country as a majority of the bottling units did not have clearance from the regulator. According to FSSAI findings in June 2016, there were 5,842 registered water packaging units, of which only 1,495 units had licenses from both Bureau of Indian Standards (BIS) and FSSAI, while the remaining 4,347 units were operating only with BIS certification. FSSAI had, on 23 June 2016, said all bottling units will have to secure clearance from it.

Bisleri, a brand owned by Mumbai-based businessman Ramesh Chauhan's *Bisleri International Pvt. Ltd*, leads the bottled water market with an estimated 40% market share. Other key brands include *Aquafina*, marketed by American food and beverages' company PepsiCo Inc., and *Kinley*, sold by American beverages maker Coca-Cola Co. *Bisleri*, together with *Kinley* and *Aquafina*, have a cumulative market share of 65%. The remaining 35% market is quite fragmented and ruled by unorganised players in tier-2, tier-3 cities.

In this growing market, *Bisleri* has been attempting to stay relevant to its consumers and to that end is now introducing dual-language labels across India. The initiative is aimed at connecting with locals and battling counterfeiting. While it is hard to put a number as to how much loss *Bisleri* incurs due to counterfeiting, Anjana Ghosh, Director Marketing at *Bisleri International Pvt. Ltd.*, said that the company is, in fact, in no position to override those who counterfeit

Bisleri. “They have a BIS license. So our statutory controls are allowing them to manufacture look-alikes. Legally, we cannot do anything, the only thing we can do is create awareness among our consumers.” She added that *Bisleri* is creating awareness about avoiding look-alikes especially when consumers do not know how safe the water in the bottle is. Ghosh admitted that counterfeiting is a challenge that the brand has been battling for a long time and does not have a concrete solution. “The dual-label initiative is an attempt in this direction.” *Bisleri* has 122 bottling plants across India and the labels across all these plants will be changing soon.

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Questions:

- a) What is driving the demand for bottled water in India? 3
- b) Draw an Engel curve for Divya Jal and piped (provided by the municipality) drinking water and give a comparative explanation. **PTO**
- c) Compare the price elasticity of demand for Aquafina with that of bottled water (in general). 3
- d) What kind of barriers could have been erected by Bisleri to prevent entry of new players like Patanjali’s Divya Jal? 5
- e) What would be the effect of dual labelling by Bisleri on its fixed costs and variable costs? Explain. 3
- f) Which market form does the bottled drinking market in India closely resemble? Justify. 3
