CHAPTER-4 | The Theory Of The Firm Under Perfect Competition

QUIZ PART-02

1. **What does price elasticity of supply measure?**
   A. Responsiveness of demand to income
   B. Responsiveness of supply to technology
   C. Responsiveness of quantity supplied to changes in price
   D. Responsiveness of cost to output (C)

Explanation : Price elasticity of supply shows how much the quantity supplied changes when the price of a good changes .

2. **What is the formula for price elasticity of supply (ES)?**
   A. % Change in Demand ÷ % Change in Price
   B. % Change in Supply ÷ % Change in Factors of Supply
   C. % Change in Quantity Supplied ÷ % Change in Price
   D. % Change in Price ÷ % Change in Quantity Supplied (C)

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

3. **If ES = 0, how is supply described?**
   A. Elastic B. Perfectly Elastic
   C. Unitary Elastic
   D. Perfectly Inelastic (D)

Explanation : When ES = 0, a change in price has no effect on quantity supplied, meaning supply is perfectly inelastic .

4. **If ES = ∞, how is supply described?**
   A. Perfectly Elastic B. Unitary Elastic
   C. Inelastic D. Elastic (A)

Explanation : Perfectly elastic supply means that even a tiny change in price results in an infinite change in quantity supplied .

5. **When ES = 1, supply is called:**
   A. Inelastic B. Elastic
   C. Unitary Elastic
   D. Perfectly Elastic (C)

Explanation : If the percentage change in quantity supplied equals the percentage change in price, supply is unitary elastic .

6. **If the price of a commodity increases by 20% and the quantity supplied increases by 40%, what is ES?**
   A. 0.5 B. 1
   C. 2 D. 3 (C)

Explanation : ES = %ΔQs ÷ %ΔP = 40 ÷ 20 = 2, so supply is elastic .

7. **When the price of cricket balls rises from ₹10 to ₹30 and output rises from 200 to 1,000 units, what is ES?**
   A. 1 B. 2
   C. 3 D. 4 (B)

Explanation : ES = (ΔQs/Qs) ÷ (ΔP/P) = (800/200) ÷ (20/10) = 4 ÷ 2 = 2 .

8. **The market price of a good changes from ₹5 to ₹20. Quantity supplied increases by 15 units, and ES = 0.5. What is the initial output?**
   A. 10 units B. 15 units
   C. H20 units D. 30 units (B)

Explanation : Using the elasticity formula and solving, the initial output is 15 units .

9. **If ES < 1, supply is classified as:**
   A. Perfectly Inelastic B. Elastic
   C. Inelastic
   D. Unitary Elastic (C)

Explanation : An elasticity value less than 1 means the percentage change in supply is smaller than the percentage change in price, so supply is inelastic .

10. **Which condition best describes elastic supply?**
   A. Price changes do not affect supply
   B. Supply responds more than proportionately to price changes
   C. Supply responds equally to price changes
   D. Supply responds less than proportionately to price changes (B)

Explanation : Elastic supply means the percentage change in quantity supplied is greater than the percentage change in price .