

Price Output Determination

- * Market structure mostly determines a firm's power to fix the price of its product.
- * The level of profit maximising price is diff. in diff. kinds of market due to differences in nature of competition.

1. Perfect Competition:

Characteristics:

a. Large no. of buyers & sellers (who compete among themselves).

- ↳ * Share of each seller in total supply
* Share of each buyer in total demand] is too small.
↓
No buyer & seller can influence its price.

b. Products are identical or homogenous, perfect substitutes.

- * All goods must sell at a single market price.
- * If firm raises its price - it will lose market share/money.
- * Buyers have no preference.
- * Consumers have perfect info. about prices.

c. Every firm is free to enter & exit:

- * No legal or market related barriers
- * No special capital inv.

If the above 3 conditions are fulfilled, such market is called **Pure Competition**.

Few more features:-

(iv) Perfect knowledge of market:

- * Both buyers & sellers have all the info. such as nature of product, price etc.

(v) Low transaction cost:

- ↳ No wastage of money & time in finding buyer & seller

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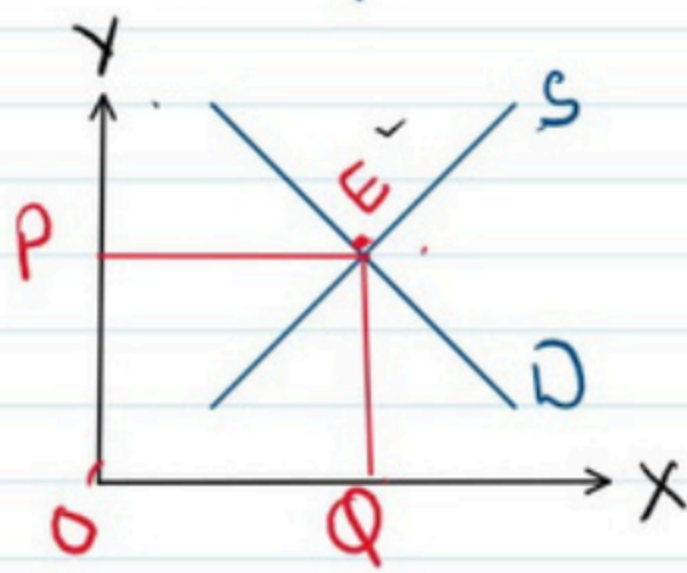
(vi) All firms, individually are price takers.

* Firms have to accept the price determined by the market forces of total demand & total supply.

Ex- Agricultural products, financial inst. like stocks, bonds, precious metals like Gold, Silver, etc.

⇒ Price Determination * Short Run

1. Equilibrium of Industry / Market



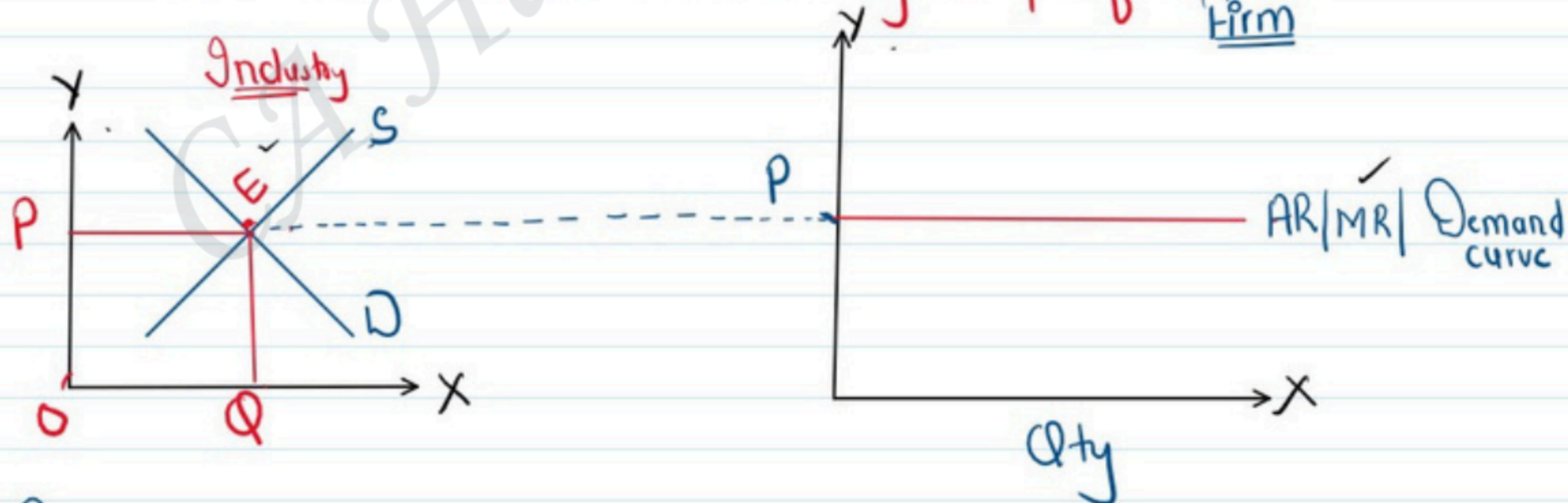
Total Supply = Total Demand

↓
Industry is in equilibrium.

→ Price prevailing at that point is Eq. price

2. Equilibrium of firm

⇒ When it is maximising its profit



Firm

Price (₹)	Quantity Sold	Total Revenue	Average Revenue	Marginal Revenue
2 ✓	8	16	2 ✓	2 ✓
2	9 ✓	18	2	2 ✓
2	10	20	2	2 ✓
2	11	22	2	2 ✓
2	12	24	2	2 ✓

↳ Price decided by market forces

Price decided by Market forces

* Firms are price takers

They will try to sell as much as they can, at the price, decided by the Market.

* Demand curve is perfectly elastic.

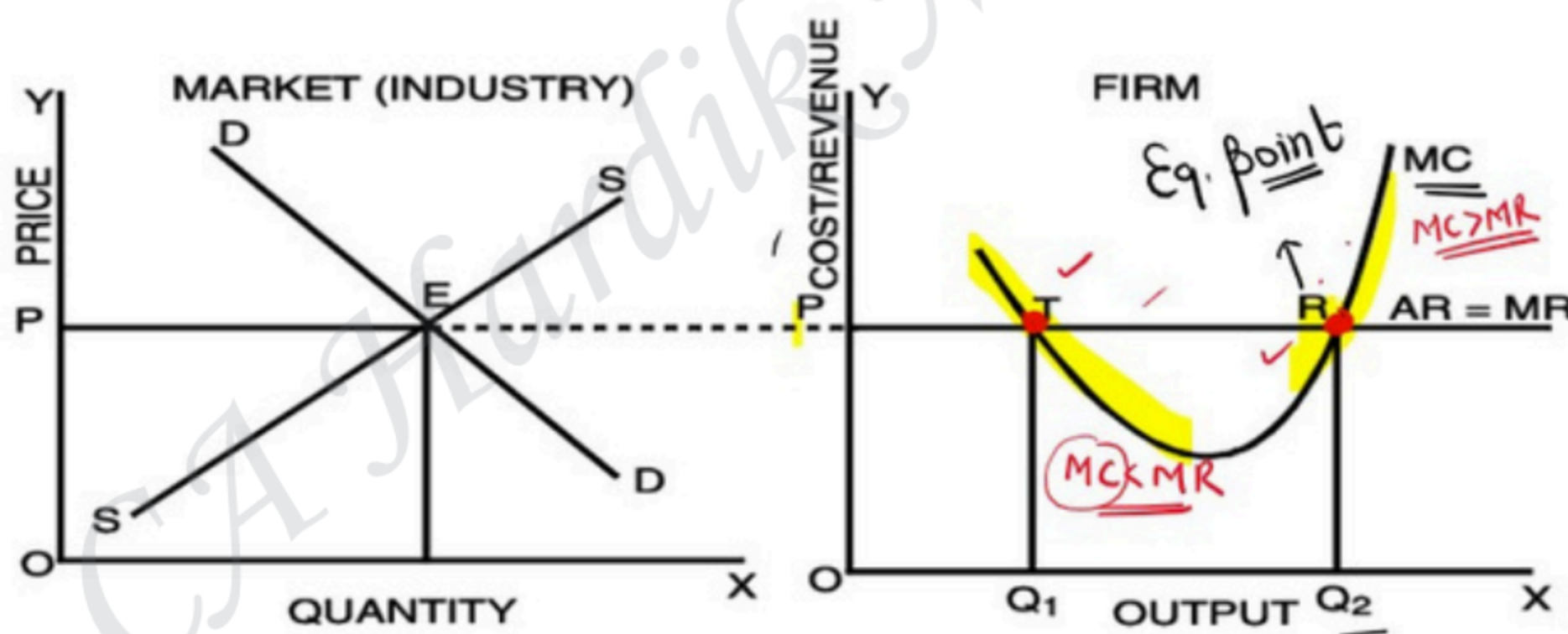
⇒ Conditions of Eq. of firm:

a) $MR = MC$

* $MR > MC$, there is incentive for the firm to expand production further

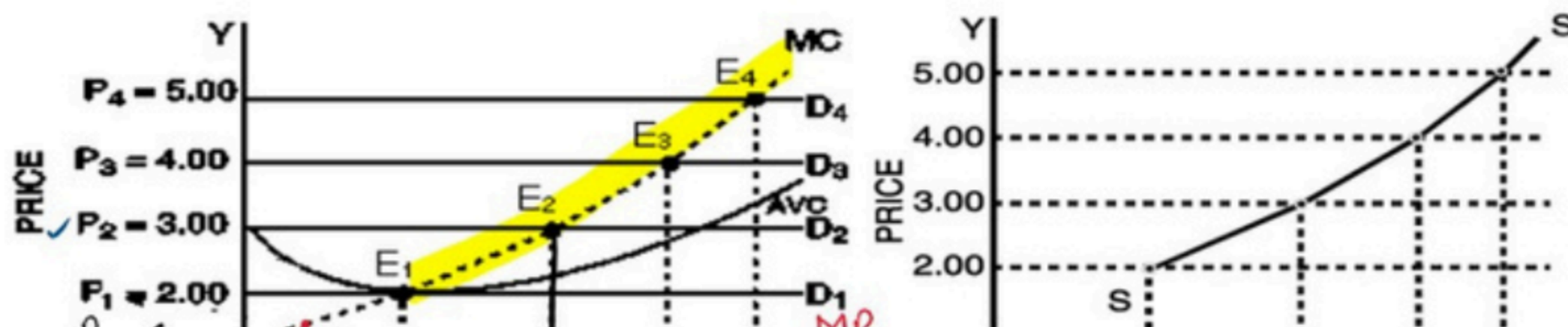
* $MR < MC$, Reduce Output since add. unit add more to the cost than Revenue

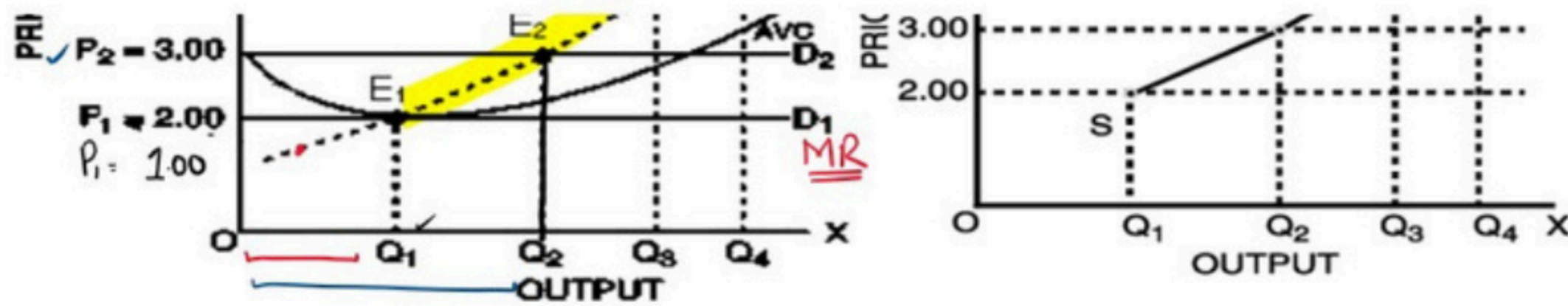
b) MC curve should cut MR from below
→ MC should have positive slope



⇒ At T, MC is cutting MR from above. The firm will benefit if it goes beyond T as add. cost is falling. MC is falling.

* Supply curve of firm in a Competitive Market.





1. At price $\text{₹}2$, firm supplies OQ_1 quantity, because $MR = MC$ at E_1 .
2. At price $\text{₹}3$, firm supplies OQ_2 qty, corresponding to D_2 .

→ MC curve is nothing but firm's supply curve that shows various qty, the firm will supply at each price.

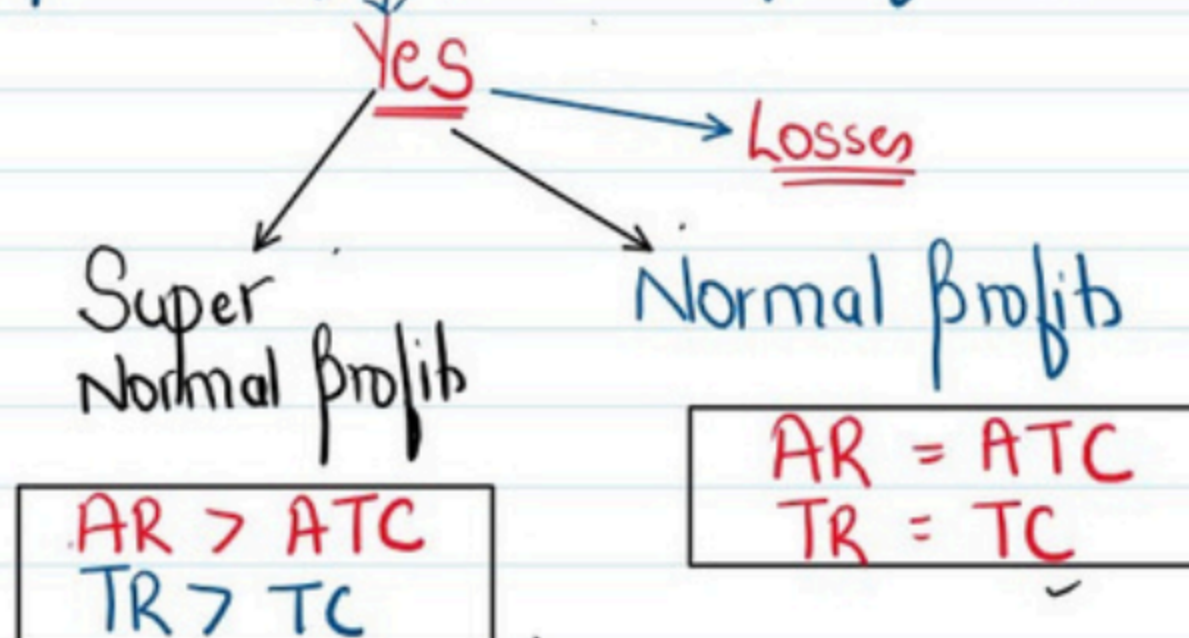
* For price ^{AR} below AVC , firms will not supply anything because firm is not able to meet its AVC .

