Chapter 4

II. Very Short Answer Questions:

21. Define cost.

➔ Cost refers to the total expenses incurred in the production of a commodity.

➔ Cost analysis refers to the study of behaviour of cost in relation to one or more production

22. Define cost function.

The functional relationship between cost and output is expressed as 'Cost Function'.

$$C = f(Q)$$

where, C=Cost and Q=Quantity of output.

23. What do you mean by fixed cost?

- Fixed Cost does not change with the change in the quantity of output.
- Fixed cost is also called as 'Supplementary Cost' or 'Overhead Cost'.

24. Define Revenue.

The amount of money that a producer receives in exchange for the sale of goods is known as

$$TR = P \times Q$$

revenue. In short, **revenue means sales revenue.**

25. Explicit Cost - Define.

It refers to the actual expenditures of the firm to purchase or hire the inputs the firm needs.
Examples: i) wages, ii) payment for raw material and etc.,

26. Give the definition for 'Real Cost'.

- Real cost refers to the payment made to compensate the efforts and sacrifices of all factor owners for their services in production.
- It includes the efforts and sacrifices landlords in the use of land.

27. What is meant by Sunk cost?

- A cost incurred in the past and cannot be recovered in future is called as Sunk Cost.
- It is called as sunk because, they are unalterable, unrecoverable, and if once invested it should be treated as drowned or disappeared. Example : Cost of specialized equipments.

III. Short Answer Questions:

28. Distinguish between fixed cost and variable cost.

Fixed Cost	Variable Cost
It refers to the cost incurred on the fixed factors of production	Its refer to the cost incurred on the variable factors of production
This cost remains constant irrespective of the levels of outputs	It varies with levels of outputs
Even if the outputs is nil, fixed cost will be incurred	This cost will increase /decrease with the levels of outputs.
This is also known as supplementary costs or overhead costs	This is also known as prime costs.
Its includes: a) Rent for the building b) Interest paid on capital	It includes a) Prices of raw materials b) Wages of labours

29. State the differences between money cost and real cost.

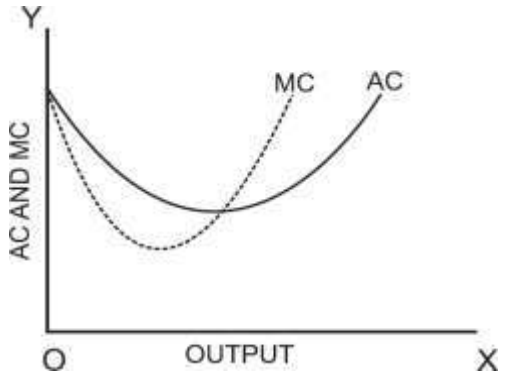
Money Cost	Real Cost
Production cost expressed in money terms is called as money cost.	The efforts and sacrifices of all factor owners for their services in production.
It includes the expenditures such as cost of raw materials, payment of wages and salaries,	It includes the efforts and sacrifices of landlords in the use of land, capitalists
These costs are considered as out of pocket expenses.	Adam Smith regarded pains and sacrifices of labour as real cost of production.
Money costs are also called as Prime Cost or Direct Cost or Nominal Cost	It is also called opportunity cost or displacement cost

30. Distinguish between explicit cost and implicit cost.

Explicit Cost	Implicit Cost
It includes actual money expenditure incurred by a firm in hiring or buying the factors it needs in the production process	It is not actual money expenditure but is the cost of factors owned by the firm and used by the firm in its production process
It is explicitly shown in the firm's books of accounts and is thus, called accounting costs	It does not enter in the firm's books of accounts
It is a payment concept	It is a receipt concept, i.e., the payments are received by producer for supplied services
Examples: Wages, rent, interest, insurance, etc	Examples: Wages of self labor, rent for self owned premises, etc

31. Define opportunity cost and provide an example.

1. It refers to the cost of next best alternative use.
2. In other words, it is the value of the next best alternative foregone.
3. For example, a farmer can cultivate both paddy and sugarcane in a farm land.
4. Opportunity Cost is also called as 'Alternative Cost' or 'Transfer Cost'.



- When MC < AC, AC falls
- When MC = AC, AC is constant and at its minimum point
- When MC > AC, AC rises

32. State the relationship between AC and MC.

- When AC is falling, MC lies below AC.
- When AC becomes constant, MC also becomes equal to it.
- When AC starts increasing, MC lies above the AC.
- MC curve always cuts AC at its minimum point from below.

33. Write a short note on Marginal Revenue.

Marginal cost is the addition made to the total cost by producing one extra unit of output.

