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.