→ At price above AVC , firm will equate MR & MC .

In perf.
comp.

Firm's MC , above AVC , is firm's supply curve.

* Can a Competitive firm earn profits?



1) Super Normal Profit

$$AR > ATC$$

$$TR > TC$$

Economic cost
(Explicit + Implicit)

- Example:

Cost of producing 1000 units = 15000
Entrepreneur Investment = 50,000
Normal rate of ret = 10%

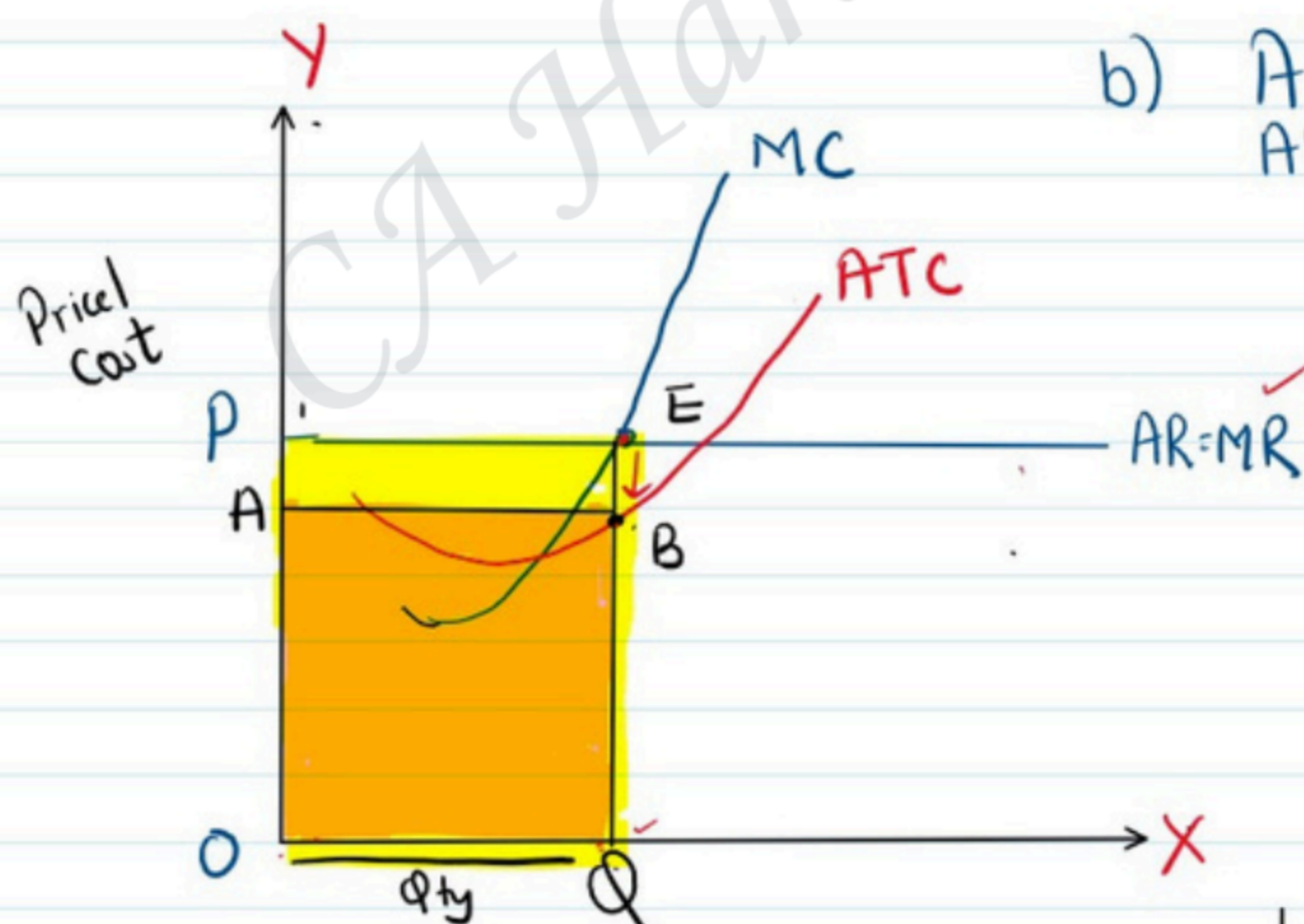
Implicit cost = 5000
Total cost = 20,000
ATC = £20

Selling price / AR of product

a) $AR = £20 \Rightarrow TR = 20,000$

$AR = ATC$
 $TR = TC$, Normal profit

b) $AR = £22 \Rightarrow TR = 22,000$
 $AR > ATC$
 $TR > TC$
Super Normal profit.



At OQ , $AR/Price = EQ$
 $ATC = BQ$
Profit per unit is = EB [$EQ - BQ$]

$$TR = AR \times Q$$

$$= EQ \times OQ$$

$$TC = ATC \times Q$$

$$= BQ \times OQ$$

$$\text{Total Profit} = TR - TC$$

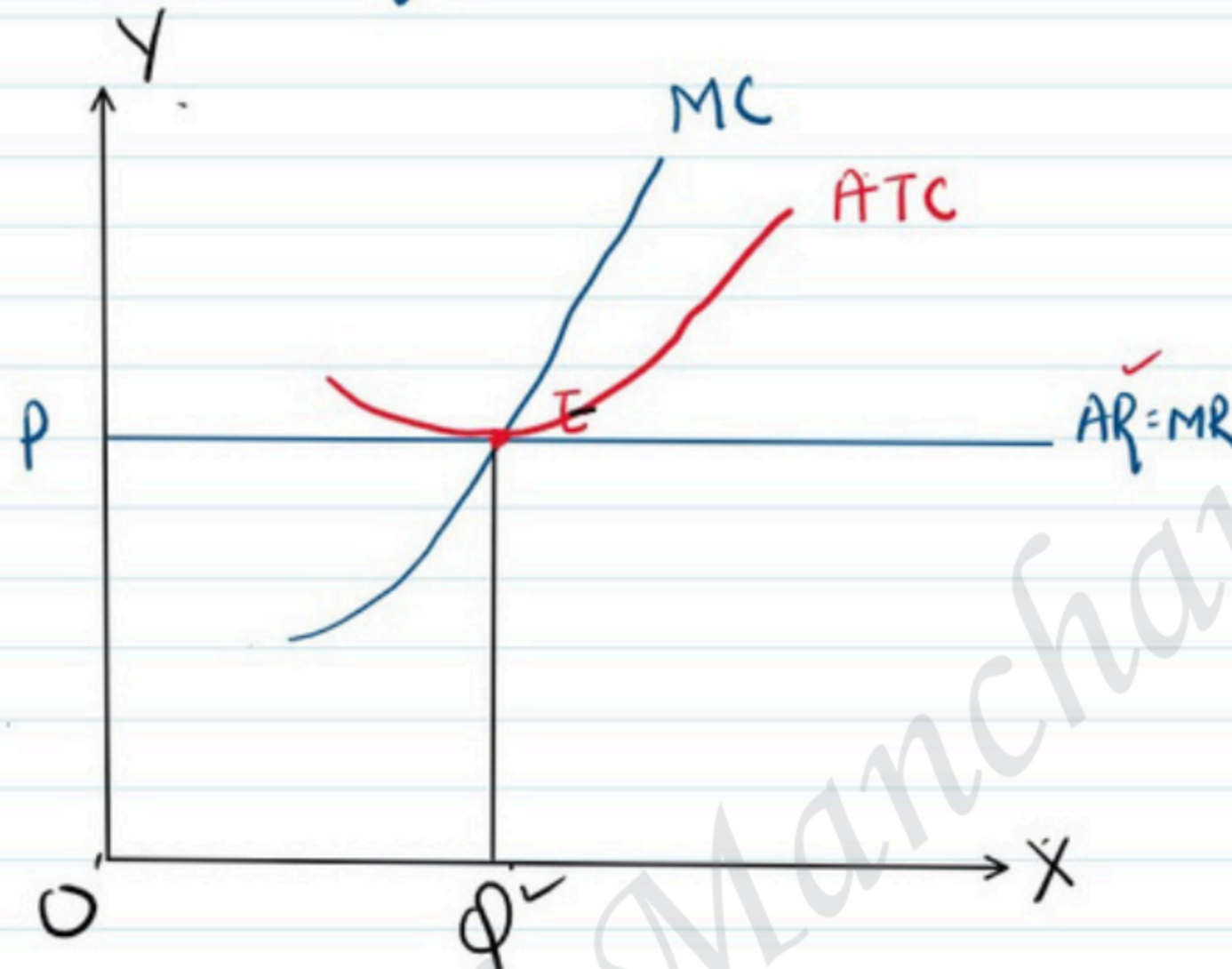
$$= BQ \times OQ$$

$$\text{Total profit} = TR - TC$$

$$\downarrow$$

$$\text{Super Normal profit} = \underline{\underline{ABEP}}$$

2. Normal Profit



Eq. Qty: OQ

At OQ , $AR = OE$
 $ATC = OE$

$AR = ATC$, Normal profit.

$TR = OPEQ$
 $TC = OPEQ$

$TR - TC = 0$

Zero economic profit

3. Losses:

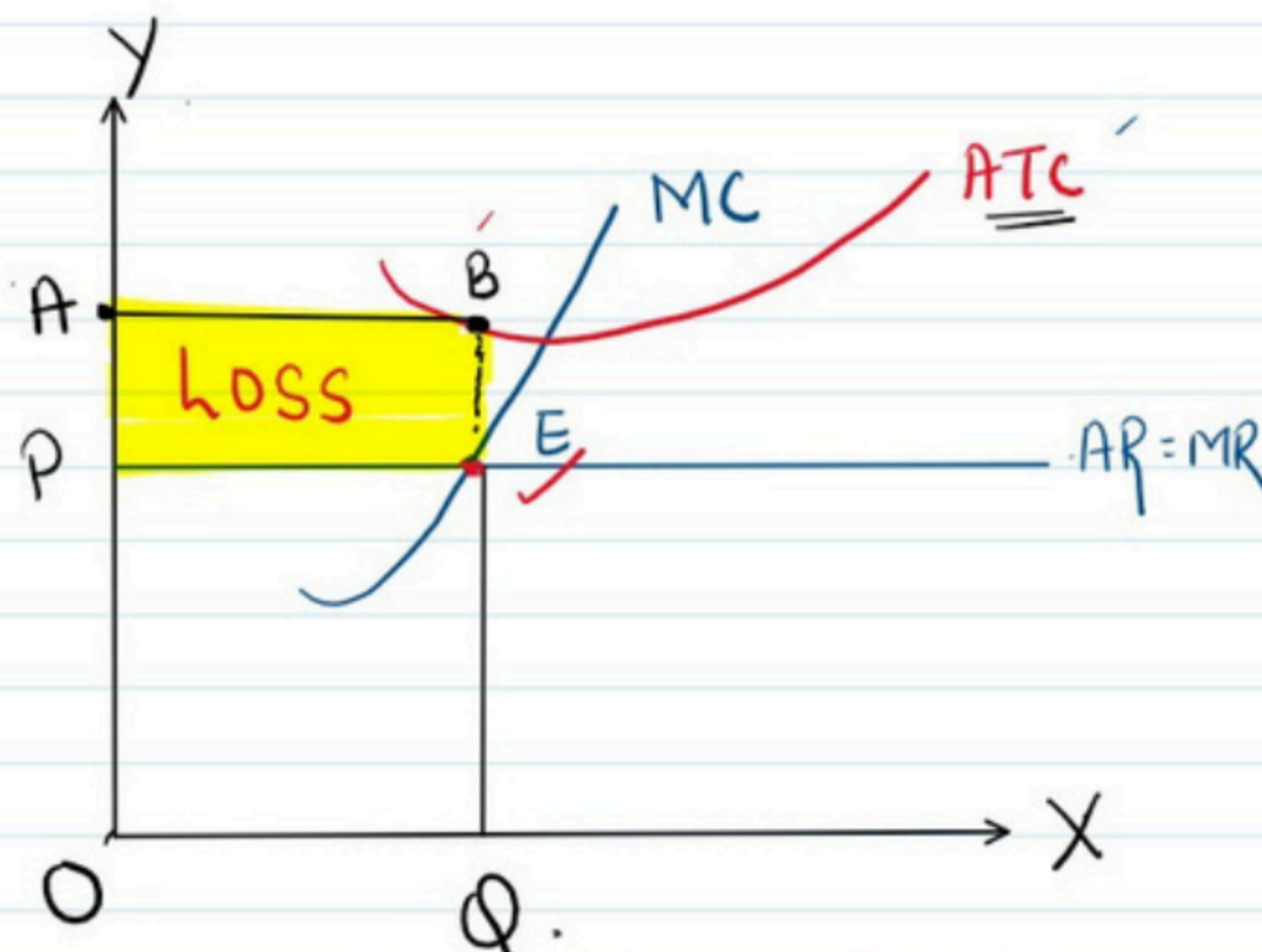
* Firm can be in equilib & still make losses.

↓

This is the situation when firm is minimising losses.

