INDIAN SCHOOL AL WADI AL KABIR

Class: XI	Department: Commerce
	Topic: Theory of Production Cost Revenue and Supply

MCQ:

1. The marginal product of a variable input is best described as:
   a) Total product divided by the number of units of variable input.
   b) The additional output resulting from one unit increase in the variable input.
   c) The additional output resulting from one unit increase in both the variable and fixed inputs.
   d) The ratio of the amount of the variable input that is being used to the amount of the fixed input that is being used.

2. Which of the following two curves start from the same point on the Y axis?

   a. TVC and TFC
   b. TFC and AVC
   c. TFC and TC
   d. TFC and AFC

3.Diminishing marginal returns implies:
   a) Decreasing average variable costs.
   b) Decreasing marginal costs.
   c) Increasing marginal costs.
   d) Decreasing average fixed costs.

4. The short run, as economists use the phrase, is characterized by:
   a) At least one fixed factor of production and firms neither leaving nor entering the industry.
   b) A period where the law of diminishing returns does not hold.
   c) No variable inputs that is all the factors of production are fixed.
   d) All inputs being variable.

5. The marginal, average, and total product curves encountered by the firm producing in the short run exhibit all of the following relationships except:
   a) When total product is rising, average and marginal product may be either rising or falling.
   b) When marginal product is negative, total product and average product are falling.
   c) When average product is at its maximum, marginal product equal**s** average product, and total

product is rising.

d) When marginal product is at a maximum, average product equals marginal product, and total product is rising.

6. Which one of the following statements is the best definition of production function?
   a) The relationship between market price and quantity supplied.
   b) The relationship between the firm's total revenue and the cost of production.
   c) The relationship between the quantities of inputs needed to produce a given level of output.
   d) The relationship between the quantity of inputs and the firm's marginal cost of production.

7. Diminishing returns occur:
   a) When units of a variable input are added to a fixed input and total product falls.
   b) When units of a variable input are added to a fixed input and marginal product falls.
   c) When the size of the plant is increased in the long run.
   d) When the quantity of the fixed input, is increased and returns to the variable input falls.

8. If the marginal product of labour is below the average product of labour, it must be true that:
   a) The marginal product of labour is negative.
   b) The marginal product of labour is zero.
   c) The average product of labour is falling.
   d) The average product of labour is negative.

9. The average product of labour is maximized when marginal product of labour:
   a) Equals the average product of labour.
   b) Equals zero.
   c) Is maximized.
   d) None of these.

10. The law of variable proportions is drawn under all of the assumptions mentioned below except the assumption that:
    a) The technology is changing.
    b) There must be some inputs whose quantity is kept fixed.
    c) We consider only physical inputs and not economically profitability in monetary terms.
    d) The technology is given and stable.

11. Average product is defined as:
    a) Total product divided by the total cost.
    b) Total product divided by the marginal product.
    c) Total product divided by the variable input.
    d) Marginal product divided by the variable input.

12.
    The change in the total product resulting from a change in a variable input is:
    a) Average cost
    b) Average product
    c) Marginal cost

d) Marginal product

13. Marginal product, mathematically, is the slope of the
    a) Total product curve
    b) Average product curve
    c) Marginal product curve
    d) Implicit product curve

14. A production function states that there exists a technical relationship between:
    a. Input prices and output prices
    b. Input prices and quantity of output
    c. The quantity of inputs and the quantity of output.
    d. The quantity of inputs and input prices.

15. The expenditure incurred on the factors of production supplied by the entrepreneur himself comes under:
    a. Implicit cost
    b. Explicit cost
    c. Fixed cost
    d. Variable cost

16. Whenever MP is less than AP, the AP must be:
    a. Rising
    b. Falling
    c. Equal to marginal product
    d. None of the above

17. In the short run, when a firm produces zero output, its total cost is equal to::
    a. Zero
    b. Variable cost
    c. Fixed cost
    d. Marginal cost

18. Rent, wages of permanent staff are the examples of ------------

19. -------- shows the functional relationship between physical inputs and physical output of a good.

