

CHAPTER-3 | Production and Costs

QUIZ-01

1. What does the production function represent?

- A. Cost of production
- B. Relationship between output and profit
- C. Maximum output from given inputs
- D. Average cost of production (C)

Explanation: A production function shows the maximum quantity of output that can be produced from given quantities of inputs when used efficiently.

2. In the short run, which of the following remains fixed?

- A. Output
- B. Revenue
- C. One of the factors of production
- D. Total cost (C)

Explanation: In the short run, at least one input (like capital or labour) remains fixed while others may vary.

3. Isoquant is a curve that shows :

- A. Same cost combinations
- B. Same profit combinations
- C. Same level of output
- D. Same level of input (C)

Explanation: An isoquant shows all combinations of two inputs that yield the same level of output.

4. Which of the following is U-shaped?

- A. Total Product curve
- B. Marginal Product curve
- C. Isoquant
- D. Production function (B)

Explanation: The marginal product curve initially rises and then falls, forming an inverted U-shape.

5. What is the shape of the Average Fixed Cost (AFC) curve?

- A. Upward sloping
- B. Horizontal
- C. Rectangular hyperbola
- D. Inverted U-shaped (C)

Explanation: Since fixed cost is constant, as output increases, AFC falls, forming a rectangular hyperbola.

6. In which case does the production function exhibit Increasing Returns to Scale (IRS)?

- A. Output increases less than proportionally
- B. Output increases more than proportionally
- C. Output remains constant
- D. Input usage decreases (B)

Explanation: IRS means when all inputs are increased by a certain proportion, output increases by more than that proportion.

7. Marginal Product is calculated as :

- A. Output per unit of labour
- B. Change in output per unit change in input
- C. Total cost divided by labour
- D. Total product divided by capital (B)

Explanation: Marginal Product = Change in output / Change in input, holding other inputs constant.

8. In the long run, all costs are :

- A. Fixed
- B. Variable
- C. Constant
- D. Zero (B)

Explanation: In the long run, all factors are variable and hence all costs are variable.

9. What does the Law of Diminishing Marginal Product state?

- A. MP increases with input
- B. MP is constant
- C. MP falls after a point as input increases
- D. MP equals total product (C)

Explanation: The law states that beyond a certain point, marginal product of a variable input starts falling.

10. Short Run Average Cost (SAC) equals :

- A. $AVC + AFC$
- B. $TC \times q$
- C. $TC - TVC$
- D. $MP \times AP$ (A)

Explanation: SAC is the sum of Average Variable Cost and Average Fixed Cost.