→ If $AR > AVC$, firm will produce the level of output at which $MR = MC$.

but $AR < ATC$



→ E is the eq. point
 $AR = EN$

but $\underline{AR < ATC}$ $MR = MC$

→ E is the eq. point
 $AR = EQ$
 $ATC = BQ$

⇒ $BQ > EQ$
 per unit Loss = $\underline{BE}$

Total Loss = $\underline{ABEP}$

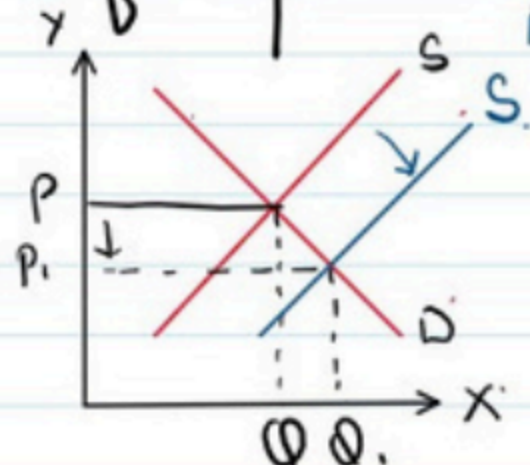
x — x

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Long Run Equilibrium

→ In the long run, firms can change the scale of production, quit the industry or new firms can enter the industry.

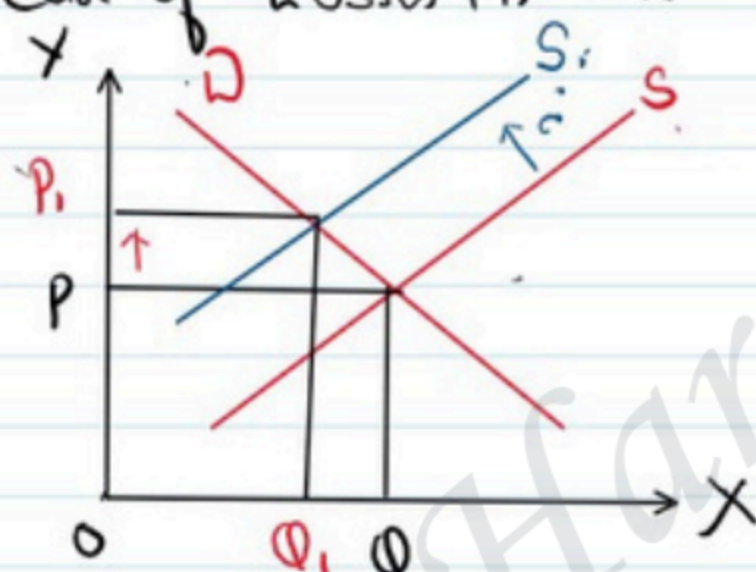
* In case of Super Normal profits, ⇒ New firms enter



Supply of Ind. ↑

- 1) Price of product ↓
 - 2) Price of Input ↑ Cost ↑
- Normal profit in the industry.

* In case of Losses in the



Short Run: → few firms exit

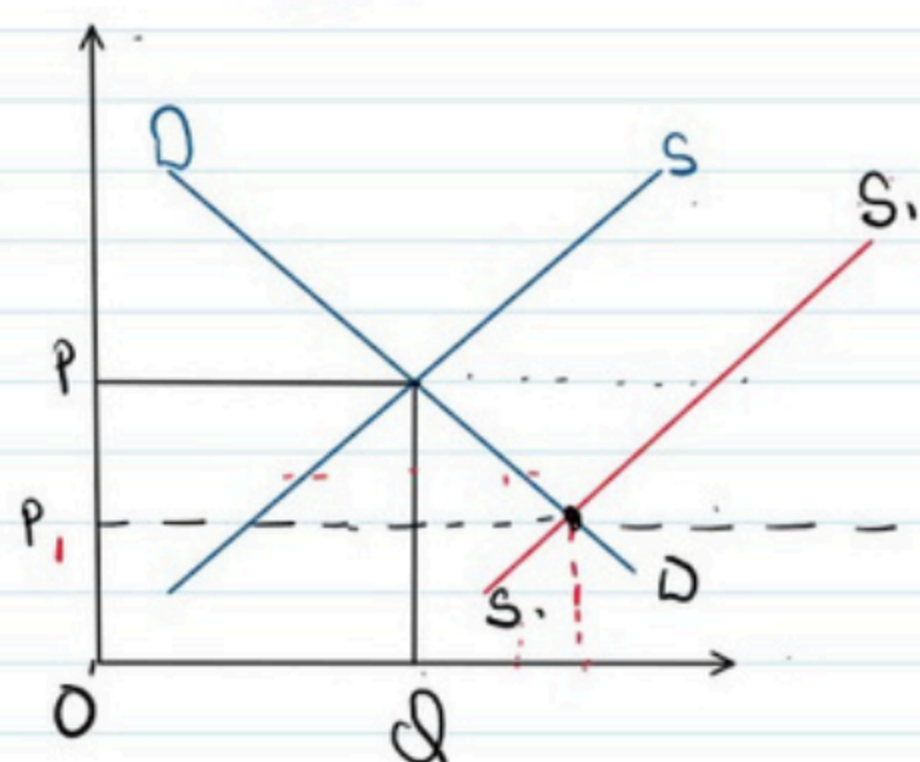
Supply of Ind. ↓

1. Price of product ↑
2. Price of Input ↓

Normal profit in the ind.

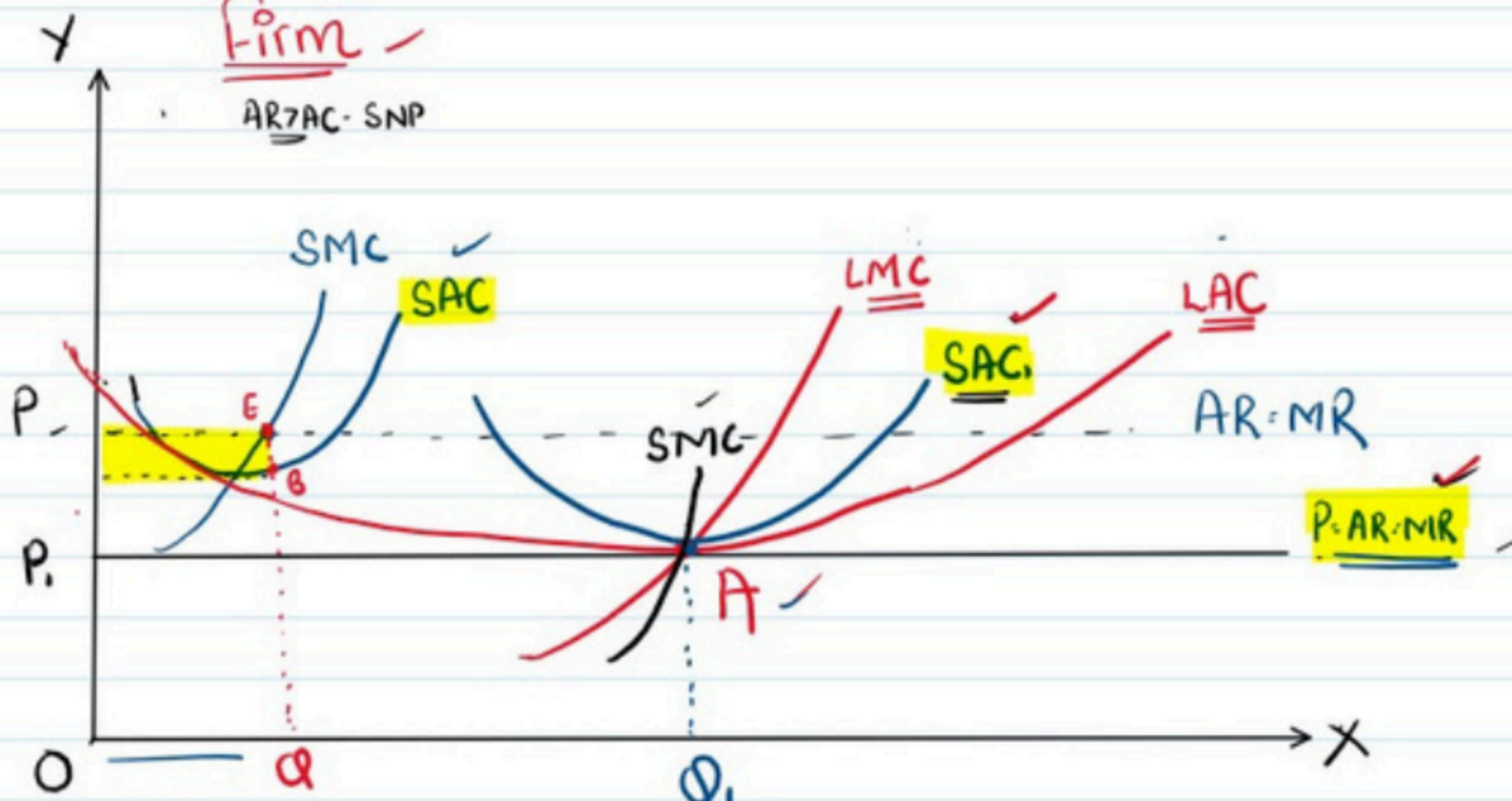
⇒ In the Long Run, firms earn normal profit only.

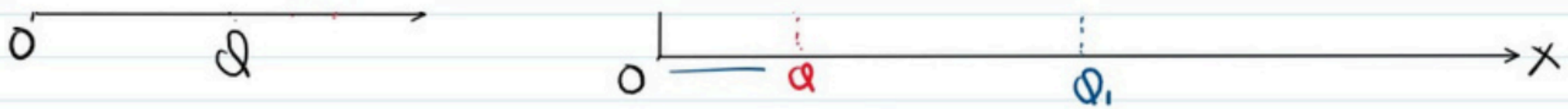
* Industry



Firm

AR = AC = SNP





- 1) At price OP , firm is making Super Normal profits, producing output OQ denoted by SAC .
 - 2) Now, firms have incentives to increase the capacity in the Long Run. At the same time, new firms will be entering the industry.
 - 3) As supply increases in the industry, supply curve will shift to the right & price will fall and new price is OP .
- In the Long Run.

Firms are in Eq. When they adjust their plant so as to produce at Minimum point of LAC curve.

$$LAC = LMC \rightarrow \text{Min. LAC}$$

At that point, firms will be making Normal profit only.

$$SAC = AR \text{ (point A)}$$

because, Minimum at that point
 $SAC = SMC$

$$\Rightarrow LAC = LMC = SAC = SMC = MR = Price$$

$\rightarrow$ SAC is tangent to the demand curve [$SAC = AR$]

* Long Run Eq. of firm:

$$LAC = LMC = Price/AR/MR$$

$\downarrow$
lowest point on Long Run cost curve
 $LAC = \text{Min.}$

* At min. point of LAC , the corresponding plant is worked at optimal capacity.

$\downarrow$
Plant is fully utilised. (SAC is Min)

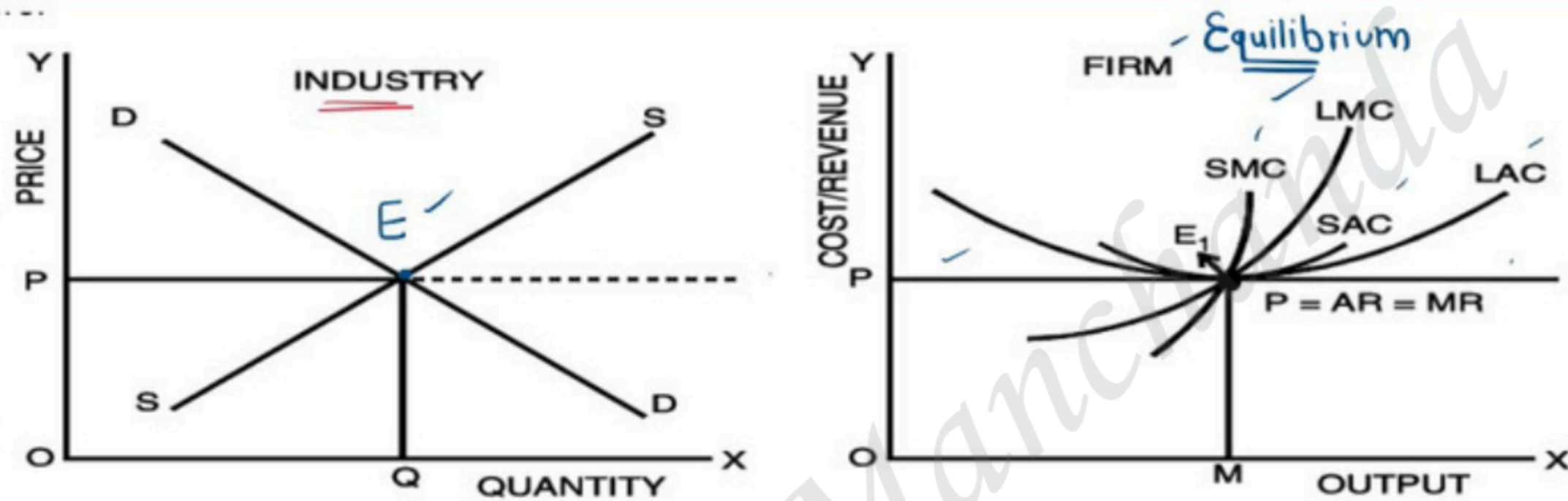
$\Rightarrow$ Min. point of LAC & SAC coincide.

* Long Run Equilibrium of Industry.

* Long Run Equilibrium of Industry.

Three Conditions:

- Total Supply = Total demand
- All firms are in equilibrium i.e. all firms are maximising profit
- No firm has incentive either to enter or exit the industry.
 $\downarrow$
All firms are earning Normal Profit



* In the Long Run, each firm attains the plant size & output level at which cost is minimum / optimum.

$\rightarrow$ Firms producing output at optimum cost is Optimum firm
 $\downarrow$
 All firms under perfect competition.

Most imp.

Following are the Outcomes associated with Long Run Eq:-

- Output is produced at Minimum feasible cost.
- * Customer pay the Minimum possible price which just covers MC.
 $\downarrow$
Price/AR = MC - Allocative eff.
- Plants are used to full capacity, no Wastage of Resources.
 $\hookrightarrow$ AC = MC
- Firms only earn Normal profit (AR = AC)

in long run equilibrium model (see next)

4. Firms only earn Normal profit ($AR=AC$)
5. Firms maximise profit ($MC=MR$)
6. This is optimum no. of firms in the industry.

