5 Cost of Production and Concept of Revenue

Introduction

In Economic Analysis it is mainly important to understand concept of cost and revenue to understand behaviour of firm. As there is change in quantity of production there is change in total cost by cost we come to know the debit side and by revenue we come to know the credit side of the firm. Concept of revenue and cost determind the normal production level :

(1) Helps firms to decide price of its commodity.

(2) Provides guidelines to maximise the profit of the firm.

(3) Marginal cost is useful to explain maximum profit.

(4) Concept of marginal cost is helpful to understand the behaviour of a firm.

(5) Concepts of cost and revenue play an important role in taking decisions like, what amount of factors of production are invested by firms, how much employment is given, what amount of production and investment is done.

(6) Concept of opportunity cost is important to in know the alternative uses of factor of production in managerial economics.

(7) Concepts of monetary cost is useful to give guideline for the administration of a firm.

Due to above mentioned causes, it is important to study cost and revenue of a firm. To produce any goods or services what ever expenditure is incurred that is known as cost of production. First we will study different concepts of cost of production.

5.1 Various Concepts of Cost

5.1.1 Real Cost : Concept of real cost was given by classical economist. They had presented this concept in context of main factor of production land and labour but in modern times this concept is considered in context of capitalist and entrepreneur also.

According to Marshall 'The labourers, capitalists and entrepreneurs who are involved in the process of production bear psychological and physical burden. Such burden is called real cost. Money spent by many producers for production work of goods is not only production cost but the fatigue, boredom tension, stress. faced by the labourers, the capitalist who sacrifice their saving and capital face anxiety, insecurity of indecisiveness are the factors included in the real cost. Real cost can not be presented in Monetary term therefore real cost is also called non-monetary cost. Prof. Marshall says, the factors of production face this real cost and to attract them return is given in the form of wage, interest and profit.

Problems in Measuring Real Cost : Real cost includes fatigue, boredom, pain, scrifice and anxiety. The goods which have psychological impact are difficult to be measured. Moreover, the smoke emitted by factories created adverse effect on health of the people of surronding area. The adverse effect is also a cost in social view and therefore it cannot be measured.

5.1.2 Opportunity Cost : The Concept of opportunity cost was presented by Austrian economist but it was properly presented by. Marshall. The means of production have alternative uses i.e. more than one use. This concept is basesd on the particular charactristic of factor of production when a factor is used for a particular use, the other use is left out or the same cannot be used for other purpose therefore the best alternative which one is left is the opportunity cost of production. For example, on one field or piece of land of wheat is produced then at the same time on the same piece of land other foodgrain (crop) cannot be produced, worker is working in textile mill so at the same time he cannot work in any other industry, this way factor of production have alternative uses.

Meaning-Explanation : If factor of production is used in the production of one commodity so the next best alternative is left out. The cost of unborn or unproduced commodity is the opportunity cost of produced commodity. This can be understood with the help of one example. One piece of land can be used to produce wheat or rice. If wheat is produced on that piece of land the income of 2 lakh ₹ can be earned and if Rice is produced the income of ₹ 3.5 lakh can be earned, farmar behaviour is rational and logical. So he will leave the production of wheat and produce rice in which he is earning total ₹ 3.5 lakh. To get the income of ₹ 3.5 lakh from the production of rice, farmer left out income of ₹ 2 lakh from the production of wheat. So the left out income of ₹ 2 lakh from the production of wheat is the opportunity cost of ₹ 3.5 lakh earned from the production of rice.

Problems in Measuring of Opportunity Cost :

(1) Factors with One Use : If any factor of production has only one use then its opportunity cost cannot be decided. For example, some piece of land is only used to produce grass so far as that piece of land opportunity cost cannot be calculated. It will be applied for unemployed person also. They have no work so how can we calculate alternative cost.

(2) Factor having Specific Use : If factors of production are specific factor, then this concept is not useful. Returns of these factors are not decided by their alternative uses but it is decided on the basis of their demand For example, persons having expertise over computers, scientist having knowledge of automic power etc.

5.1.3 Monetary Cost : Concept of monetary cost is useful in economic analysis, decisions related to production and in price determination because real cost and opportunity cost have many limitations, cost of production is calculated in terms of money therefore concept of monetary cost is important. Producer having objective of maximum profit produces goods at low cost and tries to maximise profit from the in

come by selling the product. The cost of production in terms of money is known as monetary cost. For example, if a factory producing pens incur the cost of ₹ 50,000 to produce 1000 units of pen. So the monetary cost to produce 1,000 units of pen is ₹ 50,000.

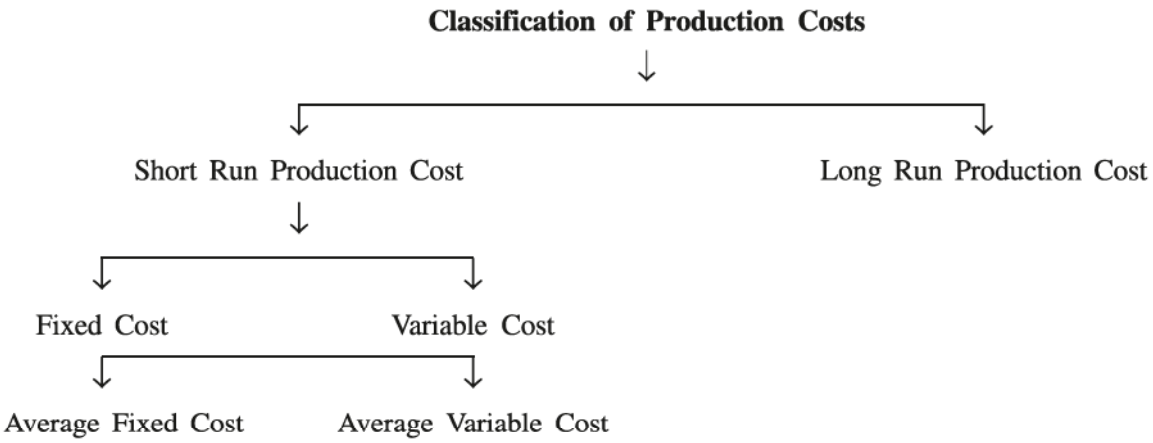
5.2 Short Term and Long Term (Short Run and Long Run Periods in Economics)