20. Whenever MR becomes negative, TR:
    a. Becomes maximum
    b. Starts increasing
    c. Starts decreasing
    d. Remains constant

21. Other things being constant, there exists ------ relationship between price and quantity

supplied.

a. Direct
b. Negative
c. Proportionate
d. Cannot be explained

22. The cause of upward movement along a supply curve is --------

23. Which of the following does not cause shift of supply curve of a good?
a. Price of input
b. Price of the good
c. GST
d. Subsidy

24. Due to change in price, if there is more than proportionate change in quantity supplied of a good, the supply is considered to be:
a. Perfectly elastic
b. Relatively inelastic
c. Relatively elastic
d. Perfectly inelastic

25. Which of the following curves is not affected by fixed cost?

a. MC
b. TC
c. AC
d. AFC

Assertion n Reasoning Questions:

Alternatives:

a. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
b. Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A)
c. Assertion (A) is true, but Reason (R) is false.
d. Assertion (A) is false, but Reason (R) is true.

1. **Assertion (A):** Raw material is a fixed capital.
Reason (R): Raw material is used up during the production process.

2. **Assertion (A):** There is a basic constraint in raising farm production.
Reason (R): Area under cultivation is practically fixed.

3. **Assertion (A):** Variable factors can be changed in the short run.
Reason (R): Variable factors are not required in case of zero output.

4. **Assertion (A):** TFC curve is a vertical straight line parallel to the Y axis.
Reason (R): TFC remains same for all levels of output.

5. **Assertion (A):** TC and TVC curves are parallel to each other.
Reason (R): The vertical distance between and TC and TVC curves is the TFC which remains constant for all levels of output.

6. **Assertion (A):** AFC curves can never touch the Y axis.
Reason (R): TFC can never be zero.

7. **Assertion (A):** When price remains constant for all levels of output, then the TR curve is a positively sloped straight line.
Reason (R): In case of constant prices, MR is constant, i.e TR increases at a constant rate.

8. **Assertion (A):** TR curve starts from the origin.
Reason (R): TR is zero at zero level of output.

9. **Assertion (A):** An individual supply curve slope upwards.
Reason (R): There exists a positive relationship between price and quantity supplied.

10 **Assertion (A):** Contraction in supply leads to a downward movement along the same supply curve.
Reason (R): Downward movement along the same supply curve occurs due to rise in price of the same commodity, other things remaining constant.

11. **Assertion (A):** Law of supply is a qualitative statement.
Reason (R): Law of supply indicates the magnitude of change in the quantity supplied.

12. **Assertion (A):** In case of inelastic supply, the supply curve is a vertical straight line.
Reason (R) : Supply does not change with change in price in case of inelastic supply or Es = 0.

13. **Assertion (A):** Price elasticity of supply is more than one in case of elastic supply.
Reason (R): Proportionate change in price is less than proportionate change in supply in case of elastic supply.

Case-Based Questions:

Story of Arif

There is a small village in Andhra Pradesh. This village does not have a regular supply of electricity and natives of the village face frequent power cuts. This village has many small firms. One such firm is owned by Arif. This firm produces torches used by the natives at night. Let us suppose Arif has to pay Rs. 1,400 every month as fixed cost of this firm. In addition, Arif also spends Rs. 60 for manufacturing each unit of torch produced. (There are other costs borne by the firm but we have not included them for simplification). How many torches can it produce within a budget of Rs 5,000?

Question-Answers:

1. Law of variable proportions must operate, even when all factors of production are variable. True or false? Justify with reason. (Refer notes)

2. Explain the effect of technological progress on supply of a good.
3. What is the likely effect on the supply of a good if a unit tax is imposed on that good?
4. A producer starts a business by investing his own savings. He employs a manager to look after the business. Identify implicit and explicit costs from this information. Explain.
5. A producer takes a building on rent for carrying out business. He looks after the business himself. Identify the implicit and explicit costs from this information. Explain.
   a. Payment of rent for hiring a building is an explicit cost as it is a payment made to the owners of the buildings.
   b. The imputed salary of the producer is an implicit cost as he looks after the business himself.
6. What does the positive sign in the formula $\frac{\Delta p}{\Delta q}$ indicate? Explain.

HOTS:

1. When AP is maximum, what is the relation between MP and AP?
2. Classify into FC and VC: Salary of permanent staff, excise duty, sales tax
3. A producer borrows money and opens a shop. The shop premise is owned by him. Identify the implicit and explicit cost from this information.
4. A farmer takes a farm on rent and carries on farming with his own family members. Identify the explicit and implicit cost.