~~x~~ $\Rightarrow$ ~~x~~

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MONOPOLY - One seller

Features:-

1. Single Seller of the product
 - Single firm constitutes the industry.
 - Absence of competition.
2. Barrier to entry: In Monopolistic market, there are strong barriers to entry like Legal, Economic, etc.
3. No close Substitute:
 - Monopolist has full control over market supply.
 - Price Maker, price taker.

Elasticity

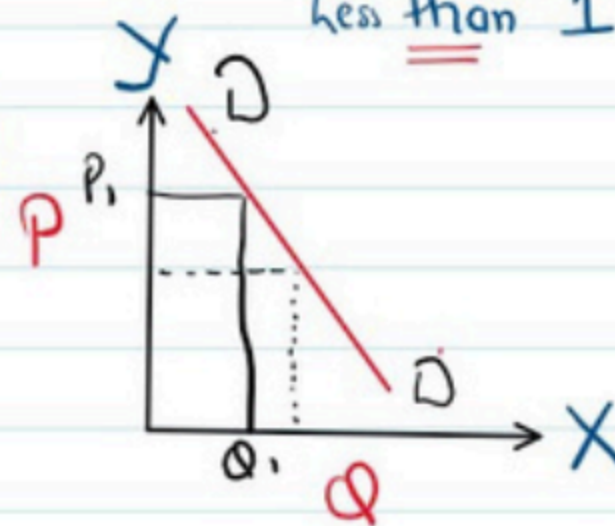
Cross-elasticity

↓
Zero - or very small.

Price-elasticity

↓
Inelastic
less than 1

* Monopolist face steep downward sloping demand curve.



4. Market power:-

→ Ability to change a price above MC
↓
Positive profit

$$AR/P > MC$$

Positive profit

* How do Monopoly arise?

1. Strategic **Control** over Scarce Resources, input or technology.
2. Developing or acquiring control over a **unique product**, which is difficult to copy.
3. Exclusive right by Govt.
4. Patent & copyright
5. Business Cartels & combinations
6. Extremely large Start-up cost
7. Natural Monopoly - Economies of Scale
8. Enormous Goodwill enjoyed by firm for very long period.
9. Stringent Legal & regulatory requirements.
10. Anti-competitive practices - Ex- Predatory pricing.

In Real life, Monopolies are not common because Monopolies are either regulated or prohibited altogether.

* Monopolist Revenue Curves

* Demand curve of Monopoly is **identical** with the Market demand curve of the product.

* If the firm wants to sell more, it has to reduce the price of the product.

Monopolist firm

Quantity sold	Average Revenue (₹) (AR = P)	Total Revenue (₹) (TR)	Marginal Revenue (₹) (MR)
0	10.00	0	

$\rightarrow \frac{\Delta TR}{\Delta Q}$

sold	(AR = P)	(TR)	(MR)
0	10.00	0	
1 ✓	9.50 ↓ 0.5	9.50	9.50
2 ✓	9.00 ↓ 0.5	18.00	8.50 ↓ 1
3 ✓	8.50 ↓ 0.5	25.50	7.50 ↓ 1
4	8.00 ↓ 0.5	32.00	6.50 ↓ 1
5	7.50 ↓ 0.5	37.50	5.50 ↓ 1
6	7.00	42.00	4.50
7	6.50	45.50	3.50
8	6.00	48.00	2.50
9	5.50	49.50	1.50
10	5.00	50.00	.50
11	4.50	49.50 ↓ TR ↓	(-) .50

* $AR \text{ per unit} = \text{Price}$
 → Demand Curve is the AR curve

* The MR on additional unit sold is lower than price.

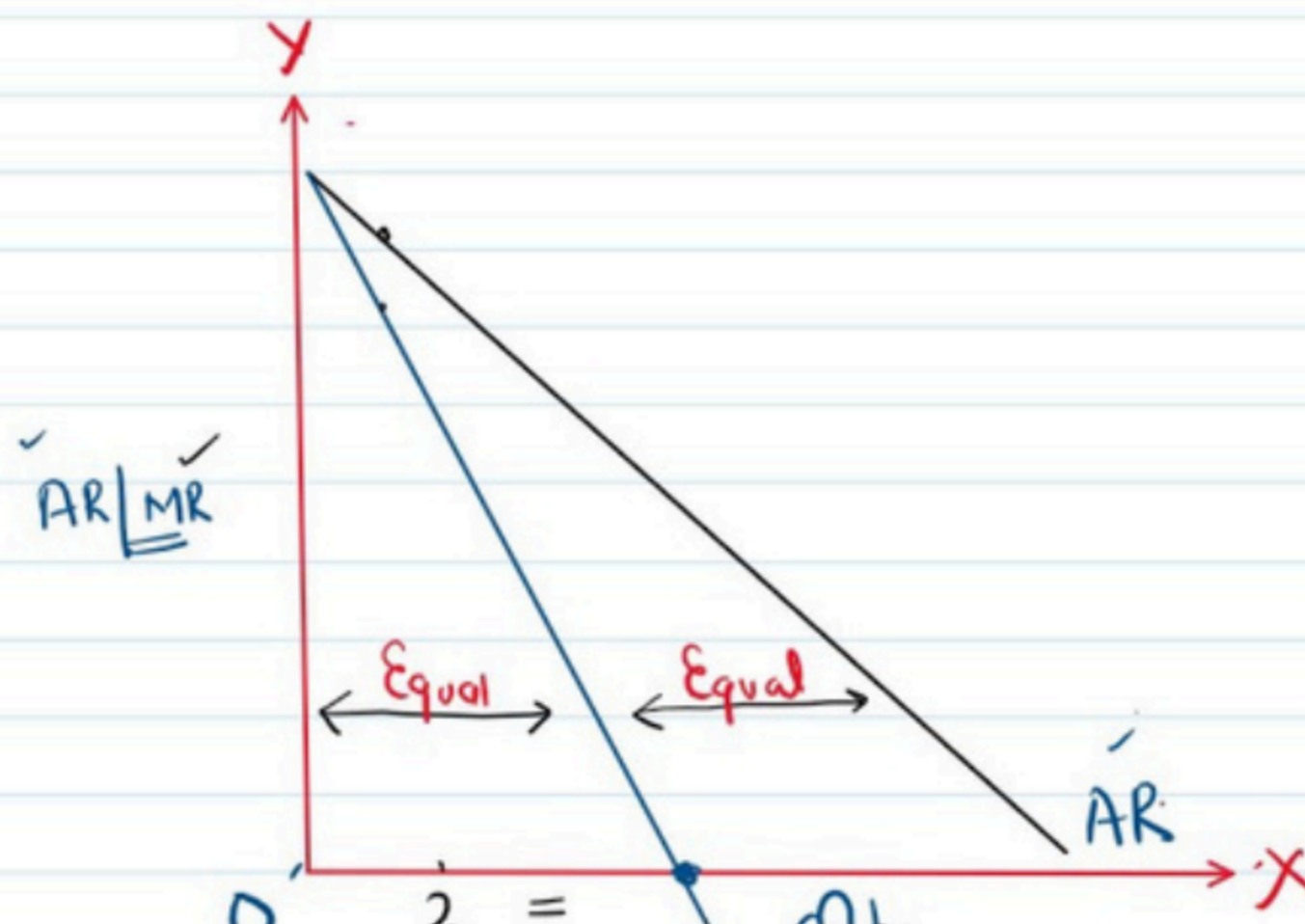
Imp ⇒ Relationship b/w MR & AR

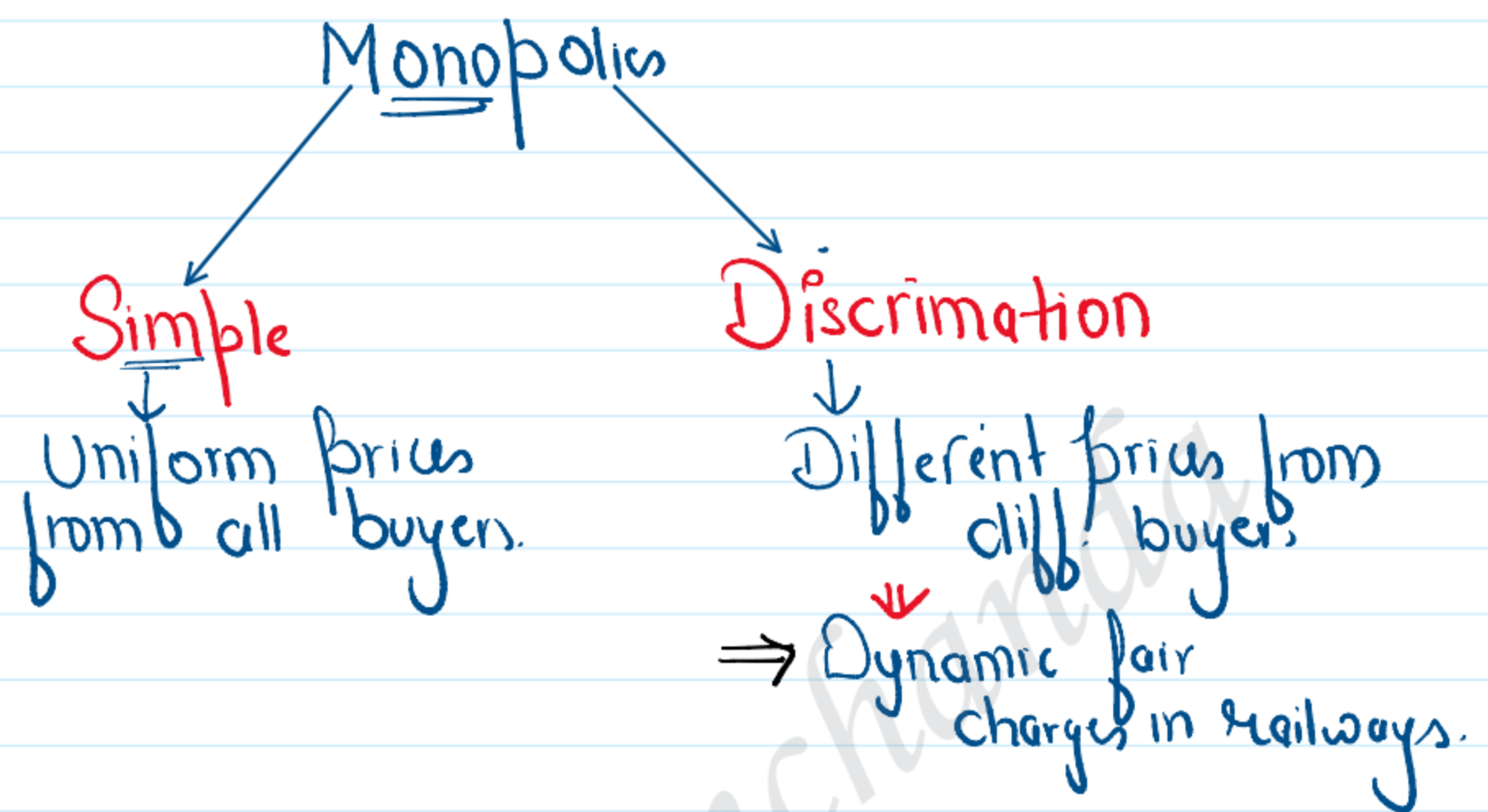
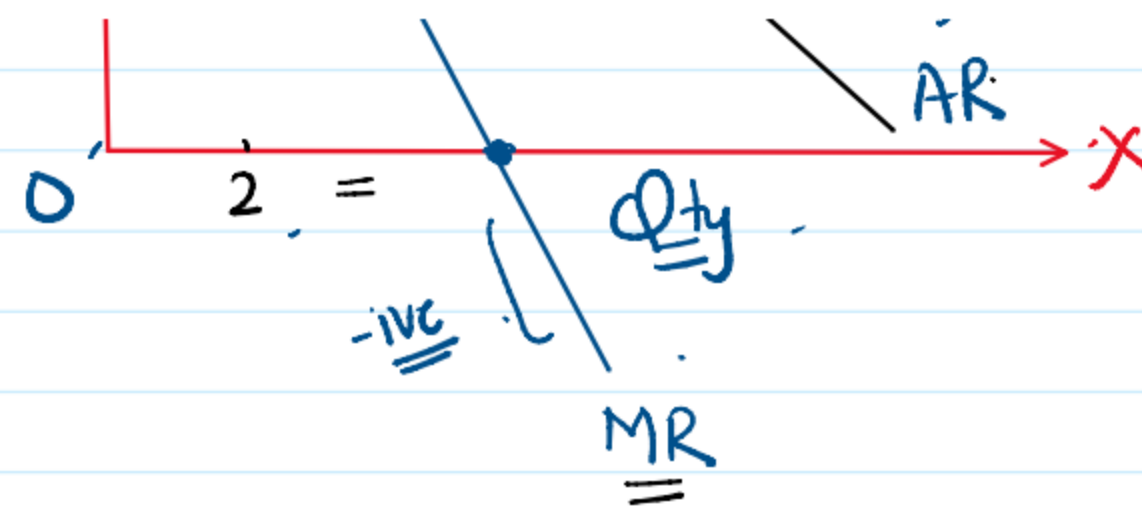
1] AR & MR are negatively sloped curve.

