CH-8 Cost

1. What is Explicit cost / Money cost / Accounting cost.

- Explicit cost are the cash payments made by the firms to outsiders for the purchase on hire of f/s.

Eg: wages pay paid to labourer, rent to landlord, interest on loans, etc.

2. What is implicit cost?

- Implicit cost are the cost of selfowned and self employed resources by the firm. It includes estimated normal profits.

Eg: Interest on own capital, rent of own land, salary for the services of enterpreneure, etc.

3. Different between implicit & explicit cost

Implicit cost	Explicit cost
It is the cost of self-owned factor.	It is the payment made to outsiders for hiring factor services
It involves imputed value of factors owned by the firm.	It involves actual money payment on buying & hiring inputs.
Eg. Interest on own cap.	Eg rent of land

4) what is economic cost
— Economic cost = Explicit cost + Implicit cost.

5. what is opportunity cost?
— Opportunity cost is the next best alternative foregone.
Eg: suppose a farmer can produce either 50 quantiles of rice or 40 quantiles of wheat on his land with the give resources. if he choose to produce rice then he will have to forego the opportunity of producing 40 quantiles of wheat. The opp. cost of producing rice is 40 quantiles of wheat.

6 what is real cost?
— Real cost refers to the efforts and sacrifice involved in providing factors services to produce a commodity.
Eg: physical and mental effort by labour in doing the work.

7. what is private cost?
— It refers to the cost of production incurred by an individual firm in producing a commodity.

8. what is social cost?
— It refers to the cost that the society has to bear on account of the production of a commodity.
Eg: cutting down of trees by a private contractors

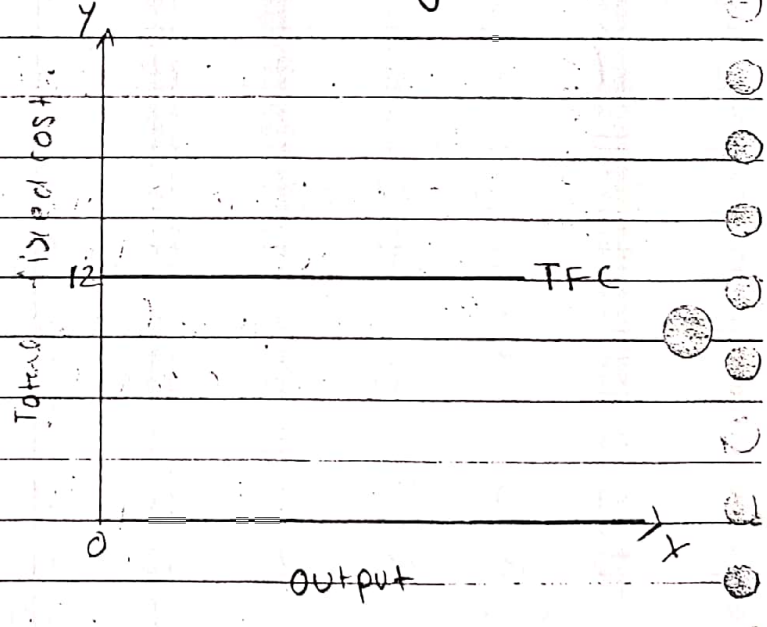
Q What is money cost

- It refers to the total money expenses incurred by a firm for producing a commodity.
Eg: Adv. cost.

Q Explain fixed cost along with its schedule and diagram.

Fixed cost refers to the cost which remains fixed throughout the level of output. It does not vary directly with the level of output.
Eg: land, building, machinery, etc.

Output	Total fixed cost
0	12
1	12
2	12
3	12
4	12
5	12



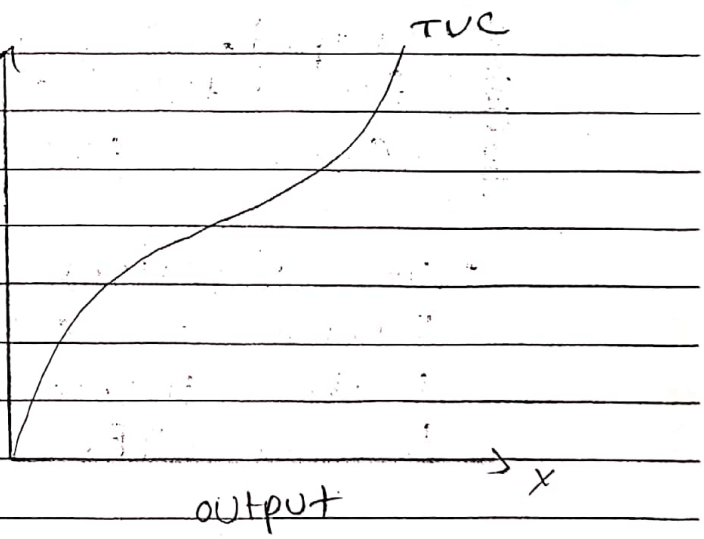
- On X-axis there is output and on Y-axis there is Total fixed cost. TFC is a horizontal straight line parallel to X-axis because TFC remains same at all levels of output i.e. 12, even if the output is zero, TFC is there.

