

UNIVERSITY OF FORT HARE  
DEPARTMENT OF ECONOMICS

ALICE CAMPUS

ECO211

TEST 2: 2023

Time: 1 Hour

Subject: Economics 2 – Microeconomics

Marks: 75

This paper consists of 8 pages, including the cover page

Internal Examiner:

Dr D Hompashe

**INSTRUCTIONS**

The test consists of two Sections  
Section A is compulsory  
Choose only TWO questions from Section B.

**SECTION A (Compulsory)**

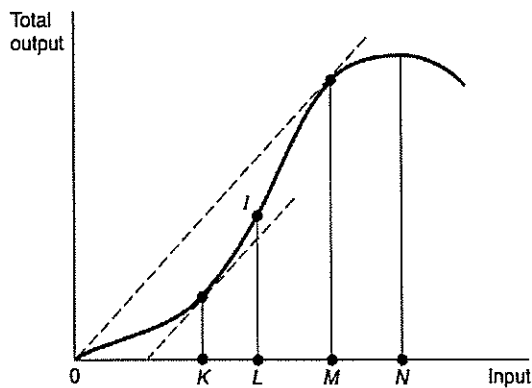
**Question 1: Multiple Choice Questions**

**[25 Marks]**

**Instruction: Indicate the most correct answer**

1. If the prices of both goods increase by the same percent, the budget line will
  - A. shift parallel to the left.
  - B. shift parallel to the right.
  - C. pivot about the x axis.
  - D. pivot about the y axis.
  - E. none of the above
2. A fixed input is an input
  - A. whose quantity can be changed in the short run but not in the long run.
  - B. whose quantity can be changed in the short run or in the long run.
  - C. whose quantity cannot be changed in the short run.
  - D. restored to sound condition after damage or injury.
  - E. that has been fully depreciated.
3. Decisions are made in either the short run or the long run. In economics, the short run is a period
  - A. of less than one year.
  - B. between one year and five years.
  - C. of time in which something about the firm's production process cannot be changed.
  - D. in which the firm can vary any of its inputs.
  - E. None of the above.
4. When the marginal product of a variable input is greater than the average product of that input, we know that
  - A. total product is constant.
  - B. average product is rising.
  - C. marginal product is rising.
  - D. average product is falling.

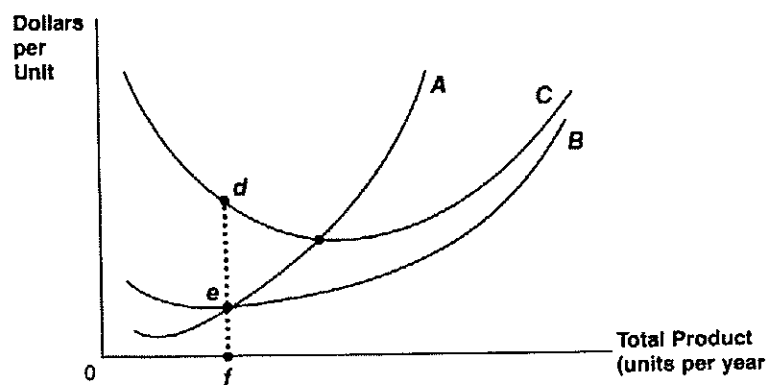
- E. average product equals marginal product.
5. Assume that the dashed lines are parallel and that their common slope is equal to  $b$ . Moreover, assume that  $I$  is an inflection point on the total product curve.



At what level of the variable input do diminishing marginal returns begin to set in?

- A.  $K$
- B.  $L$
- C.  $M$
- D.  $N$
- E. None; the production function does *not* exhibit diminishing marginal returns

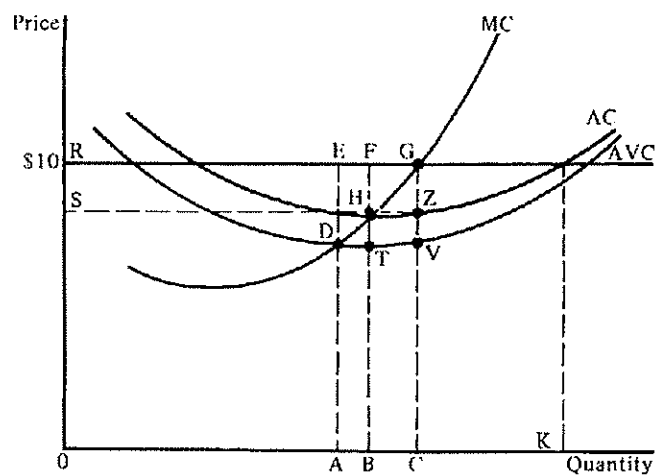
When answering the next 3 questions (11-13), refer to the graph below:



6. Line  $B$  represents

- a. Marginal cost.
  - b. average variable cost.
  - c. average fixed cost.
  - d. average total cost.
7. The vertical difference, at any level of output, between lines *B* and *C* represents
- a. marginal cost.
  - b. average variable cost.
  - c. average total cost.
  - d. average fixed cost.
8. When output equals *O<sub>f</sub>*,
- a. total cost equals *O<sub>f</sub>* times *f<sub>e</sub>*.
  - b. fixed cost equals *O<sub>f</sub>* times *f<sub>e</sub>*.
  - c. total variable cost equals *O<sub>f</sub>* times *f<sub>e</sub>*.
  - d. marginal cost equals *e<sub>d</sub>*.

When answering the next 5 questions (18-22), refer to the graph below:



14. Assume price is \$10. The profit maximizing level of output for the firm is
- a. *OA* where marginal cost just covers *AVC*.
  - b. *OB* where average profit per unit is the greatest.
  - c. *OC* where marginal cost equals the \$10 price.

- d. OK where average cost equals average revenue and the firm earns a normal rate of return.
15. At the profit maximizing level of output, when price is \$10,
- the firm X is earning economic profit.
  - profits per unit are the greatest.
  - average variable cost equals ZC.
  - all of the above.
16. At output level OC, profit per unit is equal to
- GZ.
  - ZV.
  - ED.
  - GC.
17. At output level OC, total profits equal
- FHSR.
  - OSZC.
  - GZSR.
  - ORGC.
18. At output level OC, average fixed cost is equal to
- ZV.
  - GZ.
  - ED.
  - VC.
19. Which of the following statements is true?
- Both goods are normal.
  - Neither good is a Giffen good.
  - The income effect reinforces the substitution effect for the price fall.
  - The income effect reinforces the substitution effect for the price rise.
  - All of the above are true.

20. Decisions are made in either the short run or the long run. In economics, the short run is a period
- of less than one year.
  - between one year and five years.
  - of time in which something about the firm's production process cannot be changed.
  - in which the firm can vary any of its inputs.
  - None of the above.
21. In a production function that expresses both increasing and decreasing returns to the variable factor,
- marginal product will equal average product at the maximum amount of production.
  - marginal product will be greater than average product at maximum production.
  - average product will be positive at the maximum amount of output.
  - average product will be zero at maximum output.
  - None of the above.
22. If total product is falling,
- average product is rising.
  - average product is constant.
  - marginal product is positive but falling.
  - marginal product is negative.
  - none of the above is necessarily true.
23. As long as capital and labor are assumed to be perfectly divisible, isoquants will be
- parallel.
  - nonintersecting.
  - infinite in number.
  - negatively sloped.
  - all of the above.

24. A ray drawn from the origin through a number of isoquants illustrates output levels that can be produced by
- a constant ratio of inputs.
  - a declining ratio of inputs.
  - a fixed amount of inputs.
  - an increasing ratio of the two inputs.
  - none of the above.
25. The most frequently cited reason for increasing returns to scale is
- lower input prices.
  - indivisibility of inputs.
  - external economies.
  - larger fixed costs with a larger plant size.
  - the difficulty of managing a huge enterprise.

## **SECTION B (CHOOSE ONLY TWO QUESTIONS)**

### **QUESTION 2**

- Assume that good X is an inferior good, illustrate and explain the income and substitution effects for an increase in the price of good X. [13 Marks]
- Illustrate and explain the difference between Isocost and isoquants in the theory of production (12)

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### **QUESTION 3**

- Illustrate and explain what is meant by Pareto efficiency in exchange/consumption. (12 marks)
- Illustrate diagrammatically and explain how the Engel curve for a normal good and a Backward Bending Engel Curve is derived from a two-good consumer equilibrium diagram. (13)

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### **QUESTION 4**

- Illustrate and explain what is meant by a constant cost industry. (10 marks)
- Define the following terms

- (i) Normal Profit (3)
- (ii) Marginal Cost (3)
- (iii) Marginal Product (3)
- (iv) Break-even point (3)
- (v) Marginal Rate of Substitution (MRTS) (3) ***/25/***