* 2] Slope of MR is twice that of AR curve
 Slope of MR: 2x slope curve

Imp ⇒ MR curve lies halfway b/w AR curve & Y-axis

3] AR cannot be zero, MR can be zero or negative





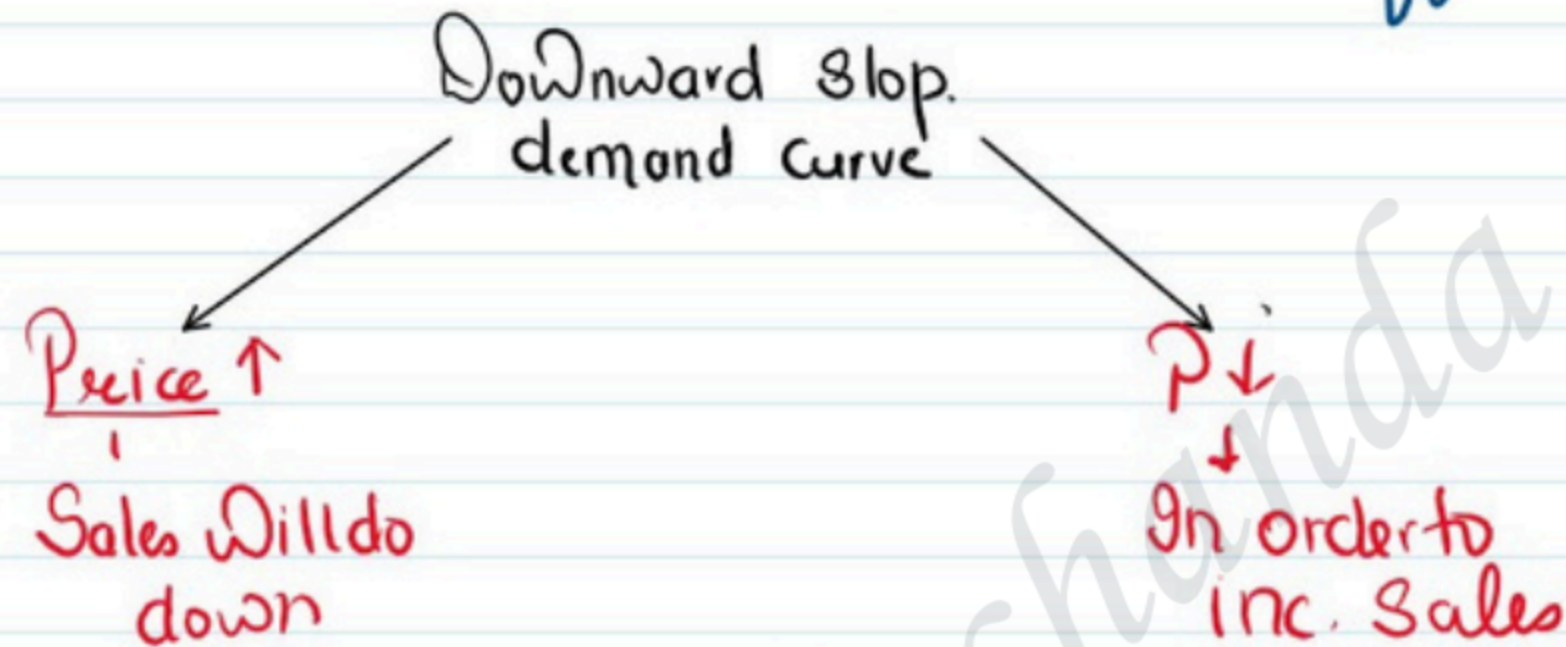
x — x

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* Profit Maximisation in a Monopolised Market

↳ Eq. of Monopoly firm.

→ AC & MC curves in a competitive & monopoly markets are identical but revenue conditions differ



How monopoly decides price & output?

1) Short Run.

Eq. $\Rightarrow MR = MC$

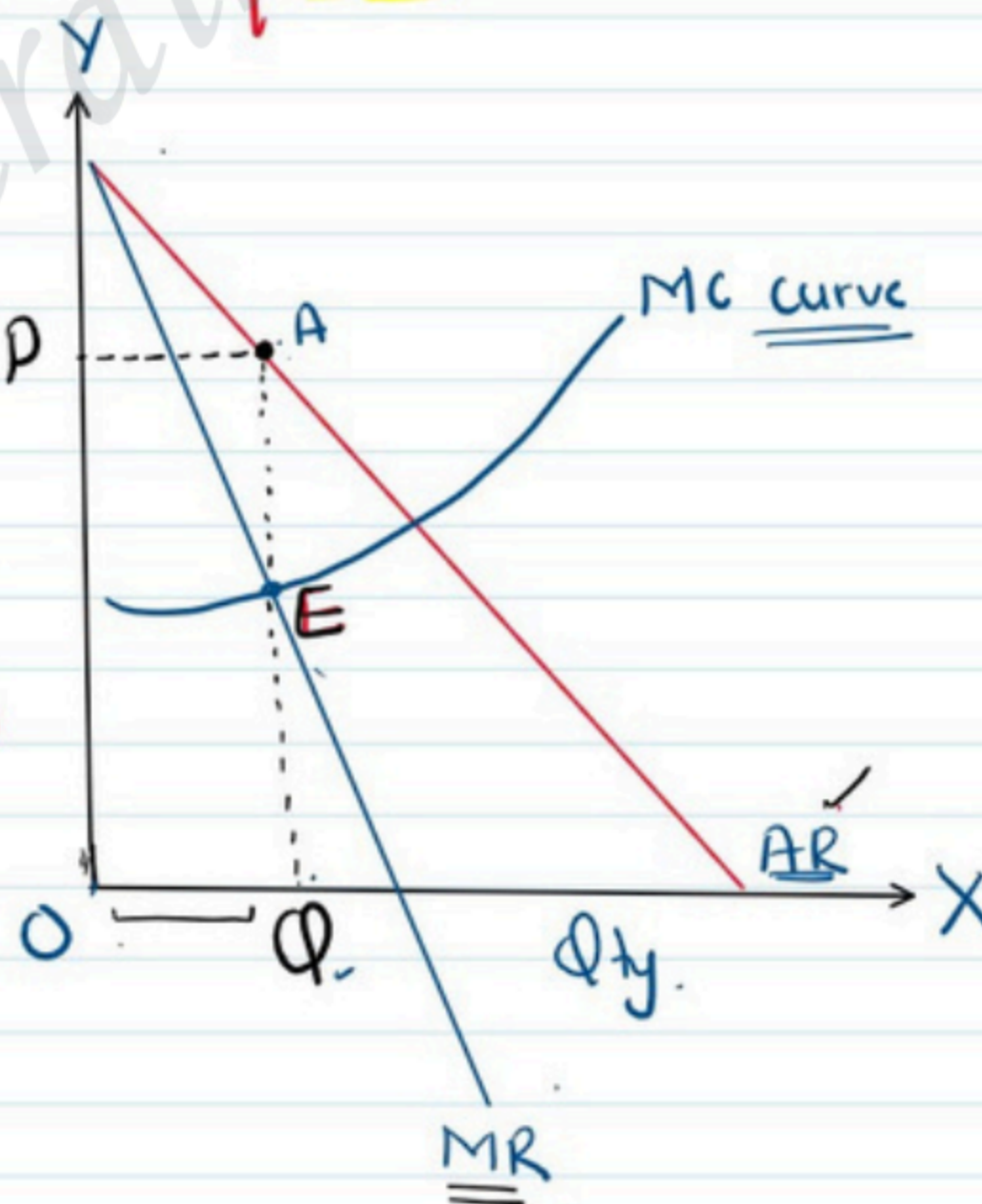
→ MC cuts MR at E.

→ Eq. qty = OQ

For OQ qty, price is OP/AQ

Price
Rev.

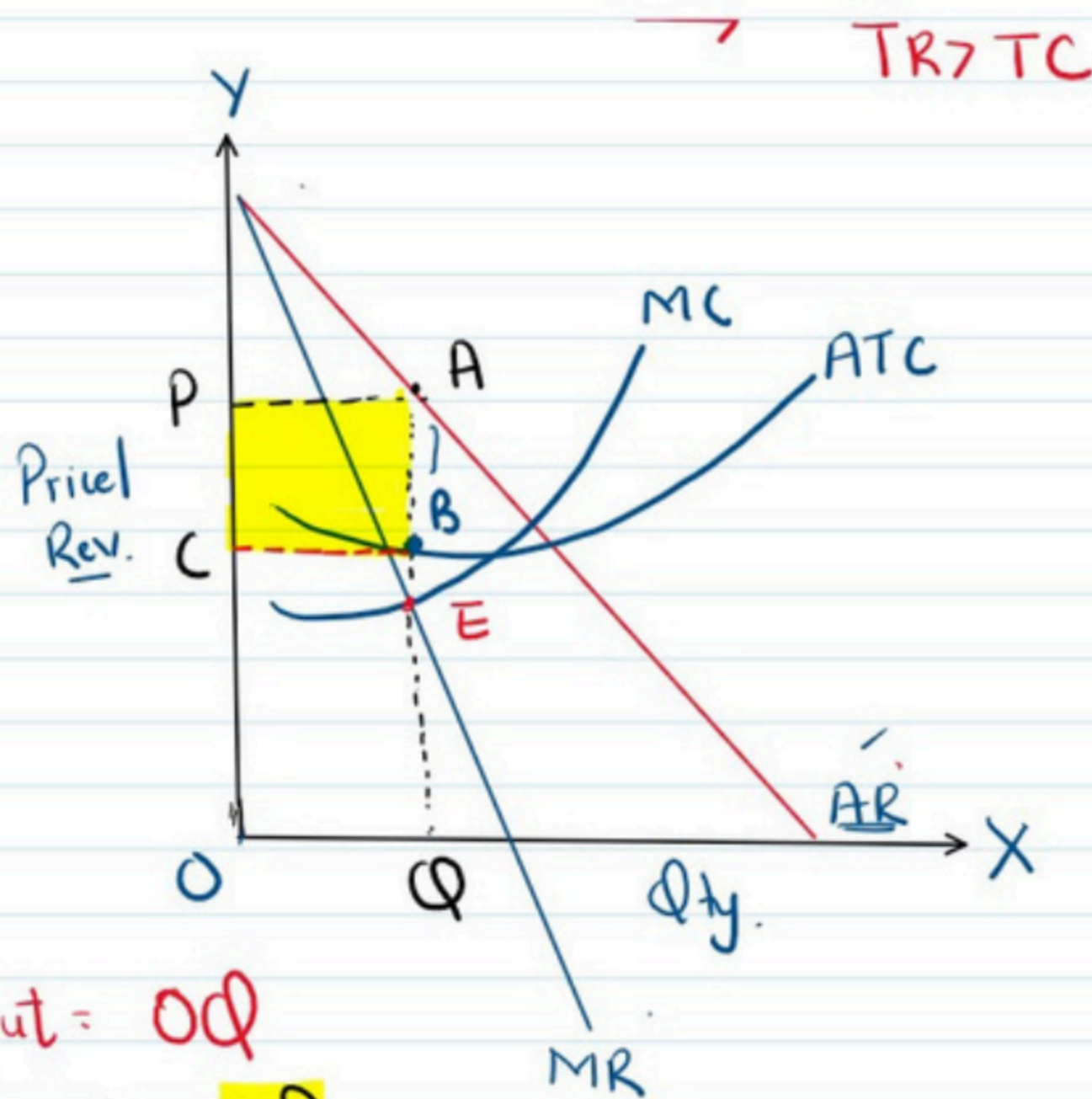
* Determination of output simultaneously determines the price which a monopolist can charge.



Super Normal Profit.

