

# Questions on Production 1

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1. What is the characteristic of *short run* production?
  - A. The relationship between the industry and the final product.
  - B. That there is one fixed factor of production
  - C. The planning horizon of the business
  - D. The period during which the firm must report its profits.
2. The slope of any line between the origin and the total product curve is
  - A The way to find the maximum product
  - B The average product
  - C The maximum marginal product
  - D Impossible to draw
3. The marginal product of labour is
  - A Total output produced by labour
  - B The change in total output from a small change in labour
  - C Total output less the cost of inputs
  - D The total cost of labour divided by its output
4. Which of these describe the production function
  - A It shows the technological relationship between inputs and outputs
  - B It expresses the relationship between costs and revenues

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- C It identifies the characteristics of a particular technology
  - D It helps firms to maximise profits
5. The relationship between total fixed cost and total variable cost is
- A Stable
  - B Narrowing over time
  - C Widening over time
  - D Zero
6. Which of the following are examples of fixed costs
- A The electricity bill
  - B Wages
  - C Gym membership
  - D Petrol
7. Which of the following are factors of production?
- A Land
  - B Labour
  - C Capital
  - D Technology
8. What is happening diminishing returns
- A Marginal Product is positive and rising
  - B Marginal Product is positive but falling
  - C Marginal Product is falling and negative
  - D Marginal Product is constant
9. Please fill in the gaps in the following table that outlines the Total Physical Product (TPP), Average Physical Product (APP) and Marginal Physical Product (MPP) of a short-run production function with different levels of labour input.

Labour Input	TPP	APP	MP
0	0	0	
1	5		5
2	12	6	7
3	20	6.67	
4	25	6.25	
5	28	5.6	3
6		5	2
7	30	4.29	
8	28		
9		2.78	-3
10		2	-5

10. When you have completed the table, please plot the TPP and APP functions on a graph.
11. From the TPP curve, identify those points that represent the maximum and zero point of the MPP curve.