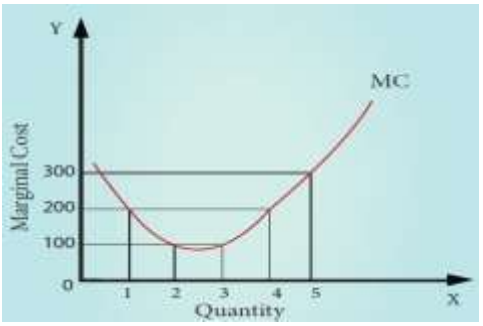
$$MC = \Delta TC / \Delta Q$$

where MC denotes Marginal Cost, ΔTC denotes change in total cost and ΔQ denotes change in total quantity.

The other method of estimating MC is :

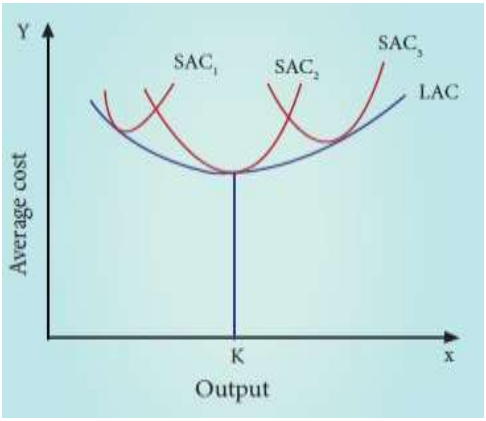
MC=TCn –TCn-1 or***TCn+1 –TCn***

where, 'MC' denotes Marginal Cost, 'TCn' denotes Total cost of 'n'th item, TCn-1 denotes Total Cost of 'n-1' th item, TCn+1 denotes Total Cost of n+1 th item.



34. Discuss the Long run cost curves with suitable diagram.

1. In the long run all factors of production become variable.
2. The existing size of the firm can be increased in the case of long run.
3. There are neither fixed inputs nor fixed costs in the long run.



1. LAC = LTC/Q where, LAC denotes Long-Run Average Cost, LTC denotes Long- run Total Cost and Q denotes the quantity of output.
2. Th e LAC curve is derived from short- run average cost curves.
3. It is the locus of points denoting the least cost curve of producing the corresponding output.

Other names of LAC:

The LAC curve is called as 'Plant Curve' or 'Boat shape Curve' or 'Planning Curve' or 'Envelop Curve'.

IV. Long Answer Questions:

35. If total cost = 10+Q3, find out AC, AVC, TFC, AFC when Q=5.

TC = TFC + TVC

AVC = $\frac{TVC}{Q}$

AFC = $\frac{TFC}{Q}$

AC = $\frac{TC}{Q}$

(i) TC = 10 + Q3. Total cost has two components TFC and TVC.
(ii) TFC = is the total fixed cost which does not change with the level of output.
(iii) It is determined by putting the value of Q.
(iv) Given the total cost function TC = 10 + Q3
Q = units of output where Q = 5
Here TFC = 10 (TFC will not change when output changes)
TC = 10 + (5)3
TC = 10 + 125
TC = 135
135 = 10 + TVC
135 – 10 = TVC
125 = TVC

TVC =125, TC = 135, therefore TFC ?
TC = TFC + TVC
135 = *x*+ 125
135- 125 = 10

TFC = 10

AFC = $\frac{TFC}{Q}$

AFC = $\frac{10}{5}$

AFC= 2

AVC = $\frac{TVC}{Q}$

AVC = $\frac{125}{5}$

AVC= 25

AC = $\frac{TC}{Q}$

AC = $\frac{135}{5}$

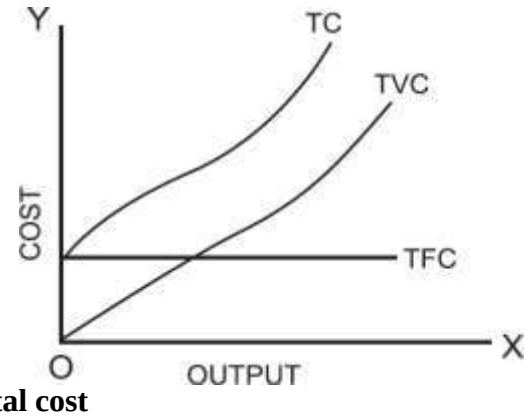
AC= 27

36. Discuss the short run cost curves with suitable diagram.

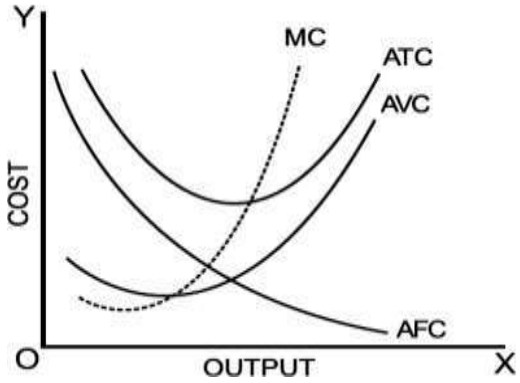
Short run cost curves:

1. **TFC** - Total Fixed Cost Curve
2. **TVC** - Total Variable Cost Curve
3. **TC** - Total Cost Curve
4. **AFC** - Average Fixed Cost Curve
5. **AVC** - Average Variable Cost Curve
6. **AC OR ATC** - Average Cost or Average Total Cost
7. **MC** - Marginal Cost

Total Cost Curves



Short run average cost curves



Total cost

Total cost is the sum of total fixed cost and total variable cost.

$$TC = TFC + TVC,$$ where

TC = Total cost
TFC = Total Fixed cost (cost of fixed factors)
TVC = Total variable cost (Cost of Variable Factors)

Short run average cost curves

Average Fixed Cost (AFC)

The average fixed cost is the fixed cost per unit of output. It is obtained by dividing the total fixed cost by the number of units of the commodity produced.

$$AFC = TFC / Q$$

Average Variable cost (AVC)

Average variable cost is the variable cost per unit of output. It is the total variable cost divided by the number of units of output produced.

$$AVC = TVC / Q$$

Average Total Cost or Average Cost

Average total cost is simply called average cost which is the total cost divided by the number of units of output produced.

$$AC = TC / Q \text{ (or)}$$
$$AC = AFC+AVC$$

Marginal Cost

Marginal cost is defined as the addition made to the total cost by the production of one additional unit of output.

$$MCn = TCn – TCn-1$$

37. Bring out the relationship between AR and MR curves under various price conditions.

Average Revenue

Average revenue is the revenue per unit of the commodity sold. It is calculated by dividing the total revenue by the number of units sold.

$$AR = TR / Q$$

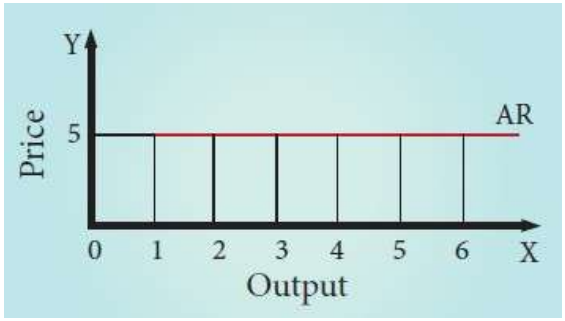
Marginal Revenue

Marginal Revenue is the addition made to the total revenue by selling one more unit of a commodity.

$$MRn = TRn – TRn\text{-}1$$

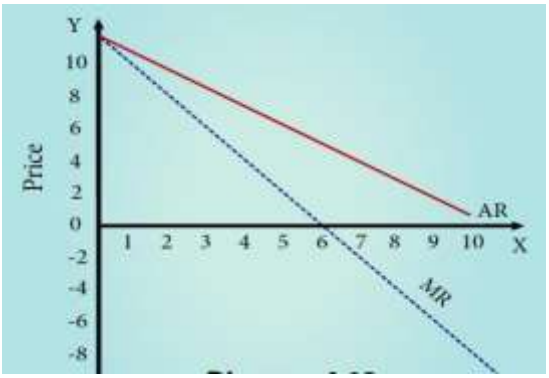
Constant AR and MR (at Fixed Price)

Quantity Sold (Q)	Price (P) ₹	Total Revenue (TR) ₹	Average Revenue (AR) ₹	Marginal Revenue (MR) ₹
1	5	5	5	5
2	5	10	5	5
3	5	15	5	5
4	5	20	5	5
5	5	25	5	5
6	5	30	5	5



Declining AR and MR (at declining Price)

Quantity Sold (Q)	Price (P)/ Average Revenue (AR) ₹	Total Revenue (TR) ₹	Marginal Revenue (MR) ₹
1	10	10	-
2	9	18	8
3	8	24	6
4	7	28	4
5	6	30	2
6	5	30	0
7	4	28	-2
8	3	24	-4
9	2	18	-6
10	1	10	-8



Explanation

1. If a firm is able to sell additional units at the same price then AR and MR will be constant and equal.
2. If the firm is able to sell additional units only by reducing the price, then both AR and MR will fall and be different.

Chapter 5

II. Very Short Answer Questions:

21. Define Market.

In Economics, the term 'market' refers to a system of exchange between the buyers and the sellers of a commodity, directly or indirectly.

22. Who is price-taker?

1. A **price taker** is a seller who has no control to fix **prices** for a good or service.
2. A price taker simply has to accept the market price.

23. Point out the essential features of pure competition.

a. Large Number of Buyers and Sellers
b. Homogeneous Product and Uniform Price
c. Free Entry and Exit
d. Absence Of Transport Cost

24. What is selling cost?

Selling costs refer to those expenses which are incurred for popularizing the differentiated product and increasing the demand for it.