↳ $AR > ATC$
 $TR > TC$

Y
↑



Eq. output = OQ

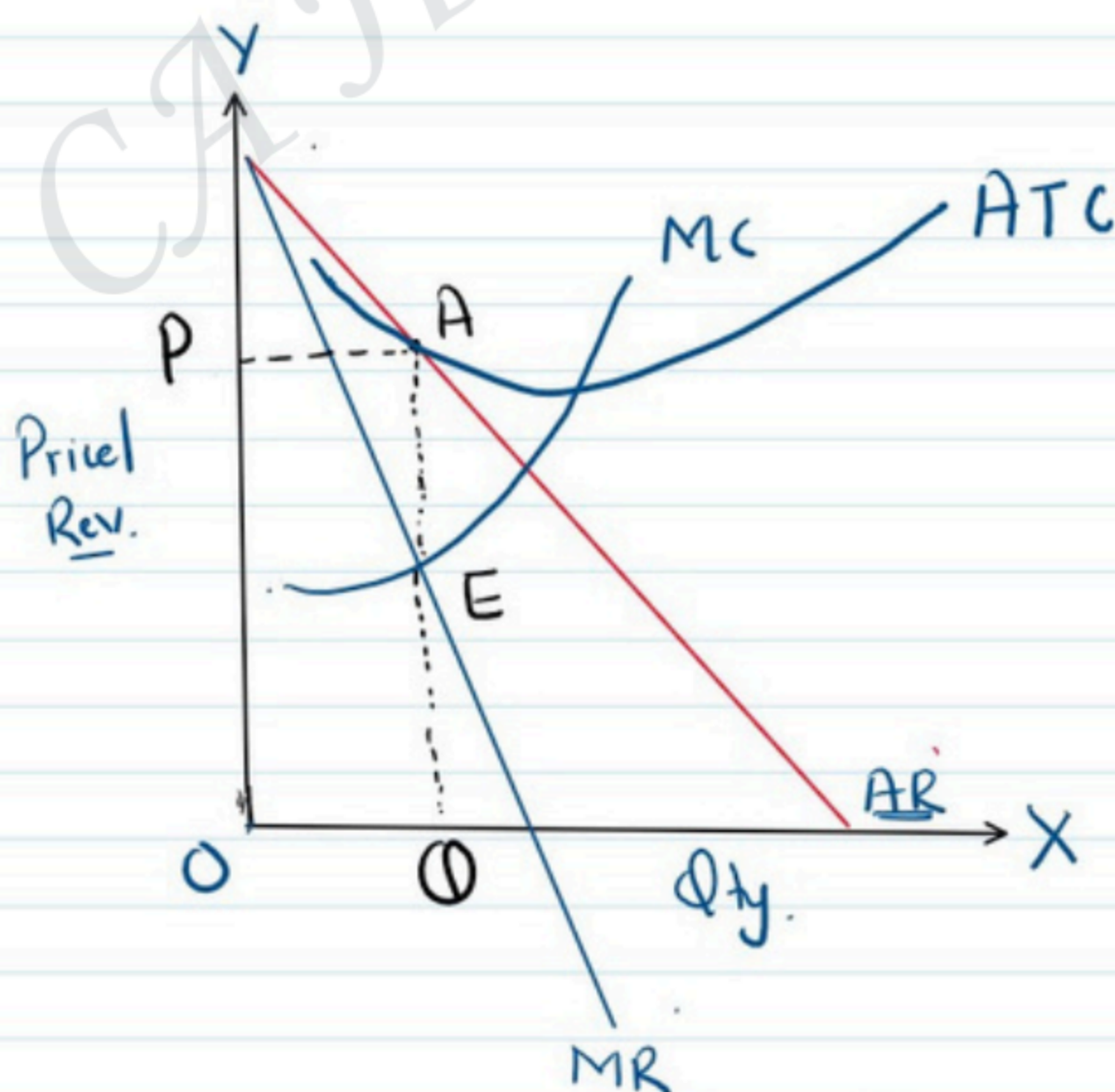
At OQ , AR is AQ

ATC is BQ

Economic Profit = $AR - ATC$
 $AQ - BQ$

Total per unit profit = AB
 Total profit = $ABCP$ - Super Normal profit

2. Normal profit



Eq. output = OQ

At OQ ,

AR = AQ

ATC = AQ

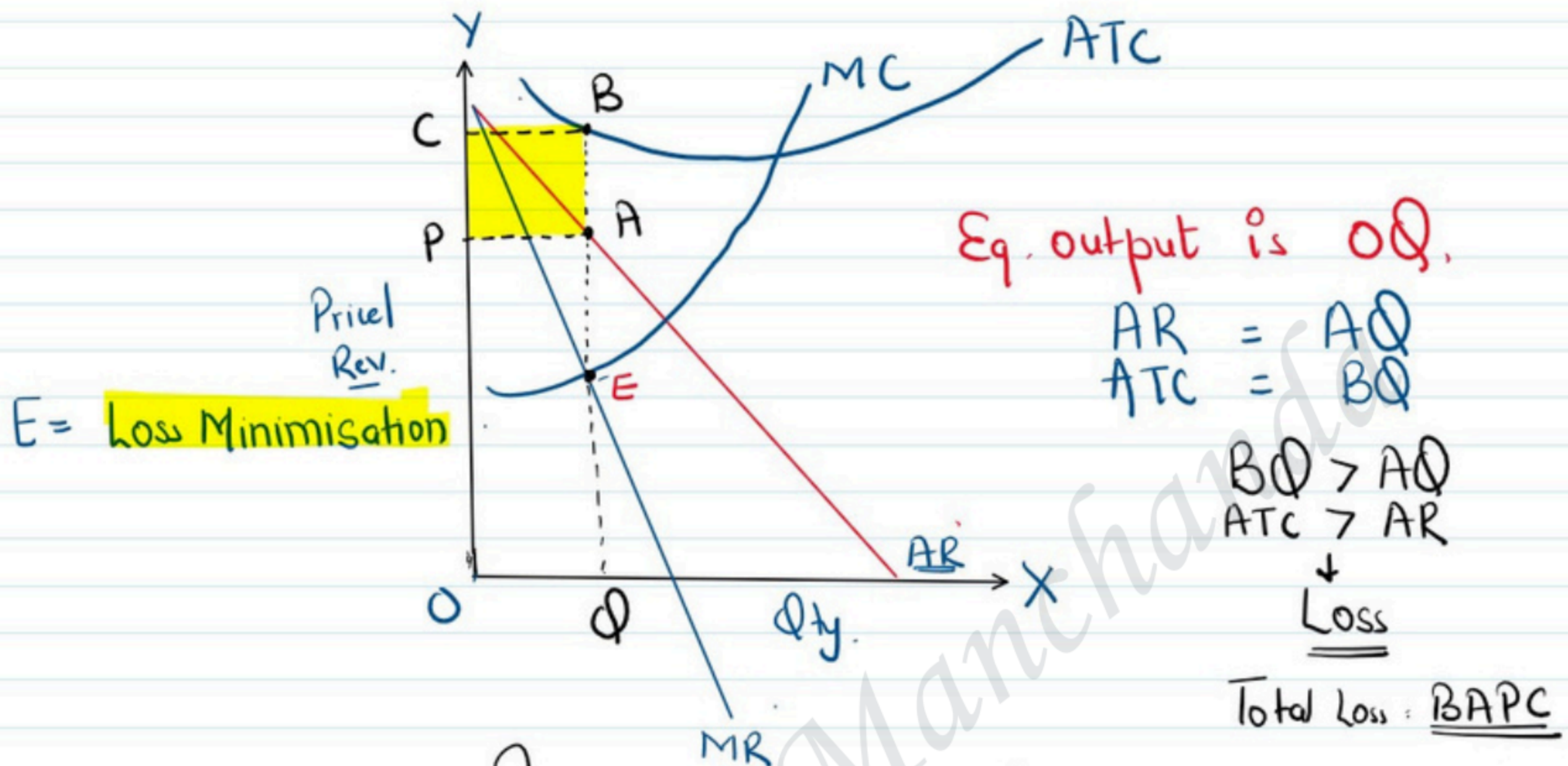
Economic profit = $AQ - AQ$
 $= 0$

- Zero economic profit
 - Normal profit

3) Can a Monopolist incur Losses?

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 ↳ Yes

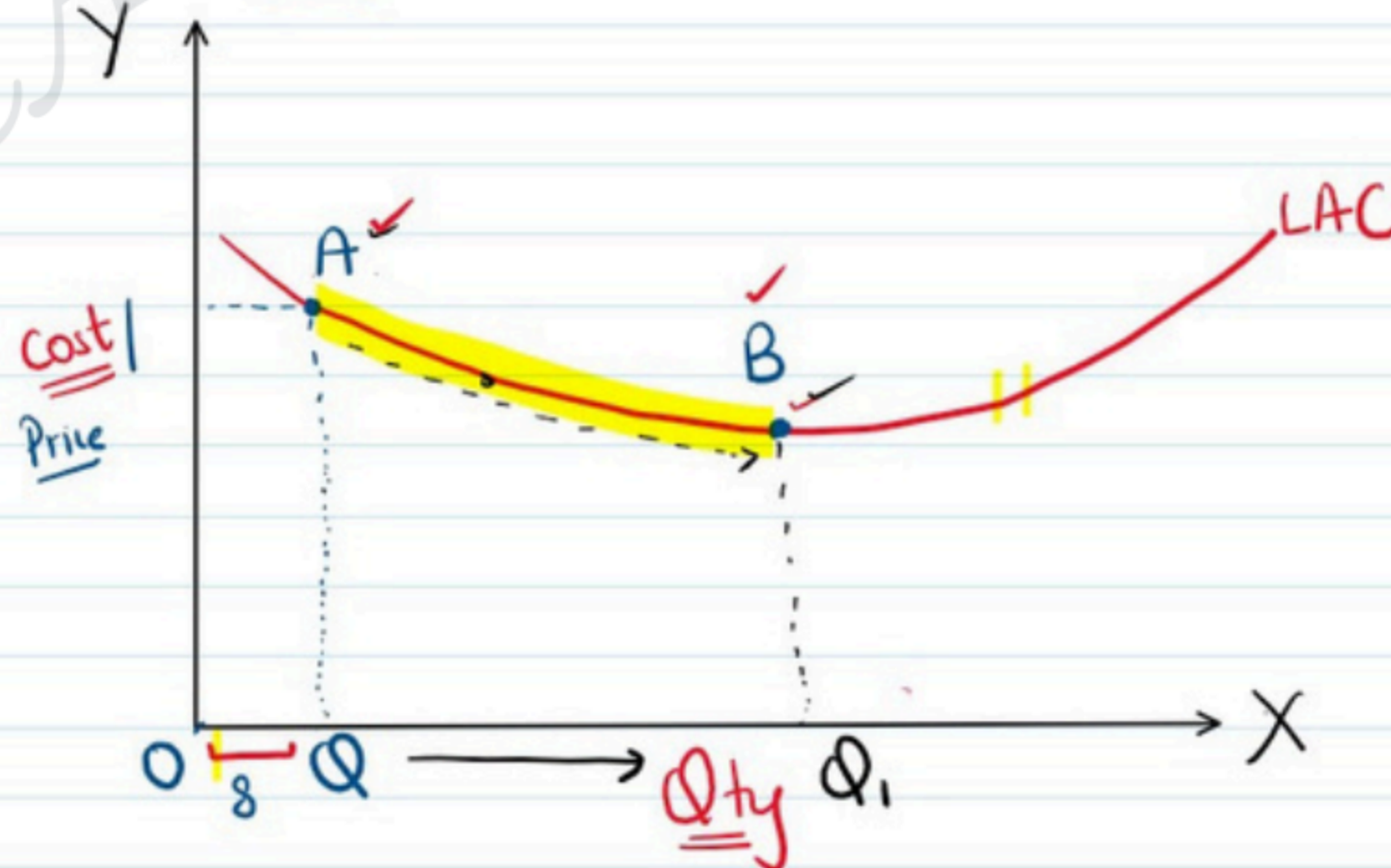
* There is no certainty that a monopolist will always earn economic profit.



→ Whether Monopolist stays in the business in the Short Run depends on whether he/she meets its AVC or not

g/ $AR > AVC$, Continue
 $AR < AVC$, Shutdown.

2) LONG RUN



Example,

	Price	Qty.	AC	TR	TC	Profit/Loss
Rev. loss	12	8	5	96	40	56

	<u>12</u>	<u>8</u>	<u>5</u>	96	40	56
Rev. loss is more than Savings in cost	8	12	4	96	48	48

⇒ Long Run is a period long enough to adjust plant size or use his existing plant at any level that Maximise his profit

* Monopolist need not produce at Optimum level
 ↳ Where AC is min.

→ He/she can produce at sub-optimal level also.

* No need to produce at min. of LAC curve, he can stop at any point on LAC where profit are maximum.

⇒ Monopolist can make Super Normal Profit even in the Long Run.
In Long Run, Monopolist will not continue if he makes losses

x—x

⇒ Price Discrimination

* When a producer sells a specific commodity/service to different buyer at different prices for reasons not associated with cost.

→ Method of pricing adopted by Monopolist in order to earn Abnormal profit

Few examples:

- 1] Some countries dump goods at low price in foreign Market
- 2] Universities charge higher tuition fees from evening class student
- 3] Lower charges on phone calls at off peak time.

Price Discrimination can be classified under three types: 1. First degree price discrimination 2. Second degree price discrimination 3. Third degree price discrimination

3) Lower charges on phone calls at off peak time.

* Price Disc. can't persist under perf. compo because seller has no influence over market determined price.

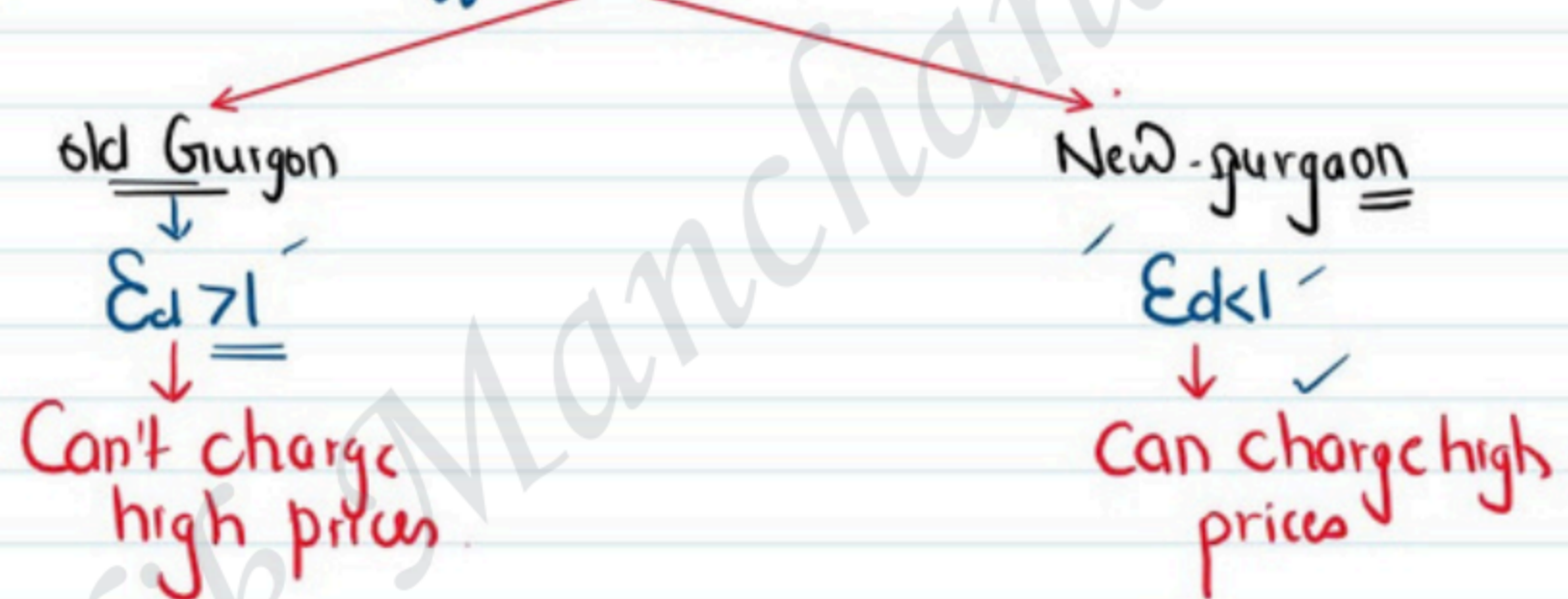
⇒ Conditions for Price Discrimination:

1) Control over Supply → Firm should have price setting power.

2) Seller should be able to divide his market into sub-markets.

* 3) Price-elasticity of product should be different in diff. sub-market

→ a High prices in a market with highly inelastic demand



4) No Market Arbitrage

↪ Not possible for buyer of lower priced market to resell the product to buyers of high priced market.

x==x

Example:

Price = ₹30

A

$$e_d = 2$$

$$MR = AR \times \left[\frac{e-1}{e} \right]$$

$$MR = 30 \times \frac{1}{2} = 15$$

B

$$e_d = 5$$

$$MR = 30 \times \frac{4}{5} = 24$$

- * MR are diff. when elasticity are diff.
- High elasticity - High MR
low elast - Low MR
- * It is profitable to tlf some amt of product from A to B
- * Once a point is reached where MR of both the Markets are equal, then it is no longer profitable to tlf goods from A to B.

$$MR_A = MR_B$$

Now, Monopolist will start charging diff. prices in 2 Markets.

- Higher Price in Market A - Lower elasticity
- Lower price in Market B - Higher elasticity.

* Objectives of Price Discrimination

- 1] To earn Max profits
- 2] To dispose off Surplus stock.
- 3] To enjoy economies of scale
- 4] To capture foreign markets

- 4) To capture foreign markets
- 5) To secure equity through pricing.

⇒ Price Discrimination may be related to consumer surplus enjoyed by customers.