According to time period also, in short term monetary cost is presented. There are some factors of production whose quantity can be changed easily with the change in quantity of factors of production. Quantity of production also changes. Raw material, extra labourers, fuel are those factors which can be changed in short peroid therefore they are known as variable factors. Expenditure on those factors is known as variable cost. On the other hand machinery, building of factory, administrative staff can not be changed (increase) in short period of time therefore they are known as fixed factor of production and cost of such factors is known as fixed cost of production.

Short Term : A short term is such a period in which a producer cannot change the size of firm but can increase production by use of factors of productions–capacity. Short term is such a time period in which certain factor of production are fixed. For example, plant, heavy machinery, building of a factory etc. with the increase or decrease of variable factors like raw matereal, labour, electricity etc production can be increased or decreased.

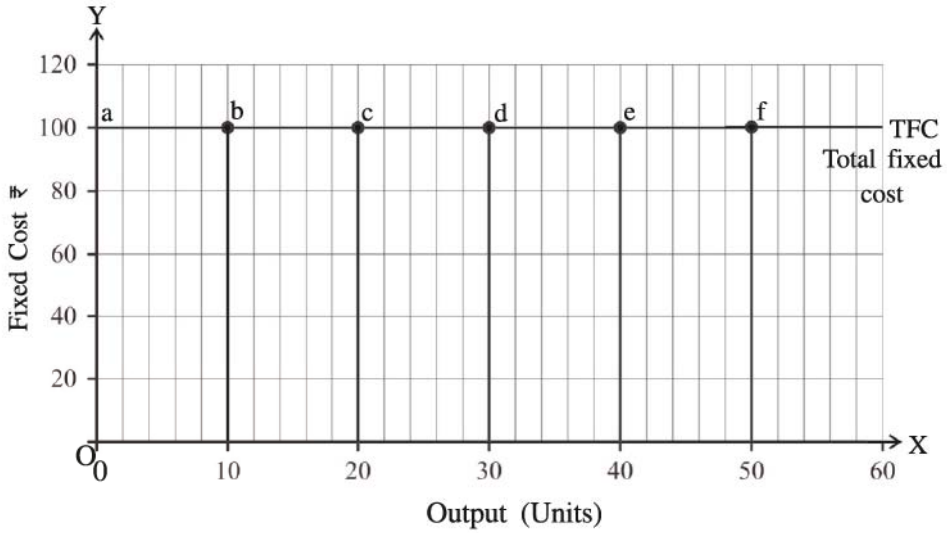
Long Term : Long term is a period in which a producer can change all the factors of production, so in this period all factors of production are variable. For example, plant, heavy machinery, building of a factory etc. By increasing or decreasing these factor of production, production can be increased or decreased in long term. Producer can change the size of the firm and doing so he can change the total production to a large extent in a long term. Firm increases the size of the firm by new and modern technology.

5.3 Classification of Production Costs



5.3.1 Fixed Cost : In short period, either production increases, decreases or remains zero. There is no change in production cost, that type of cost is known as fixed cost. Fixed cost is also known as overhead cost. In short period there is no relation between fixed cost and quantity of production following things are inclueded in the fixed cost. For example, permanent staff's salary, rent of factory building, house-property tax, licence fee, interest on capital, premium of insurence etc. Let us understand the fixed cost with the help of schedule and diagram.

Units of Output	Total Fixed Cost (₹)
00	100
10	100
20	100
30	100
40	100
50	100



5.1 Diagram of Total Fixed Cost

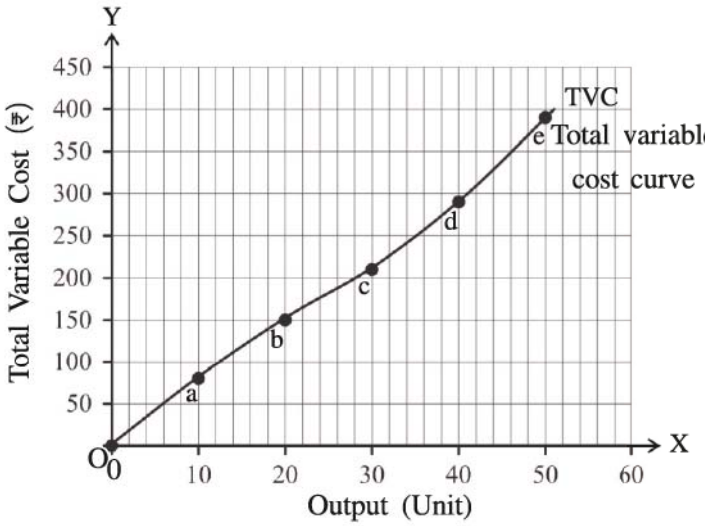
In schedule, it is shown that production of pen is either 00 or 10, 20, 30, 40, 50 with the increase in units of production, cost remains the same i.e. ₹ 100 This cost is fixed. This types of cost is known as total fixed cost, here production unit changes but cost does not change therefore it is known as total fixed cost.

Diagramatic Presentation : In diagram on X-axis output (unit) is measured and on Y-axis total fixed cost in ₹ is shown. According to diagram either production is 00 or 10, 20, 30, 40 or 50 production cost is ₹ 100 only in the diagram TFC curve is parallel to X-axis.