11. Explain total variable cost along with table and diagram.

- Variable cost refers to those cost which vary directly with the level of output. Eg: payment for raw material, power, fuel etc.
- Variable cost raises with increase in output and falls with decrease in output. Such cost are incurred till there is production and become zero level of outp

Total variable cost is inversely 'S' shape. as it initially increases at decreasing rate and later it increases at increasing rate.

output	TVC
0	0
1	6
2	10
3	15
4	24
5	35



- On X-axis there is output and on Y-axis there is variable cost.
- As seen in the diagram, TVC curve starts from the origin indicating that when output is zero, variable cost is also zero
- TVC is an inversely S shaped curve due to the law of variable proportion

Explain the relationship between total cost, total variable cost and total fixed cost.

Total TFC is a horizontal straight line parallel to X-axis as it remains ~~constant~~ constant at all levels of output.

- TC & TVC are inversely S shaped bcoz they initially increases at decreasing rate and then at a constant rate and finally at an increasing rate. The reason behind their shape is law of variable proportion.

- At zero output TC is equal to TFC because TVC is zero at zero level of output. So, TC and TFC curves starts from the same point which is above the origin.

- The vertical distance between TFC & TC curve is equal to TVC. As TVC increases with increase in output, the distance between TFC & TC also increases.

- TC and TVC are parallel to each other and the vertical distance between them remains the same at all levels of output. because TFC is constant at all levels of output.

3) Explain total cost along with table and diagram.

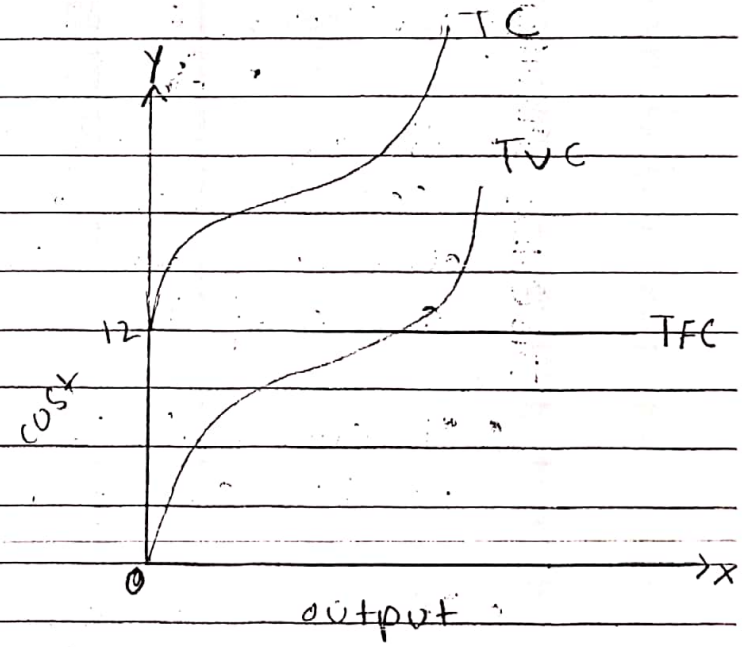
Total cost is the total expenditure incurred by a firm on the factors of production required for the production of a commod

TC is equal to TFC and TVC

$$TC = TFC + TVC$$

Since, TFC remains same at all levels of output, the change in TC is due to TVC.

output	TFC	TVC	TC
0	12	0	12
1	12	6	18
2	12	10	22
3	12	15	27
4	12	24	36
5	12	35	47
6	12	40	52



- On X-axis there is output and on Y-axes there is cost.

- TC is @ = TFC = 12 at 0 level of output bcoz TVC is 0.

