MANAGERIAL ECONOMICS

REVISION

QUESTION 1

1. A major cricket tournament is hosted in Karachi. Show the effect on the restaurant market in Karachi.
2. The government imposes an excise tax on soft drinks that must be paid by producers. What is the effect on the soft-drink market?
3. A noticeable increase in electricity prices and its effect on the air-conditioning (AC) market.
4. A breakthrough in dairy farming technology reduces the cost of producing milk. What happens in the cheese market?
5. The government provides a subsidy to rice farmers. Show the effect on the biryani (restaurant) market.
6. A sharp rise in online food delivery apps' popularity (Foodpanda/Careem Food) in Islamabad. What is the effect on the fast-food restaurant market?
7. Heavy rains destroy a large portion of the potato crop in Punjab. What happens in the market for French fries?
8. A new government regulation requires all pharmacies to maintain digital prescription records, increasing their operating costs. Analyze the effect on the pharmaceutical retail market.
9. A successful marketing campaign promotes the health benefits of green tea. What happens in the black tea market.
10. A major technology firm opens a new office hub in Rawalpindi, hiring thousands of workers. Show the effect on the local apartment rental market.

QUESTION 2

- Consider the following inverse demand curve for a product: $P(Q) = 80 - 2Q$ and the total cost function $C(Q) = 40 + 8Q$.
- i. **Derive the total revenue (TR) function** as a function of Q.
- ii. **Derive the average revenue (AR) function** and interpret it economically.
- iii. **Derive the marginal revenue (MR) function**.
- iv. **Find the output level that maximizes total revenue.**
- v. **Find the profit-maximizing output and price.**

QUESTION 3

- A firm has fixed cost FC = 30. Its variable cost is $VC(Q) = 0.05Q^3 - 0.80Q^2 + 12Q$.
- i. Write the **total cost** function TC(Q).
- ii. Derive the **marginal cost** function MC(Q).
- iii. Derive the **average cost** function AC(Q).
- iv. Compute TC, MC, and AC at $Q = 4$ and $Q = 8$.

QUESTION 4