5.3.2 Variable Cost : When cost incurred on variable factors by producer is called variable cost. In short term with the change in quantity of production cost also changes with the increase in production, cost also increases and with the decrease in production, cost also decreases and if production is zero than cost is also zero. It is known as variable cost. Variable cost is also known as unstable or direct or main cost. This cost has direct (positive) relation with quantity of production. In variable costs following things are included. For example, price of raw material, energy consumption, transportation expenditure, labour wages, tax on product and sale tax etc. As production increases this cost also increases. Therefore this is known as variable cost. Difference between fixed cost and variable cost is possible in short period of time only. In a long run (period) all costs are variable.

When production is zero, variable cost is zero but as production increases, variable cost also increases. From the table, we can see that till 30 units variable cost is increasing at a diminishing rate because increasing returns to scale is applicable. After 30 units decreasing return to scale is applicable due to that variable cost is increasing at increasing rate.

Units of Output	Total Variable Cost (₹)
00	00
10	80
20	150
30	210
40	290
50	390



5.2 Diagram of Total Variable Cost

In diagram on X-axis output (Units) is measured and on Y-axis total variable cost in ₹ is measured. As production increases from 10, 20, 30 total variable cost also increases from 80, 150, 210 total variable cost has positive slope from initial point as it increases at decreasing rate initially, later on at increasing rate.

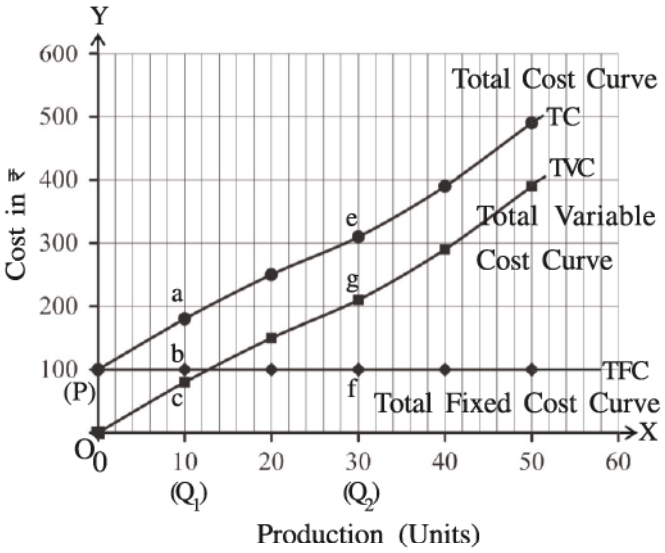
In short term, fixed cost is fixed but variable cost keeps on changing. This cost is directly related with production that is why Prof. Marshall has said variable cost as a main cost.

5.3.3 Total Cost : There is a cause effect relationship between total production and total cost. If total production is more, then total cost is also more, sum of total fixed cost and total variable cost is equal to total cost.

TC = TFC + TVC

With the increase in production fixed cost remains fixed but variable cost increases. Total cost increases as increase in amount of variable cost. Therefore TC curve is above TVC curve. Note that the difference between TC and TVC is constant because of which TC and TVC are parellel to each other. We can see in diagram.

Production (Unit)	Total Fixed Cost (₹)	Total Variable Cost(₹)	Total Cost (₹)
00	100	00	100
10	100	80	180
20	100	150	250
30	100	210	310
40	100	290	390
50	100	390	490



5.3 Diagram of Total Cost

On X-axis production and on Y-axis cost is shown with the increase in production. There is no change in fixed cost but variable cost increases. As a result of increase in production total cost also increases. Total cost curve begins from point P on Y-axis. This shows that if output is zero then also TFC = 100 (OP), while TVC = 0. As the production increases TFC remains constant and TVC increases. Due to this TVC curve moves upward from left hand side to right hand side and TC curve is upside and parallel to TVC curve.

When,

(1) Production is zero TVC is 0

(2) Production is zero TFC is OP and VC is 0 and TC is OP.

(3) Production is OQ_1 then TFC is Q_1b, VC is Q_1c and TC is Q_1a.

(4) Production is OQ_2 then TFC is Q_2f, VC is Q_2g and TC is Q_2e.

5.3.4 Average Fixed Cost : Average Fixed Cost is the cost of per unit of output. By dividing total fixed cost of a firm with production unit we get Average Fixed Cost.

$$\text{Average Fixed Cost} = \frac{\text{Total Fixed Cost}}{\text{Total Production Unit}}$$

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

AFC = Average Fixed Cost

TFC = Total Fixed Cost

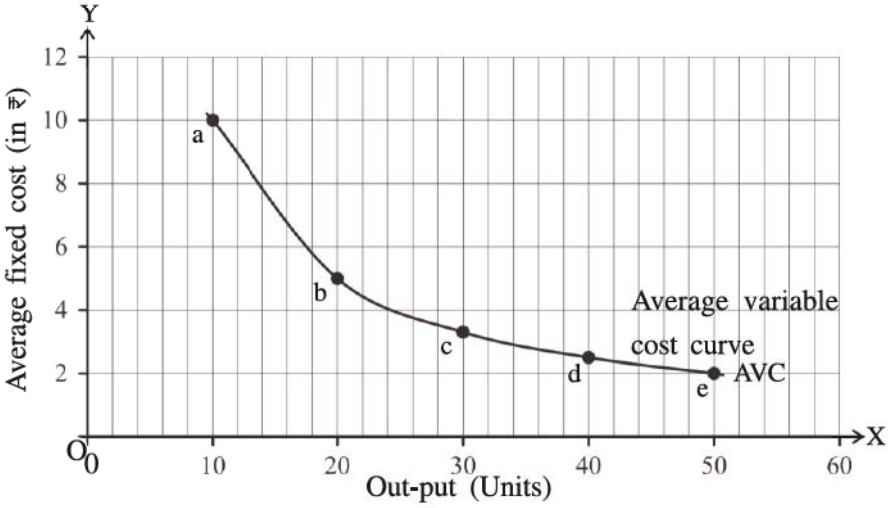
TP = Total Production

Let's try to understant with an examples e.g. One company total fixed cost is ₹ 50,000 and producer produces 1000 units of commodity then

$$\text{Average Fixed Cost is} = \frac{50000}{1000} = 50 \text{ ₹}$$

When production increases the total fixed cost is distributed among more units, therefore with the increase in production, average fixed cost decrease and therefore average fixed cost curve is a downward sloping curve. In schedule and diagram relation between production and average fixed cost is shown :