At 1 unit of output TFC is same at ₹12, but TVC increases to ₹6. as a result TC becomes 18 and so on.

TC curve is obtained by summation of TVC and TFC curve.

The change in TC is due to TVC as TFC remains constant.

The vertical distance between TC and TVC always remains the same due to constant TFC.

TVC TC is also inversely S shaped due to the law of variable proportion.

4) Different between TFC & TVC.

TFC	TVC
• It refers to those cost which do not change directly with the level of output.	It refers to those cost which change directly with the level of output.
• It the can't be changed in the short run	It can be changed in the short run.
• It can never be zero.	It can be zero at zero level of output
• It is a horizontal stright line parallel to X-axis.	It is inversely S shaped
• Eg: salary of permanent staff, rent of building.	Payment for raw-materials, wages of casual labour.

5 Explain average fixed cost along with its table and diagram.

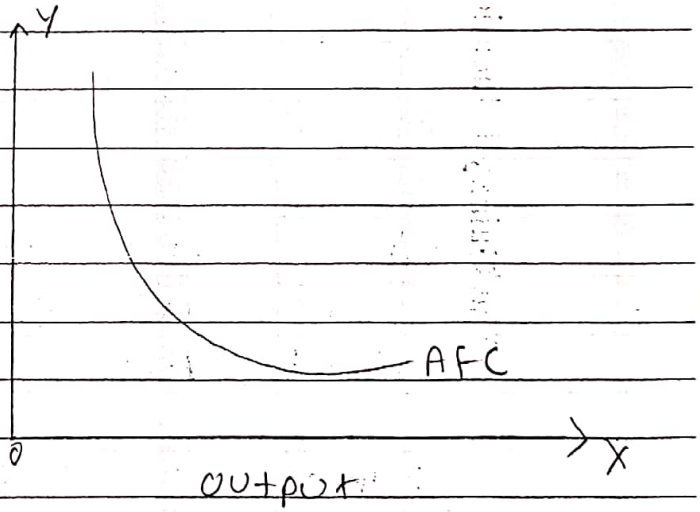
- Average fixed cost refers to the per unit fixed cost of production.

It is calculated by dividing TFC by Total out

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

AFC falls with increase in output as TFC remains same at all levels of output.

Output	TFC	AFC
0	12	-
1	12	12
2	12	6
3	12	4
4	12	3
5	12	2.4



- As seen in the table and diagram AFC falls with rise in output because constant TFC is divided by increasing output.

- AFC curve is rectangular hyperbola i.e. area under AFC curve remains same at all different points.

- AFC can never touch X-axis as TFC can never be zero.

AFC can never touch the Y-axis because at zero level of output TFC is a positive value and any positive value divided by zero will be an infinite value.

Explain average ~~variou~~ variable cost along with table and diagram.

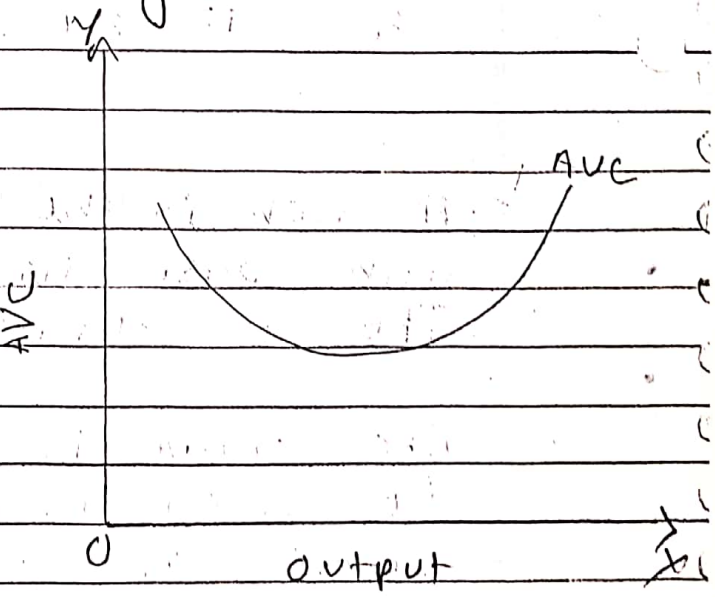
AVC refers to the per unit variable cost of production.

