

JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA
PGDM / PGDM (M)/ PGDM (SM)
FIRST TRIMESTER (Batch 2022-24)
END-TERM EXAMINATIONS (REAPPEAR), NOVEMBER 2022

Course Name	Managerial Economics	Course Code	ECO20401
Max. Time	2 hours	Max. Marks	40 MM

INSTRUCTIONS: All questions are compulsory.

SECTION I

Q.1. Suppose a seller of a textile cloth wants to lower the price of its cloth from Rs. 150 per metre to Rs. 142.5 per metre. If its present sales are 2000 metres per month and further it is estimated that its price elasticity of demand for the product is equal to - 0.7. Demonstrate the impact of his decision making whether or not total revenue will increase as a result of his decision to lower the price. Calculate the exact magnitude of its new revenue. **[3 +2 Marks]**

Q.2 (a). If we plot the quantity of aluminum ore mined per year on the horizontal axis and the real annual price of aluminum ore on the vertical axis, we find that the path of price-quantity combinations generally indicates lower real prices and higher quantities over time. What is a plausible explanation for this observed outcome?

[5 Marks]

(b) In a city there are a large number of firms selling a product and no single firm has any control over the price of the product. The following total revenue and cost functions are given for a single seller

$$TR = 10Q$$
$$TC = 1000 + 2Q + 0.01Q^2$$

Determine how many units of the product a firm will produce per annum, if it aims at profit maximisation. Also find out the total profits made by it in the equilibrium situation.

[3+2 Marks]

Q.3. What are the benefits of the staggered movie times allowed by multiple screens? What is the benefit to a multiscreen theater of locating at a shopping mall? Identify the economic framework and how it works behind the scene in the actions of Movie theater owners

[5Marks]

(P.T.O)

SECTION II

India's Civil Aviation Industry

Before 1991, India's civil aviation industry was highly regulated. It was opened in 1991 and many players (e.g., Air Deccan, Kingfisher Airlines, Air Sahara, Jet Airways, Spice Jet, GoAir, IndiGo, etc.) have entered the market. India has emerged as one of the fastest-growing global aviation markets.

Despite the significant increase in air traffic movements, airlines still not operating at full capacity. The Indian aviation industry has recovered fully from the Covid-19 pandemic shocks as is reflected from the air traffic movement which increased to 100.42 million passengers in the first quarter of FY 2022-23 from 48.22 million passengers in the same period last year. However, most airlines are not operating at their full capacity due to less demand. IndiGo is operating at 88 percent capacity.

AirAsia is operating at 63 percent capacity. SpiceJet is operating at 37 percent capacity as against the allowed 50 percent. Merge to give competition Indigo, which entered into aviation market in 2006, emerged as a leading player with a market share of 58 percent. The Tata group airlines (Air India, Vistara, and Air Asia) combined market share was about 23.4 percent. To optimize resources and challenge industry leader IndiGo, the above three carriers are planning to merge.

Input costs and Pricing

The prices of all inputs in the aviation sector have increased significantly. For example, the aviation turbine fuel price in Delhi was Rs. 37, 793. 70 per KL in 2006 and increased to Rs. 115, 520.27 per KL in October 2022. Note that fuel accounted for 48 percent of the total operational cost. However, ticket prices for all routes for all airlines remain stagnant since 2006. For example, in the case of IndiGo, a Delhi-Mumbai ticket (14 days advance booking) was Rs. 4000 and Rs. 4081 in August 2008 and May 2018, respectively. The ticket price remained almost the same at Rs. 4451 in October 2022.

Questions

Q4.(a) Explain both demand and supply side challenges faced by the Indian airlines?

Q4. (b) Justify if the Indian civil aviation industry presents a good explanation of oligopoly? Which characteristic of oligopoly do you find in the above case?

Q4.(c) Why have prices remained sticky for economy-class passengers in the Indian aviation market?

Q4.(d) Derive possibilities of collusion in the above case? [5*4=20 Marks]