Out-put (Units)	Total Fixed Cost(₹)	Average Fixed Cost(₹)
10	100	10
20	100	05
30	100	03.3
40	100	02.5
50	100	02



5.4 Diagram of Average Fixed Cost

In diagram 5.4, it is shown that as output increases, average fixed cost decreases. On OX-axis output (Units) is shown and OY-axis average fixed cost in ₹ is shown. average fixed cost decreases as output increases. It means that average fixed cost curve is having left to right upward to downward slope. average fixed cost decreases but it never become zero.

5.3.5 Average Variable Cost : Total variable cost of a firm divided by total units produced, we get average variable cost. Average variable cost is the variable cost per unit of output. This concept is useful in taking a decision regarding continuing production, increasing production or closing down. To find out this cost, formula is on page 52.

$$\text{Average Variable Cost} = \frac{\text{Total Variable Cost}}{\text{Total Production (Units of Production)}}$$

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

AVC = Average Variable Cost

TVC = Total Variable Cost

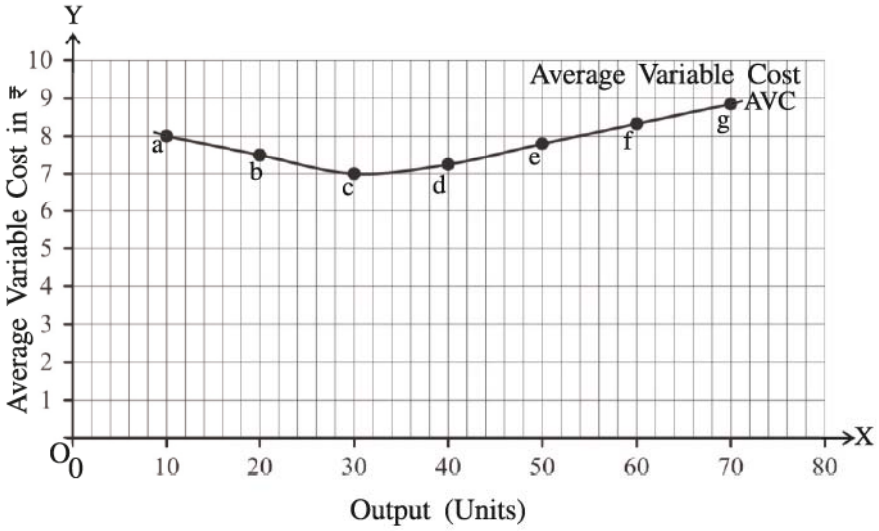
TP = Total Production

For example, suppose firm's total variable cost is ₹ 150 and a firm produce 20 units of output then

$AVC = \frac{150}{20} = ₹\ 7.5$

As output increases, average variable cost also increases. Intially with the increase in production Average Variable Cost decreases, then it become minimum and after that with the increase in production Average Variable Cost also increases. It means it has relation with the volume of production. This can be understood with the help of table and diagram.

Out Put (Units)	**Total Variable Cost TVC (₹)**	**Average Variable Cost (AVC) (₹)**
10	80	8
20	150	7.5
30	210	7
40	290	7.25
50	390	7.8
60	500	8.33
70	620	8.85



5.5 Diagram of Average Variable Cost

In diagram 5.5, output is shown on X-axis and AVC is on Y-axis. Here in the diagram first average Variable Cost move left to right upward to downward means negative slope curve, which indicates that in beginning as output increases average variable cost decreases but after the production of thirty (30) units, average variable cost is an increasing trend. Because in the beginning, increasing return to scale and afterward decreasing return to scales law may apply.

5.3.6 Average Cost : Average cost is also known as average total cost. Average cost is cost per unit of production. Average cost is found by dividing total cost by units of production. Total cost is a sum of total fixed cost and total variable cost therefore total fixed cost + total variable cost is divided by production unit we get average cost.

$$\text{Average cost} = \frac{\text{Total Cost}}{\text{Total Production (Units of Production)}}$$

OR

$$\text{Average cost} = \frac{\text{Fixed Cost + Variable Cost}}{\text{Total Production (Units of Production)}}$$

$AC = \frac{TC}{TP}$ in which, AC = Average Cost

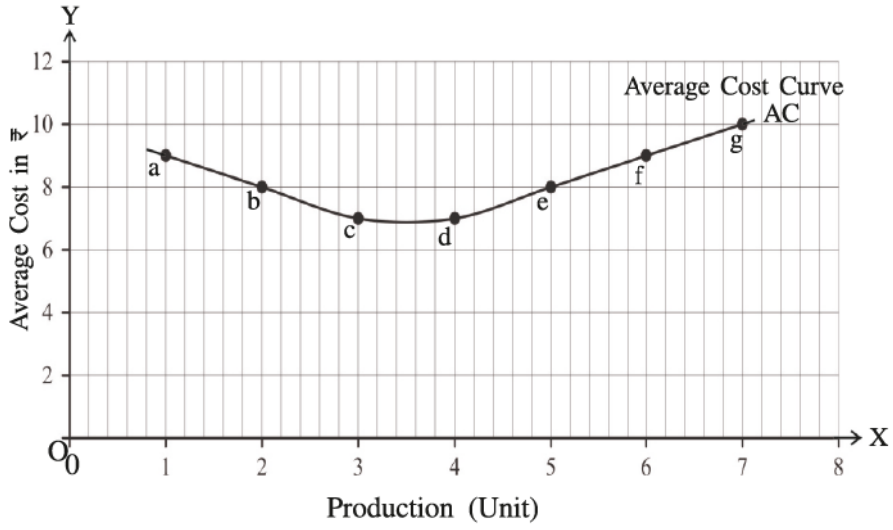
TC = Total Cost

TP = Total Production

Example : Trends of a firm are as below :