It is calculated by dividing TVC by total output

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

AVC initially falls with increase in output. Once the output rises till the optimum level AVC starts rising.

output	TVC	AVC
0	0	0
1	6	6
2	10	5
3	15	5
4	24	6
5	35	7



As seen in the table AVC initially falls with increase in output & after reaching its minimum level

of ₹ 5, its start rising.

- AVC is a 'U' shaped curve as it initially falls and then remains constant for a while and finally its starts increases.

17 Explain Average cost or Average total cost with the help of table and diagram

— AC refers to the per unit of TC of production. It is

It is calculated by dividing TC by Total o/p

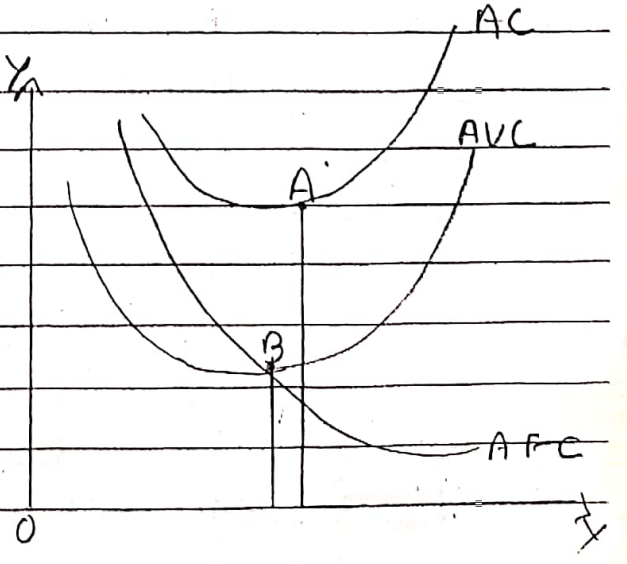
$$AC = \frac{TC}{Q}$$

Average cost is also defined as the sum of AFC and AVC.

$$AC = AFC + AVC$$

AC initially falls with increase in o/p. Once the o/p rises till optimum level, AC starts rising.

uc	output	AVC	AFC	AC
0	0	0	—	0
6	1	6	12	18
10	2	5	6	11
5	3	[5]	4	9
4	4	6	3	[9]
3(	5	7	2.4	9.4



- As seen in the table, AC is calculated by adding AFC and AVC.

- AC is a 'U' shaped curve, it initially falls and after reaching its minimum point it starts rising.

- when both AFC and AVC falls till the level of 2 units of output, AC also falls.

- from 2 unit to 3 units, AFC continues to fall but AVC remains constant so, AC falls till it reaches its minimum point A.

- After 4 units of output, rise in AVC is more than fall in AFC. Therefore AC starts rising.

8. Explain the relationship between AC, AVC & AFC.

Table and diagram (refer Q 17).

- AC curve will always lie above the AVC curve because AC at all levels of output includes AVC and AFC.

- The minimum point of AC curve will always to the right side of the minimum point of AVC curve.

- AFC curve cuts AVC curve at its minimum point i.e. B.

- As the output increases the difference between AC and AVC keeps on decreasing because AFC decreases.

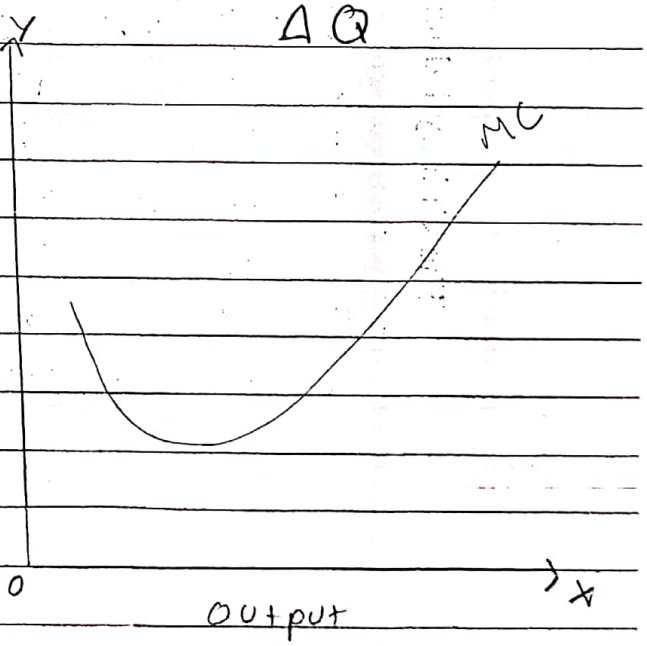
- AC and AVC can't intersect even though both AFC can never be zero.

