CHAPTER-4 | The Theory of the Firm under Perfect Competition

QUIZ-01

1. What is the formula for total revenue (TR) of a firm under perfect competition?

   A. TR = q ÷ p B. TR = p × q

   C. TR = p + q D. TR = p − q (B)

Explanation : Total revenue is calculated by multiplying market price (p) with quantity sold (q).

2. What is the average revenue (AR) equal to for a price-taking firm?

   A. Marginal cost B. Market price

   C. Total cost D. Profit (B)

Explanation : Average revenue equals the market price under perfect competition.

3. What condition must hold for a firm to maximize profit?

   A. AR = AC B. MR = MC

   C. TR = TC D. MR = AVC (B)

Explanation : Profit is maximized when marginal revenue equals marginal cost.

4. In the short run, a firm will shut down if the price falls below:

   A. Marginal cost B. Average revenue

   C. Average variable cost D. Total cost (C)

Explanation : A firm stops production in the short run if price is below AVC.

5. What type of demand curve does a price-taking firm face?

   A. Downward sloping B. Upward sloping

   C. Perfectly inelastic D. Perfectly elastic (D)

Explanation : Price-taking firms face a horizontal demand curve, i.e., perfectly elastic.

6. What happens to a firm's supply curve if technology improves?

   A. It shifts leftward B. It becomes vertical

   C. It shifts rightward D. It does not change (C)

Explanation : Technological progress lowers costs, shifting the supply curve right.

7. What is the shut down point in the long run?

   A. Minimum AVC B. Minimum AC

   C. Maximum TR D. Zero profit point (B)

Explanation : In the long run, shutdown occurs when price falls below minimum AC.

8. What does the break-even point represent?

   A. Zero output B. Loss minimization

   C. Normal profit

   D. Super-normal profit (C)

Explanation : Break-even point is where the firm earns only normal profit.

9. What is the effect of a unit tax on the firm's supply curve?

   A. Shifts right B. Shifts left

   C. Becomes flat D. Becomes vertical (B)

Explanation : Unit tax increases costs, causing the supply curve to shift left.

10. What is the formula to calculate price elasticity of supply (e_s)?

   A. ΔQ ÷ ΔP B. (ΔP ÷ P) ÷ (ΔQ ÷ Q)

   C. (ΔQ ÷ Q) ÷ (ΔP ÷ P) D. Q ÷ P (C)

Explanation : Price elasticity of supply is the percentage change in quantity supplied divided by the percentage change in price.