Production in Unit (P)	Total Cost in ₹ (TC)	Average Cost in ₹ (AC)
1	09	09
2	16	08
3	21	07
4	28	07
5	40	08
6	54	09
7	70	10

As the level of output increases, the total cost rises. But initially the average cost falls then remains constant and subsequently rises. If such a trend of average cost is plotted, the following diagram is obtained :



5.6 Diagram of Average Total Cost (ATC/AC)

In diagram 5.6, on X-axis output and Y-axis average cost is shown in the begning with the increase in output. Average cost decrease after some units of production increase in average variable cost is more in comparison to decrease in average fixed cost and due to that total cost increases and average cost curve becomes 'U' shaped in short, initially with an increase in production the average cost decreases then at a particular level of production it is minimum but after that it increases with an increase in production. Therefore, average cost curve becomes 'U' shaped.

5.3.7 Marginal Cost :

Meaning : We know that if production is increased the cost of production also increases with the increase or decrease of one unit in total production, what ever change take place in total cost is known as marginal cost. In short, marginal cost is the change in total cost when an additional unit of output is produced.

Formula and Example : By the difference of n units of production cost and $n - 1$ units of production cost we find out marginal cost (MC).

$$MC_n = Tc_n - Tc_{(n-1)}$$

n = Number of units

MC_n = Marginal cost of n units of output

Tc_n = Total cost of n units of output

$Tc_{(n-1)}$ = Total cost of $(n - 1)$ units of output

By putting volume of $n = 3$ in formula we get,

$$Mc_3 = Tc_3 - Tc_{(3-1)}$$

$$= Tc_3 - Tc_2$$

Where $= Tc_3 = 21$ and $Tc_2 = 16$

$Mc_3 = 21 - 16$

$= 5$ is marginal cost

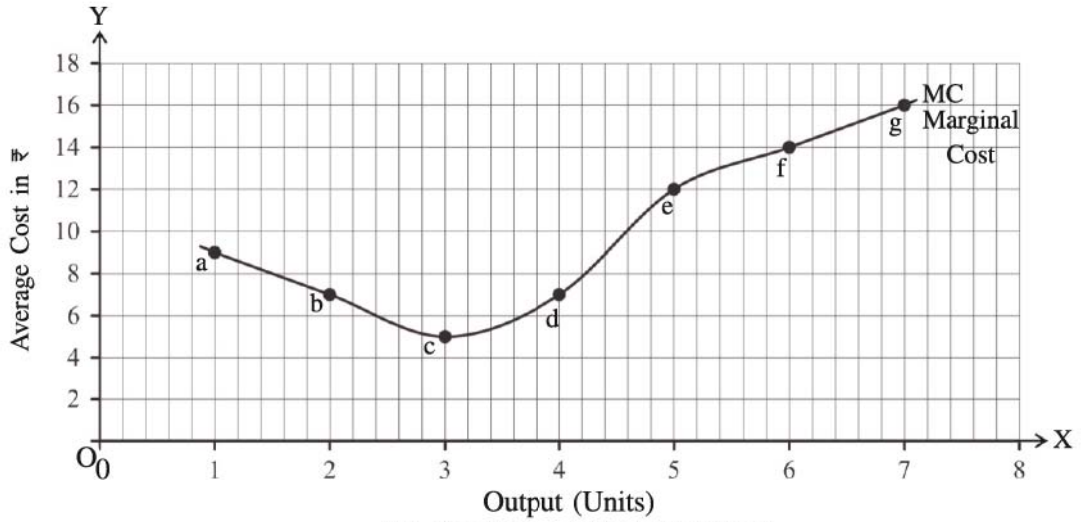
The table shows that marginal cost of the 3rd unit is the difference of the 3rd and the 2nd unit of total cost i.e. 5.

This should be kept in mind that marginal cost is independent of fixed cost. Therefore, it can be said that marginal cost is the result of change in variable cost when production decrease from n and goes to $n - 1$ then increase in total variable cost is equal to marginal cost with the change in production of output marginal cost is equal to total cost.

Table :

Output (Units)	Total Cost (TC) (in ₹)	Marginal Cost (MC) (in ₹)
1	09	09
2	16	07
3	21	05
4	28	07
5	40	12
6	54	14
7	70	16

From the table, it is known that till increase in the 3rd unit, marginal cost is decreasing. At the 3rd unit, marginal cost is minimum after that there is continious increase in marginal cost. This behaviour can be shown in the diagram.



5.7 Diagram of Marginal Cost

As shown in the diagram, in the beginning mariginal cost decreases as total average cost decreases initially, but after some time there is increase because initially with the increase in production total variable cost increases at diminishing rate and after some point increases at increasing rate. Due to that initially with the increase in production marginal cost decreases and after some point it increases. In the diagram, marginal cost curve is like "Hockey Stick"(✓). Till the third unit, marginal cost is decreasing therefore marginal cost curve has negative slope after the third unit with the increase in production MC increases therefore marginal cost curve has positive slope.

5.4 Inter-relationship between Average Cost and Marginal Cost

The relationship between the average cost and the marginal cost holds an important place in the study of production cost. Cost per unit of output is called average cost and the mMarginal cost is the cost increased to produce one extra unit of commodity. Producer in long run decides to continue production when price of commodity is more than average cost and in short run will take decesion to continue the production when price of commodity is more than marginal cost. In this way the average cost and the marginal cost play important role in taking a decision about production. Now with the help of table and diagram relation between average cost and marginal cost will be explained.

