

Introduction to Production Function

Economics · Practice Test · 15 Questions

1. What is a production function?

- A) The cost of inputs
- B) The relationship between inputs and output
- C) The price of a good
- D) The profit of a firm

2. How is a labor-intensive technology defined?

- A) Relies heavily on capital
- B) Relies heavily on human labor
- C) Uses no inputs
- D) Uses equal parts land and capital

3. What does the slope of the production function represent?

- A) Average product
- B) Total cost
- C) Marginal product
- D) Returns to scale

4. What is the formula for Marginal Product of Labor (MPL)?

- A) Total Output / Labor
- B) Change in Output / Change in Labor
- C) Price / Output
- D) Labor / Output

5. What is the Law of Diminishing Returns?

- A) Marginal product eventually declines
- B) Output always increases proportionately
- C) Fixed inputs decrease over time
- D) Labor becomes more productive

6. Why does diminishing marginal product occur?

- A) Workers are lazy
- B) Fixed inputs restrict efficiency
- C) Prices of goods fall
- D) Technology improves

7. What happens to Average Product when Marginal Product exceeds it?

- A) It decreases
- B) It stays the same
- C) It increases
- D) It becomes zero

8. When is Total Product at its maximum?

- A) When marginal product is negative
- B) When marginal product is zero
- C) When average product is zero
- D) When inputs are zero

9. What is the formula for Average Product of Labor?

- A) $\text{Change in } Q / \text{Change in } L$
- B) $\text{Total Output} / \text{Quantity of Labor}$
- C) $\text{Marginal Product} * \text{Labor}$
- D) $\text{Labor} / \text{Total Output}$

10. What are Constant Returns to Scale?

- A) Output grows faster than inputs
- B) Output grows in the same proportion as inputs
- C) Output grows slower than inputs
- D) Output remains constant

11. If inputs double and output increases by 2.75 times, what is this called?

- A) Constant returns to scale
- B) Decreasing returns to scale
- C) Increasing returns to scale
- D) Negative returns to scale

12. If inputs double and output increases by only 1.5 times, what is this called?

- A) Constant returns to scale
- B) Decreasing returns to scale
- C) Increasing returns to scale
- D) Negative returns to scale

13. Rational people think at the margin to decide what?

- A) Whether to hire an extra worker
- B) How to set fixed costs
- C) How to eliminate all labor
- D) How to increase land size

14. Which of these is a factor of production mentioned in the text?

- A) Capital
- B) Profit
- C) Revenue
- D) Tax

15. In the short run, why does the marginal product of labor decline?

- A) Because of variable inputs
- B) Because of fixed inputs
- C) Because of market demand
- D) Because of competition