* Prof. Pigou classified 3 degrees of Price Discrimination

1) First Degree
↓
Individual customers.

→ Monopolist separates the market into each individual consumer & charges them the price, they are willing & able to pay.

↓
Extract entire Consumer Surplus.

* Prices are decided under negotiation, 'bid & offer' system, auctions. In drive

2) Second Degree

→ Diff. price for diff qty sold

↓
Monopolist will take away only a part of Cons. Surplus.

2 possibilities:

a) Diff. cons pay diff prices if they buy diff qty
↓
Larger Qty - lower unit price.

b) Each consumer pays diff price for consecutive purchases.
↓
Elect / Telephone.

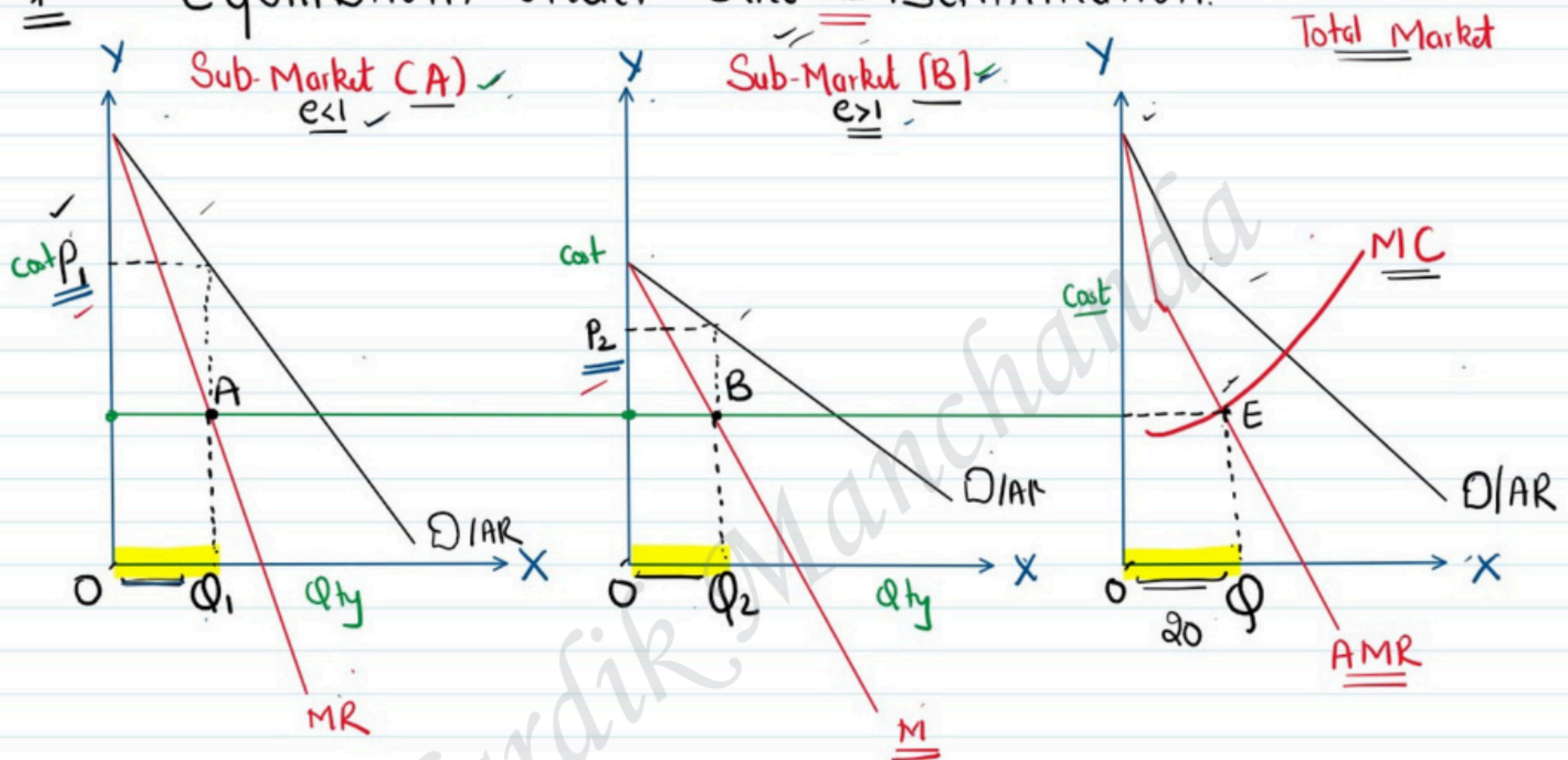
3) Third Degree
↓

3) Third Degree

Price varies by attributes such as location or by consumer segment.

→ Divide consumers into separate sub-markets & charge diff prices in diff sub-market.

* Equilibrium under Price Discrimination.



1. Firstly, Monopolist has to divide the total Market into various sub-market on the basis of difference in elasticity of demand.
2. In order to reach eq. price, the discriminating Monopolist has to make 3 decisions:
 - a) How much total output to produce - OQ
 - b) How total output should be dist. b/w 2 sub-markets?
 - Sub-Market (A) - OQ_1
 - Sub-Market (B) - OQ_2
 - c) What prices to charge in 2 sub-markets
 - Sub-Market (A) - OP_1
 - Sub-Market (B) - OP_2

- Imp 1] MR in 2 Sub-market must be equal if Profit are to be maximised.
- 2] Also, MR in both Sub-markets should be equal to the MC of the whole output.

Economic Effect on Monopoly

- 1) Monopoly is often criticized because it reduces aggregate economic welfare through loss of productive and allocative efficiency. ^{Customer - Min price} $AR \uparrow$
- 2) Monopolists charge substantially higher prices and produce lower levels of output than would exist if the product were produced by competitive firms. $\downarrow P.C.$
- 3) Monopolists earn economic profits in the long run which are unjustifiable. $AR > MC$
- 4) Monopoly prices exceed marginal costs and therefore reduces consumer surplus. There is a transfer of income from the consumers to the monopolists. Not only that consumers pay higher prices, but they would also not be able to substitute the good or service with a more reasonably priced alternative.
- 5) Monopoly restricts consumer sovereignty and consumers' opportunities to choose what they desire.
- 6) Monopolists may use unjust means for creating barriers to entry to sustain their monopoly power. They often spend huge amount of money to maintain their monopoly position. This leads increases average total cost of producing a product.
- 7) A monopolist having substantial financial resources is in a powerful position to influence the political process in order to obtain favourable legislation.
- 8) Very often, monopolists do not have the necessary incentive to introduce efficient innovations that improve product quality and reduce production costs.
- 9) Monopolies are able to use their monopoly power to pay lower prices to their suppliers.
- 10) The economy is also likely to suffer from 'X' inefficiency, which is the loss of management efficiency associated with markets where competition is limited or absent.

Since monopolies are exploitative and generate undesirable outcomes in the economy, a number of steps are taken by governments to prevent the formation of monopolies and to regulate them if they are already present.

- X ineff -
- a) Lowest cost / optimum X
 - b) Innovation X
 - c) Excessive Wastage of Res. ✓

→ Favourable Outcome of Monopoly:-

- a) $\uparrow$ in Revenue will enable firm to stay in business, who otherwise would have made a loss.
- b) Peak Load Pricing $\rightarrow$ Firms having capacity constraints

- b) Peak Load Pricing → Firms having capacity constraints will be able to spread its demand to off peak times resulting in better capacity utilisation.
 ↳ Reduction in cost of prod.

* Monopolistic

↓
 Mix of Monopoly + Perfect comp.

→ More common than pure comp or Pure Monopoly.

Features:

1) Large no. of Seller - , having small share in the Market.

2) Product Differentiation: Product of diff sellers are differentiated on the basis of Brands.

→ Close Substitutes:

↳ Elastic demand.
 (Ed > 1)

→ Firms use design, colour, features & promotional techniques to make the prod. diff.

↳ Such differentiation may be true or fanciful.

→ Prod. diff. gives rise to an element of Monopoly to the producers over the competing product. because of absence of perfect substitutes

↓
 Producers can raise the price
 ↳ will lose some of the customers.

3) Random Int. & Exit

3) Freedom of Entry & Exit

↳ barriers are comparatively low.

Long Run - Normal Profit

4) Non-Price competition:

↳ Compete on basis other than price.

* A key base of non-price competition is a deliberate policy of product diff.

* Equilibrium of firm

→ Each firm is a price maker.

→ Downward sloping demand curve.

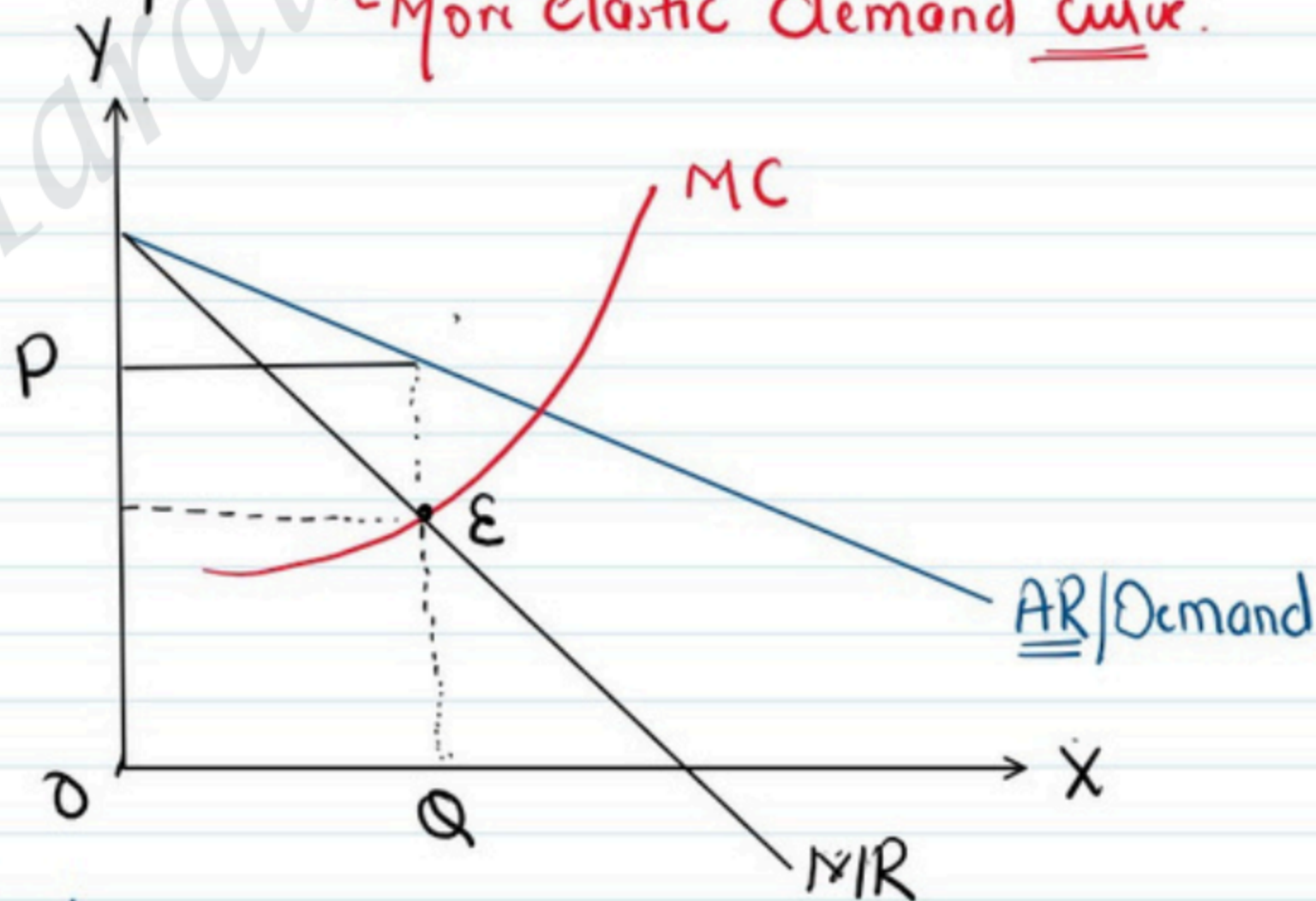
* Less differentiated product -

↳ More elastic demand curve.

Short Run

Eq. output - OP

Eq. price - OP

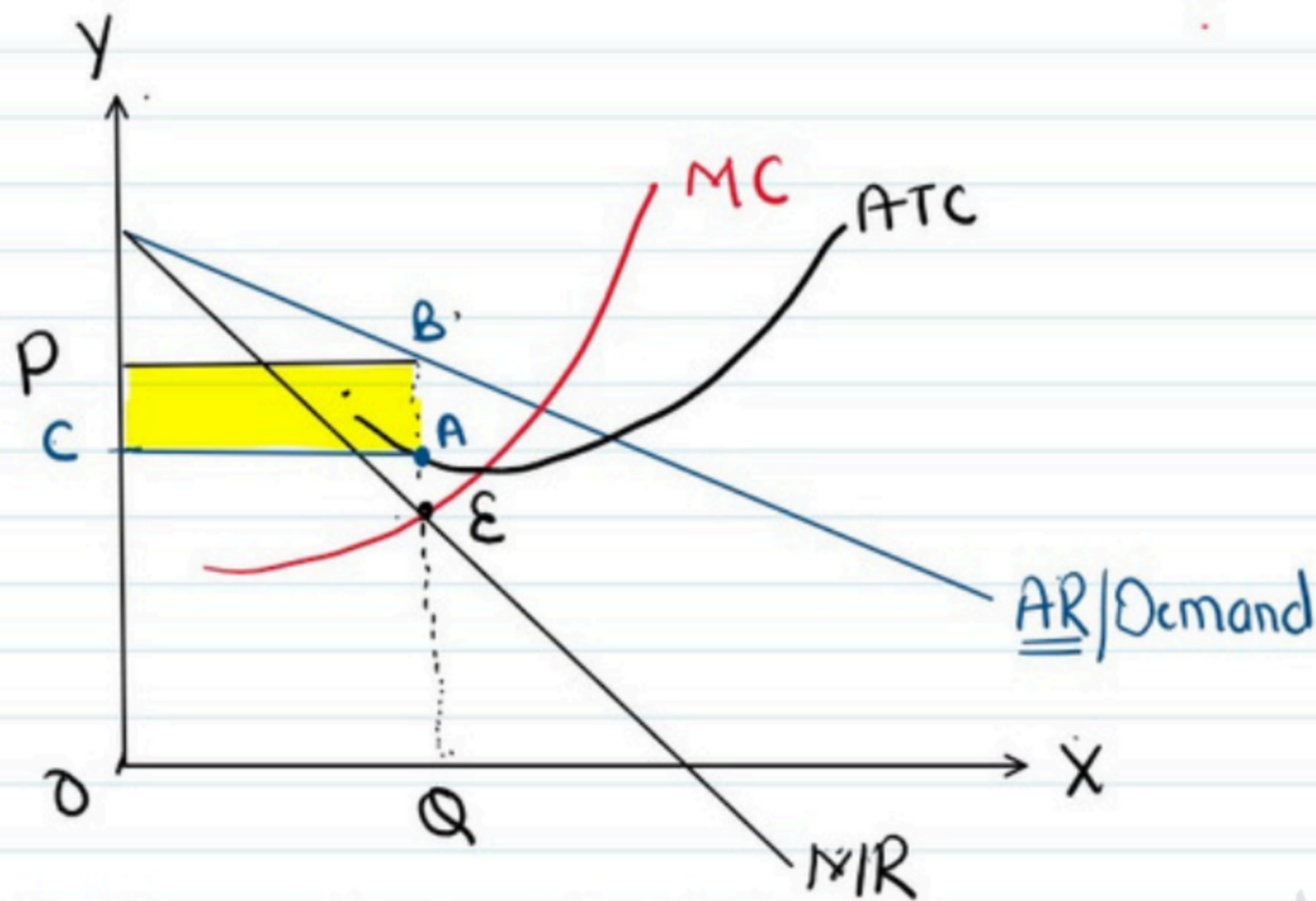


Conditions of equil.