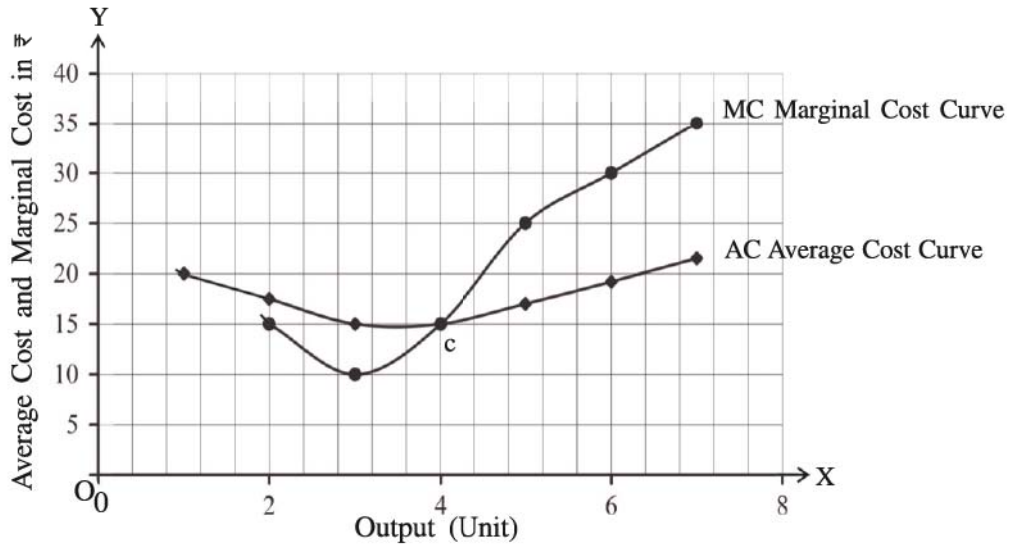
Example : For the production of commodity i.e. AC, MC and TC of a firm is as shown below :

Schedule :

Output (Units)	Total Cost (₹) (TC)	Average cost (₹) (AC)	Marginal Cost(₹) (MC)
1	20	20	-
2	35	17.5	15
3	45	15	10
4	60	15	15
5	85	17	25
6	115	19.2	30
7	150	21.5	35

As shown in the schedule, as output increases, initially the Average Cost and the Marginal Cost both decrease because of the law of increasing returns to scale is applicable. At the 4^{th} unit of output Average Cost and the Marginal Cost both are equal and AC is minimum after that due to the decrease returns to scale, AC and MC both increase. This can be stated by schedule and diagram as below :

Diagram : In diagram, on X-axis output (units) and Y-axis the Average Cost and the Marginal Cost are shown, relation between AC and MC is also shown below :



5.8 Diagram of Relationship between Averag Cost and Marginal Cost

Relation :

5.4.1 Margnial Cost < Average Cost (MC < AC) : Intially, average cost decreases, than marginal cost also decreases but marginal cost decreases more rapidly than the Average Cost. That is why when marginal cost curve is decreasing it remain below the average cost curve.

5.4.2 Marginal Cost = Average Cost (MC = AC) : When Average Cost is minimum at that time Marginal Cost curve intersect to the Average Cost curve from below and the Marginal Cost and Average Cost become equal. (Average Cost = Marginal Cost)

5.4.3 Marginal Cost > Average Cost (MC > AC) : When Marginal Cost curve intersect the Avrage Cost curve than both cost start to increase. After this point increase in MC cost is rapid than the increase in Average Cost therefore Marginal Cost curve above than Average Cost curve in the given diagram.

5.5 Long Run Average Cost Curve

According to Benham in the long run, there is no distinction between fixed cost and variable cost. The classification of costs as fixed and variable becomes irrelevant in the long run as all factors of production become variable. In order to increase production in the long run, factors of production can be altered in any proportion. Therefore, the scale of a firm expands. For example, the remuneration paid to an employee is considered as a fixed cost in the short run. However, in the long run, in response to an increase in demand, if the producer, decides to increase production then she/he may

employ new workers or buy new land or rent in new land etc. Thus, factors which are fixed in the short run become variable in the long run.

5.6 Concepts of Revenue

In capitalist market structure the main objective of production is to maximise profit, therefore the concept production is to maximise profit, therefore the concept of revenue assumes significance. When total revenue of a firm is higher than its total cost, profits accrue and if total revenue is lower thean total cost, losses occur. However, while analysing profits in the short run the concepts of average revenue and marginal revenue are used more often. We proceed to understand the concept of total revenue, marginal revenue and avarage revenue.

5.6.1 Total Revenue : By selling of produced units money received by firm is know as revenue. Total income received by firm from sale is called total revenue. This income is known as total revenue or sale revenue. Firms total income is based on two things (1) Price per unit and (2) Total sale. When both factors or any one factor changes the revenue of firm changes. Let us try to understand total revenue with one example. A firm produces pen and per unit market price of pen is ₹ 50 and total sale of firm is 100 units of pen then total revenue of firm is $100 \times 50 = ₹\ 5000$ to find out total revenue this formula is used.

Total Revenue = Units Sold × Price of Commodity

$$TR = Q \times P$$

$$5000 = 100 \times 50$$

$$= ₹\ 5000$$

If the sale unit of commodity increases or decreases or price increases or decreases or there is a change in both factors then firm's total revenue changes.