19 What is marginal cost? Explain with its diagram.

- Marginal cost refers to addition to total cost when 1 more unit of output is produced

$MC_n = TC_n - TC_{n-1}$ OR $MC = \frac{\Delta TC}{\Delta Q}$

Q	TFC	TVC	TC	MC
0	12	0	12	–
1	12	6	18	6
2	12	10	22	4
3	12	15	27	5
4	12	24	36	9
5	12	35	47	11



- As seen in the table marginal cost can be ~~cost~~ calculated from both TC and TVC.

MC is a 'U' shaped curve i.e. MC initially falls till it reaches it minimum point and there after it starts rising. It is due to law of variable proportion.

2. Explain the relationship between AC & MC.

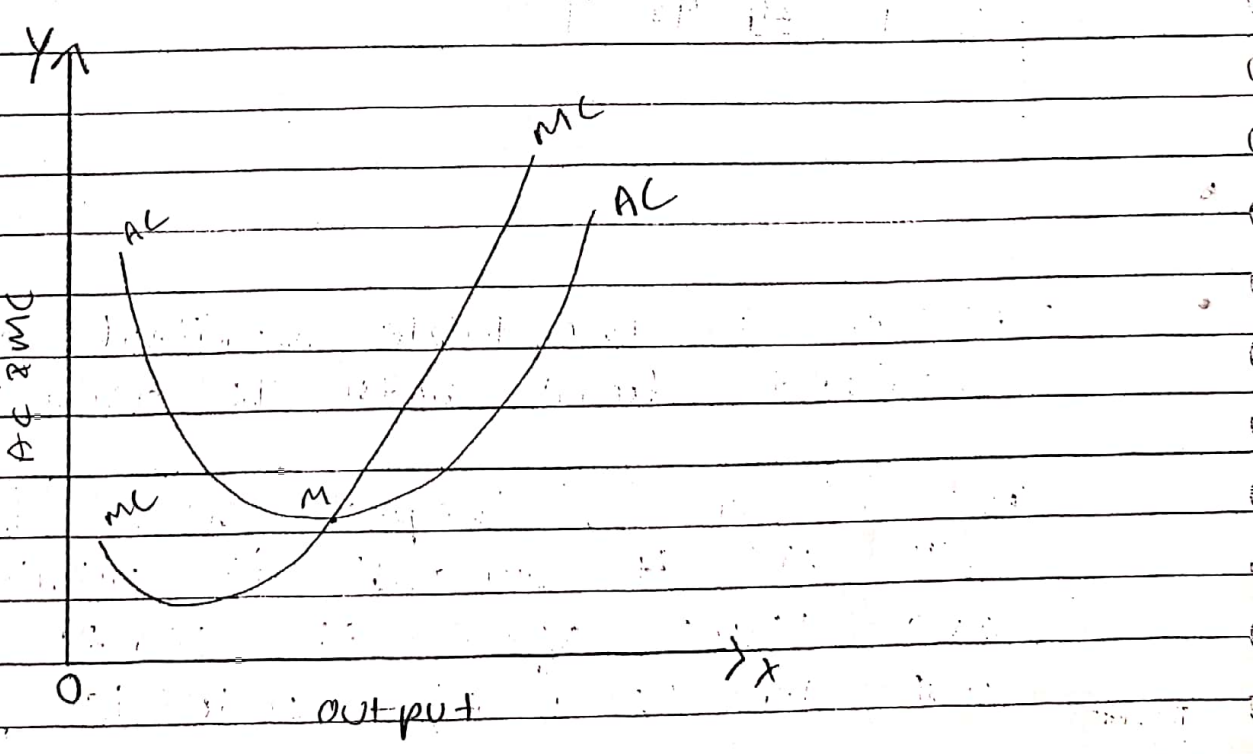
- There exist a close relationship between ~~at~~ AC and MC.

1. Both ~~at~~ AC & MC are derived from total cost. AC refers to TC per unit of output and MC refers to addition to TC when one more unit of output is produced.

2. Both AC & MC curve are 'U' shaped curve due to the variable proportion.

3.