5.6.2 Average Revenue : We find out average revenue of a firm by dividing total revenue to sale units means....

$$\text{Average Revenue} = \frac{\text{Total Revenue}}{\text{Total Sale}}$$

$AR = \frac{TR}{Q}$ in which AR = Average Revenue

TR = Total Revenue

Q = Quantity Sold

Let us understand with the help of example. One firm has sold 1000 units of pen and total revenue is ₹ 50,000 according to formula $\frac{50000}{1000} = ₹\ 50$ is average revenue. It means revenue per unit of pen. Normally, firm sells all units of commodity at a same price, then Average Revenue is equal to price. If price and Average Revenue are equal then for producer, it is demand curve, which is also Average Revenue

curve for him. Demand curve shows, on different price how many commodities, consumer is ready to purchase. On the other hand the Average Revenue Curve shows the Average Revenue of a producer with the sale of commodity. In short, we remember that Average Revenue by the angle of producer is also price of consumer angle.

5.6.3 Marginal Revenue : The income from per unit sale is average revenue of firm whereas Marginal Revenue is revenue from the sale of one additional unit so the Marginal Revenue is the change in total revenue which results from the sale of one more unit of a commodity. For example, firm receives income of ₹ 50,000 by selling 1000 units of pen. Now firm sells 1001 unit of pen and firms revenue increases from 50,000 to ₹ 50,045 means increase of ₹ 45 is Marginal Revenue. So we can say the Marginal Revenue is the change in total revenue on account of the sale of an additional unit of output. We can put Marginal Revenue in formula or equation as under :

$$MR_n = R_n - R_{(n-1)}$$

where, MR = Marginal Revenue

n = Number of sold units

R_n = Revenue from the sale of n units commodity

$R_{(n-1)}$ = $(n-1)$ revenue from sale of units

In earlier example, we have seen that 1000 pen is sold at the price of ₹ 50 and total revenue is ₹ 50,000 now if 1001 unit of pen is sold then total revenue is ₹ 50,045 as per the formula. Marginal revenue find out as under :

Here, n = 1001 and

therefore $(n-1)$ = 1000

$$MR_n = R_n - R_{(n-1)}$$

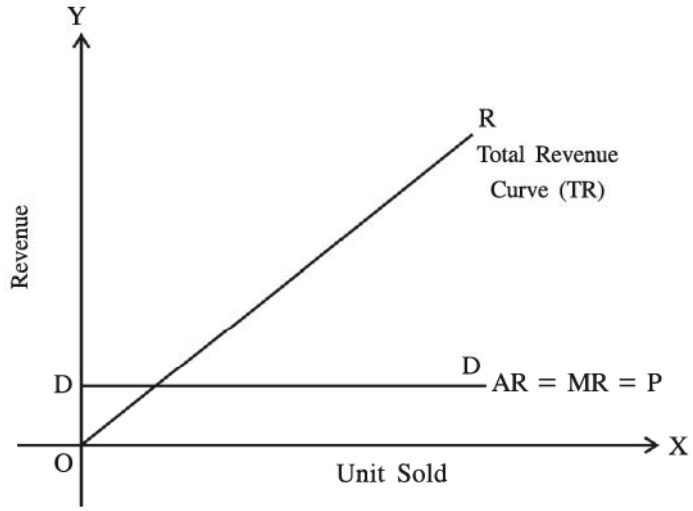
= ₹ 50,045 − ₹ 50,000

= ₹ 45 is Marginal Revenue

5.7 Total Revenue, Average Revenue and Marginal Revenue under Perfect Competitive Market

Perfectly competitive market is such a market where firm accepts market price and sell its commodity. In perfect competion market, commodities are homogeneous and there are large number of buyers and sellers. Buyers and sellers have complete knowledge of market situation, price is determined by demand and supply of a commodity and firm sells commodity on that price only no firm can effect the price. Therefore, price is fixed and constant.

In perfect competition market price = Average Revenue = Marginal Revenue (P = AR = MR). If price of commodity is ₹ 50 then Average Revenue and Marginal Revenue of firm is ₹ 50 only. Therefore, firms Average Revenue and Marginal Revenue curve is same and parallel to X-axis in diagram we can see this by DD curve, which is horizontal to X-axis.



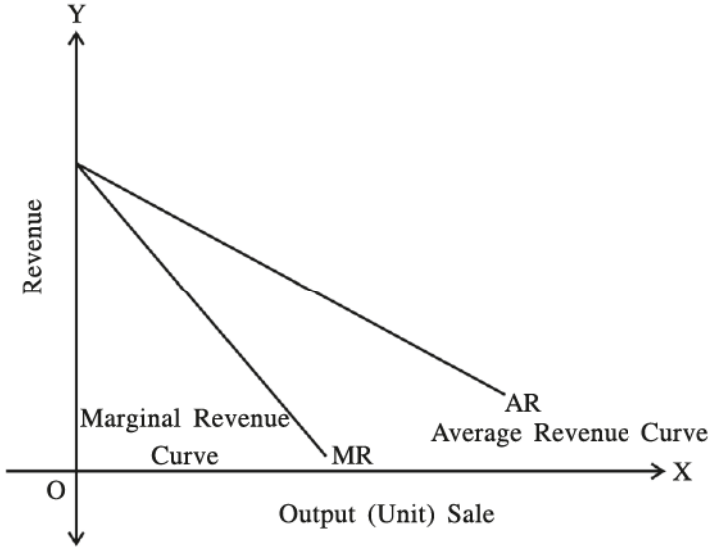
5.9 Revenue Curve in Perfectly Competitive Market

In the diagram, revenue curve of a firm is shown we can see three things in it. (1) In perfectly competitive market, firms Marginal Revenue and Average revenue is constant and same due to that it can be shown through one line (curve) DD only. All points on DD curve show. Average Revenue = Marginal Revenue. (2) Average Revenue and Marginal Revenue curve is parallel to OX-axis shown by DD curve, here Average Revenue and Marginal Revenue curve converted into one another and the slope of curve is zero. (3) Total Revenue curve or Right to increasing upward going curve, which was 45° angle at a zero point. This curve indicates that the sale of goods increases total revenue also increases at equal rate, therefore the slope of total revenue curve is positive and equal proportion :

5.8 Total Revenue, Average Revenue and Marginal Revenue under Imperfectly Competitive Market

A situation where perfect competition is absent, it is a case of imperfect competition. Monopoly, duopoly, oligopoly, monopolistic competition are examples under this market. Mainly monopoly and monopolistic market where seller has to reduce the price in order to sell more units. It means to increase his demand with the increase in sale the total revenue increases at a decreasing rate. As a result, there is a difference between the Average Revenue and Marginal Revenue. Due to decrease in price, Average Revenue curve slope downwards from left to right. For more sale of product it is necessary to decrease price and due to that Marginal Revenue also decreases.