Q	TFC	TVC	TC	AFC	AVC	AC	MC	
0	12	0	12	÷	-	-	+	
1	12	6	18	12	6	18	6	phase I
2	12	10	22	6	5	11	4	
3	12	15	27	4	5	9	5	
4	12	24	36	3	6	9	9	phase 2
5	12	35	47	2.4	7	9.4	11	phase 3



1. When MC is less than AC, AC falls with increase in output i.e. till 3rd unit of output

- when MC is ~~equal~~ equal to AC i.e. when MC and AC interset each other At point 'A' AC is constant and at it's minimum point.

- when MC is more than AC, AC rises with increase in output i.e. from 5th unit of output.

- There after, both AC and MC rises but MC rises ~~at~~ a faster rate than AC. As a result MC curve is ~~ste~~ steeper as compar to AC.

21 What is revenue.

— Revenue refers to the amt received by a firm from the sale of a give quantity of a commodity in the market.

22. what is total revenue

- Total revenue refers to total receipt from the sale of a give quantity of a commodity

$$TR = \frac{AR}{Q}$$

23. What is average revenue.

— Average revenue refers to revenue per unit of output sold.

$$AR = \frac{TR}{Q}$$

1. What is marginal revenue.

- MR is the additional revenue generated from the sale of an additional unit of an output.

$$MR = TR_n - TR_{n-1} \quad \boxed{OR} \quad MR = \frac{\Delta TR}{\Delta R}$$

5) Explain the relationship b/w AR & MR under perfect comp.

→ Under perfect competition prices of the products are same. So, no firm is in a position to influence a market price of the product.

A firm can sell more quantity of output at same price. It means, the revenue from every additional unit (MR) is equal to AR. As a result, both AR and MR curves is a horizontal straight line parallel to x-axis.

Units	Inc	TR	AR	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
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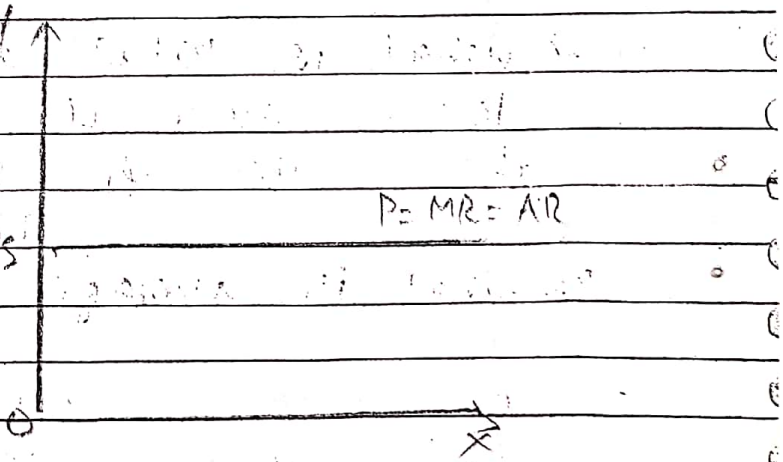


As seen in the given schedule and diagram, price (AR) remains same at all levels of output and is equal to MR. As a result, demand curve of AR curve is perfectly elastic.

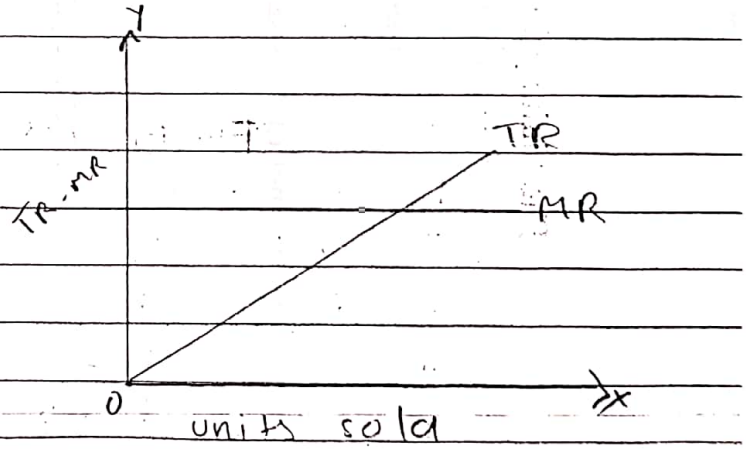
6) Explain the relationship between TR & MR under perfect competition.

- Under perfect competition prices of products are same, so a firm can sell any quantity of output at a price fixed by market.
As a result MR curve is a horizontal straight line parallel to X-axis.