With the decrease in price Average Revenue and Marginal Revenue also decreases but the decrease in Marginal Revenue is rapid in comparison to Average Revenue therefore Marginal Revenue curve is below Average Revenue curve which can be seen from diagram :



5.10 Revenue Curve under Imperfect Competition

In the diagram it is shown that Average Revenue curve slope downwards from the left to the right direction to sell more, price is reduced due to that in comparision to Average Revenue, Marginal Revenue decrease rapidly and therefore Marginal Revenue curve lies below the Average Revenue curve for rapid decrease in Marginal Revenue is that to increase sale when price is reduced, it is applicable to all earlier units also.

Exercise

1. Choose correct option for the following from the options provided :

(1) How is Average Cost curve shaped ?

(A) Hockey-stick (B) U (C) V (D) Square

(2) Which cost cannot be measured ?

(A) Real cost (B) Monetary cost (C) Opportunity cost (D) Long run cost

(3) When production is zero then which cost is positive ?

(A) Monetary cost (B) Average cost (C) Variable cost (D) Fixed cost

(4) Which cost has direct relation with the production units ?

(A) Fixed cost (B) Variable cost (C) Average cost (D) Marginal cost

(5) In which market, Average Revenue and Marginal Revenue are same ?

(A) Perfet Competition (B) Monopoly

(C) Monopolistic Competition (D) Oligopoly

(6) How is the slope of fixed cost curve ?

(A) Nagative (B) Positive (C) Parallel to x-asis (D) Parallel to x-axis

2. Answer the following questions in one sentence :

(1) Why does the average fixed costs decrease with the increase in production ?

(2) Give formula of Marginal cost.

(3) What do you mean by fixed cost ? How is the fixed cost curve ?

(4) Which concept of revenue can be known as price ?

(5) What do you mean by Marginal Revenue ?

(6) What do you mean by short run ?

(7) What is opportunity cost ?

(8) What is monetary cost ?

(9) What does the firm get when marginal cost is less than Marginal Revenue ?

(10) What is real cost ?

3. Answer the following questions in short :

(1) What do you mean by short run ?

(2) What is the meaning of average fixed cost ? Give example.

(3) 'All costs are variable in the long run.' Explain.

(4) Give meaning of total cost and total revenue.

(5) Why is the revenue curve negatively sloped in imperfect competition ?

4. Answer following questions to the point :

(1) Give the meaning of fixed cost and explain with the help of diagram.

(2) Give the meaning of variable cost and explain with the help of diagram.

(3) State the limitations in measuring opportunity cost.

5. Answer the following questions in detail :

(1) Explain different concepts of the cost of production.

(2) Explain with diagram the inter-relationship between average cost and marginal cost.

(3) Explain Average Revenue and Marginal Revenue with the help of diagram in perfect competition market.

(4) Explain Average Revenue and Marginal Revenue with the help of diagram in imperfect competition market.

Glossary

Firm	:	Unit, producing goods and services is known as firm. Firm is an economic unit, which produces and sells with the motive of maximum profit.
Cost of Production	:	Production cost refers to the expenditure increase by a producer to produce goods and services in monetary terms.
Real Cost	:	Real cost is a cost increased during production process which includes the fatigue, bordom, dissatisfaction, mental tension, physical pain of labour capitalist, land owner and entrepreneur. This cost is difficult to measure.
Monetary Cost	:	All the expenses increased in the form of money for production of goods is monetary cost.
Opportunity Cost	:	The best alternative whose production is left out and due to that amount of money value left is opportunity cost of that commodity.
Fixed Cost	:	With the increase or decrease in production, there is no change in cost is known as fixed cost. Fixed cost does not have any relation with unit of production.
Variable Cost	:	With the change in quantity of production, cost also changes. With the increase in production, it increases, with decrease in production, it decreases and with zero production it is zero. Variable cost has positive relation with unit of product.
Total Cost	:	Sum of total fixed cost and total variable cost is equal to total cost.
Average Fixed Cost	:	Average fixed cost is the fixed cost per unit of output which can be acheived by dividing total fixed cost by total production.
Average Variable Cost	:	Average variable cost is the variable cost per unit of output which can be achived by dividing total variable cost by total production.

Average Cost	:	Average cost is cost of per unit of production. It is got from dividing total cost by units of production.
Marginal Cost	:	With the increase or decrease of one unit in total production, whatever changes taken place in total cost is known as marginal cost.
Revenue	:	The revenue of firm is its sale receipts or money receipts from the sale of a product.
Total Revenue	:	Total money receipts of a firm from the sale of a given output is called total revenue.
Average Revenue	:	Average Revenue refers to revenue per unit of output sold. It is found out by dividing total revenue by total units sold.
Marginal Revenue	:	Marginal Revenue is the change in total revenue which results from the sale of one more unit of a commodity.
Short Term	:	It is the period of time during which factors of production like machinary, plant etc. are fixed. We cannot increase it.
Long Term	:	It is the period of time during which factors of production like machinary, plant etc. are variable.