Since MR remains constant, TR also increases at a constant rate.

Due to this reason, the TR is a positively sloped straight line.

Q	Price	TR	AR	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



- As seen in given schedule and diagram, MR is same at all ~~level~~ levels of output as a result it is perfectly elastic.

TR is positively sloped as it increases with increasing output.

TR starts from origin because it's zero at zero level of output.

Explain the relationship between AR and MR under imperfect competition.

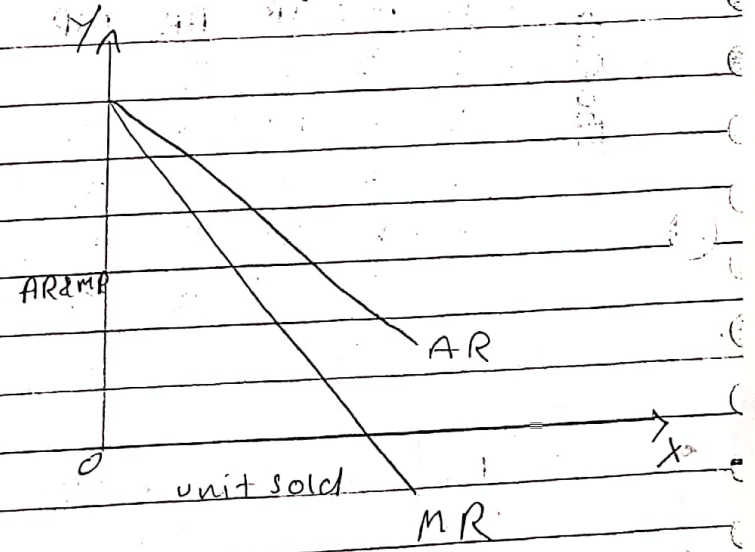
Under imperfect competition price of the product keeps on changing with the change in the level of output.

If the firm wants to increase the volume of sales, they need to reduce the price so AR also falls.

Revenue from every additional unit i.e. MR will be less than AR.

As a result both AR and MR curve slopes downward.

Q	P	~~TR~~ AR	AR	MR
1	5	5	5	5
2	4	8	4	3
3	3	9	3	1
4	2	8	2	-1
5	1	5	1	-3



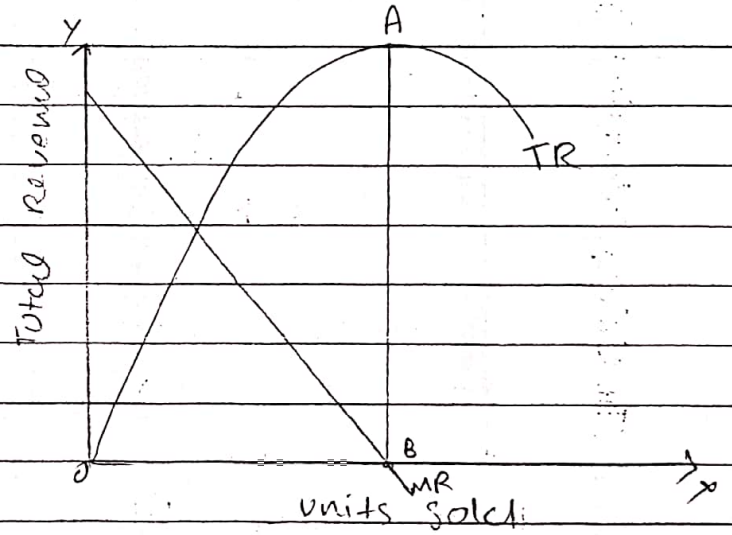
In the table both AR and MR falls with increase in output.
MR falls double than AR as a result MR ~~curve~~ curve is steeper than AR.
AR is positive so it is above the X-axis and MR is negative so it ~~cut~~ cuts the X-axis

Q) Explain the relationship between TR and MR under imperfect competition

- When more output can be sold by lowering the price, then revenue from every additional unit i.e. MR will fall.

MR is the addition to TR when 1 more unit of output is sold, so TR will increase when MR is positive, TR will fall when MR is negative and TR will be maximum when MR will be zero.

Q	AR	TR	MR
1	5	5	5
2	4	8	3
3	3	9	1
4	2.25	9	0
5	1	5	-4



- In the figure, TR curve rises as long as MR is positive. It reaches its highest point A. when MR is zero Point B. and it starts decreasing when MR becomes negative.