1) $MR = MC$

2) MC curve cuts MR from below.

1. Super Normal profit - $\underline{AR} > \underline{ATC}$



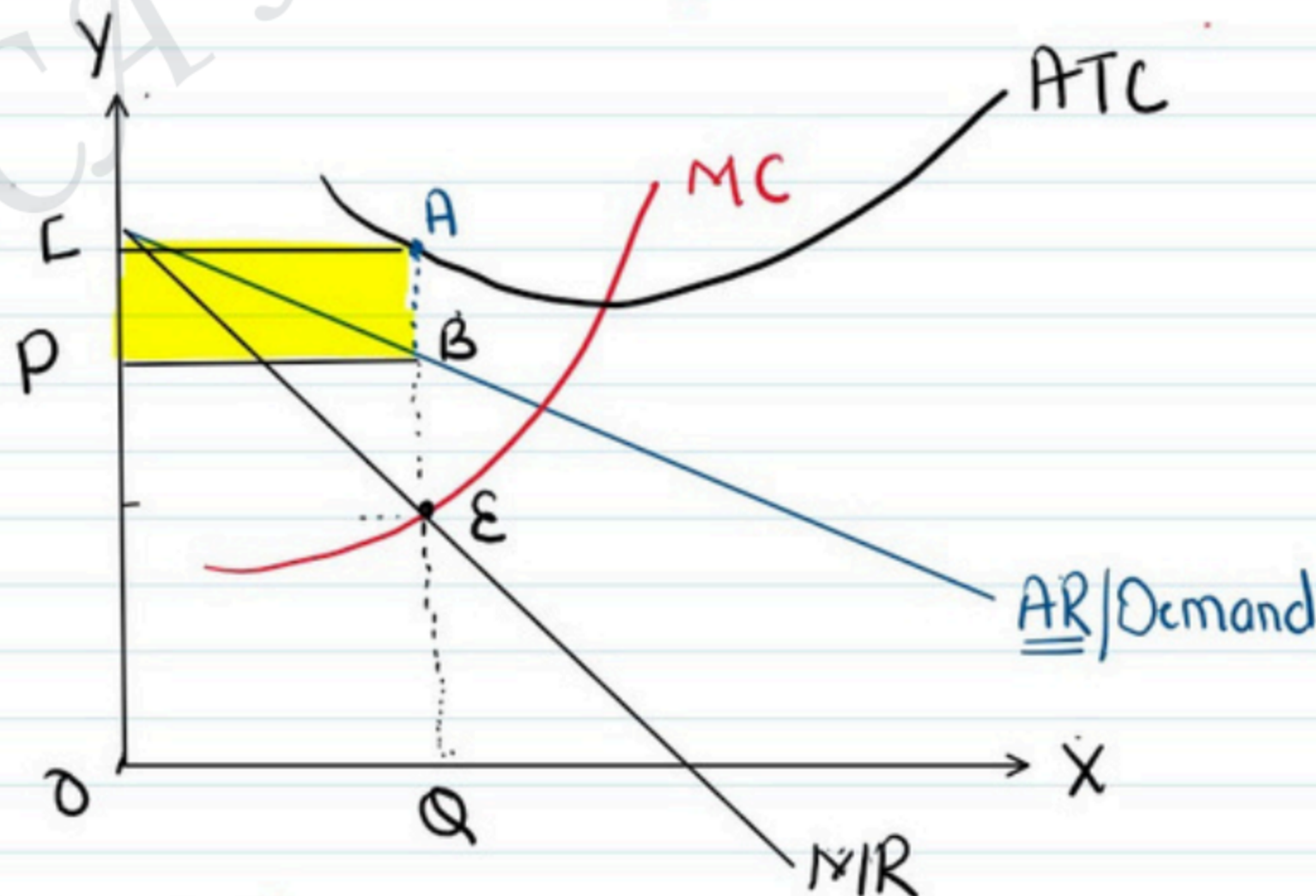
Eq. Point = E, Eq. output = OQ

At OQ, $AR = BQ$

$ATC = AQ$, $BQ > AQ$

Profit = PCAB

2. Can Monopolistic firm incur losses? $\rightarrow \begin{matrix} AR < ATC \\ AR > \underline{AVC} \end{matrix}$



At Eq. output OQ,

$AR = BQ$
 $ATC = AQ$

$\frac{AQ}{ATC} > \frac{BQ}{AR}$

$$HK = DV$$

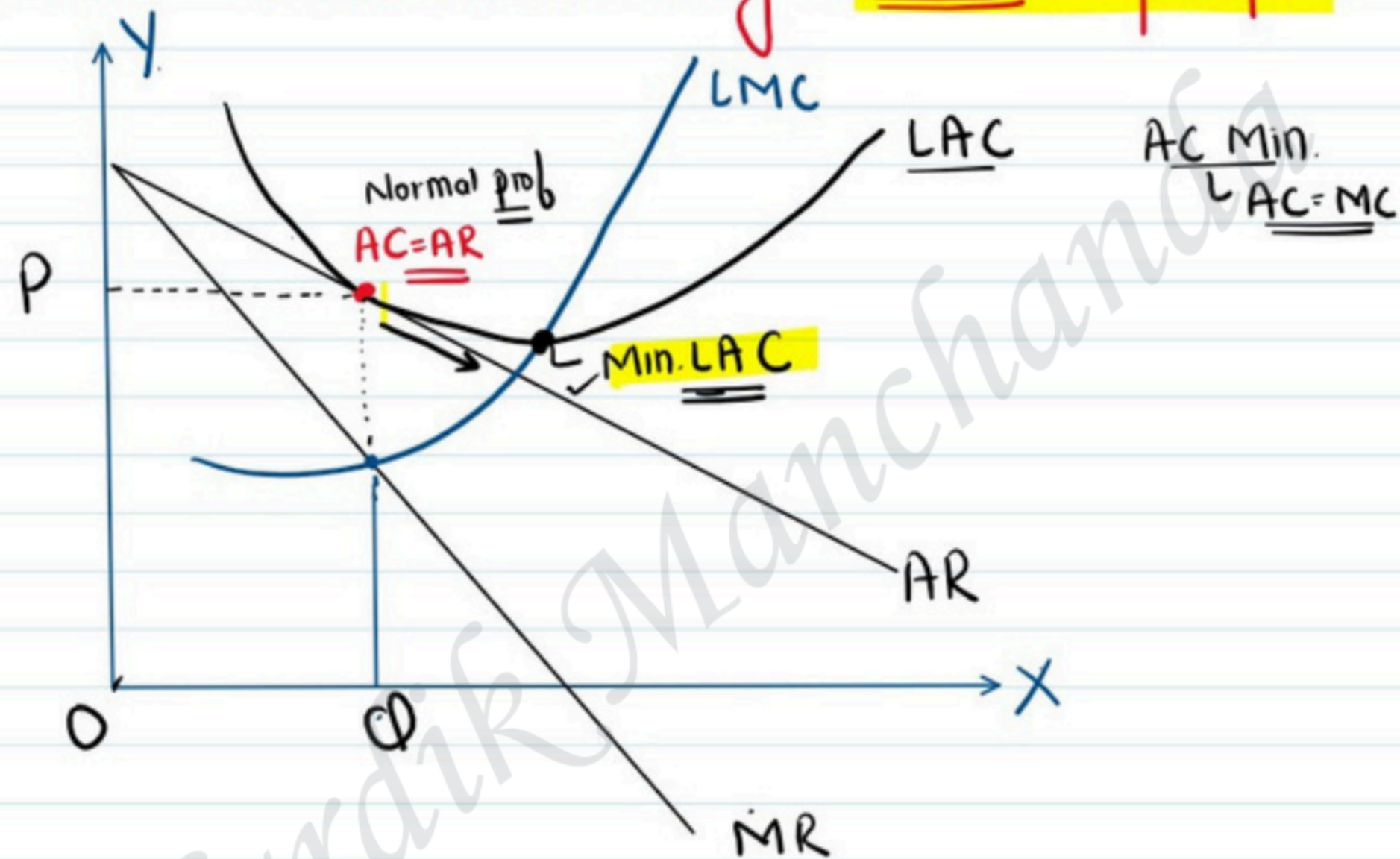
$$ATC = AQ$$

$$\frac{AQ}{ATC} > \frac{BV}{AR}$$

$$Loss = \underline{CPBA}$$

* Long Run

In the Long Run, firms under monopolistic competition will earn only normal profit.



→ In the Long Run, firms do not operate at optimum Capacity.

because,

⇒ Price Reduction to sell more will exceed cost Reduction
 $\hookrightarrow AC > AR$

⇒ Firms have excess capacity.

x-x

Oligopoly - Example - Cold drinks
Automobiles
Telecommunication
Airline

- Competition among the few $\approx [2-10]$

OPEC

Org. of the petroleum
Exporting countries

Prof. Stigler defines

"Situation in which a firm bases its market policy, in part, on the expected behaviour of a few close rivals."

→ Selling Homogeneous or differentiated products.

→ Oligopolies mostly arise due to factor which are responsible for emergence of Monopolies.

few firms exercise power

→ Absolute Market power

* Types of Oligopoly:

1. Pure or Perfect oligopoly:

1] Product are homogeneous in nature.
Ex- Aluminium

2] This type of oligopoly tends to produce raw material / intermediate goods
Ex- Petroleum, Steel.

→ Differentiated oligopoly / imperfect oligopoly.
Goods sold is based on product diff.

2] Open & closed Oligopoly:

2) Open & closed Oligopoly:
 ↓
 New firms can enter the market.
 ↳ entry is restricted.

3) Collusive & competitive Oligopoly
 ↓↓
 ↳ few firms come to a common understanding or act in collusion with each other, in fixing price or output or both.
 ↳ Absence of such understanding & they compete with each other.

4) Partial or full Oligopoly
 ↓
 Industry is dominated by one large firm.
 ↳ Absence of such price leadership.
 ↳ looked upon as leader

* 5) Syndicated & Organised
 ↓
 ↳ firms sell their products through a centralised syndicate.
 ↳ firms organise themselves into central association for fixing prices, output, etc.

* Characteristics of Oligopoly Market.

i) Strategic Interdependence: - Most imp feature

Characteristics of Oligopoly:

- 1) Strategic Interdependence: - Most imp feature
 - Under Oligopoly, each seller is big enough to influence the Market.
 - A firm has to respond to its rivals actions & simultaneously, the rivals also respond to firm's actions.
 - An Oligopoly firm that does not consider its rivals behaviour or incorrectly assumes them, is likely to suffer a setback.

2) Importance of Advertisement & Selling costs:

- Due to interdependence of oligopolists, firms have to employ various aggressive marketing weapons to gain greater share in the market.
- Avoid price cutting & try to compete on non-price basis.

3) Group behaviour:

- Theory of oligopoly is theory of Group behaviour.
- There is no generally accepted theory of Group behaviour.
 - Firms may form a group in promotion of their common interest
 - Group may or may not have a leader.

* Price-output Decisions in Oligopolistic Market

- Oligopolistic firms can't have sure & determinate demand curve.
 - ↓
 - What price & output to fix cannot be ascertained by economic analysis.

1. economic analysis.

* However, economists have established no. of price-output models for oligopoly:

1. Ignore interdependence & make decision independently.
 - Demand curve becomes definite & equilibrium output is found out by equation, $MR = MC$.

2. Economist Models:-

a) Cournot Model :- Firm's control variable is output.

b) Stackelberg's Model :- Leader commits to an output before all other firms. The rest of the firms are followers, they choose output so as to maximise profit.

c) Bertrand Model - Price is control variable for firms & each firm sets its price.

3. Cartel

- Oligopolists enter into agreement & try to pursue their common interest.

→ They jointly act as Monopoly

→ ex- OPEC

* Price Leadership

→ A group of firms that explicitly agree to coordinate their activities is Cartel.

* Most Cartels have only a subset of producers.

→ If the participating producers stick to cartel agreement, Cartel will have high market power & earn monopoly profits especially when demand for product is

Cartel will have high market power & earn monopoly profit especially when demand for product is inelastic

* 'Live & Let Live Philosophy' ○○○○

↳ Dominant firm accept the presence of fringe firms & set the price to maximize its profit.

This is called Price Leadership by Dominant firm.

* Price leadership by low-cost firm

→ Price leader set the price in such a manner that it allows some profit to the followers also.

○○○○
Cost 10 12 13 11
15

* Barometric Price Leadership

→ Old, experienced, or most respected firm acts as a leader.

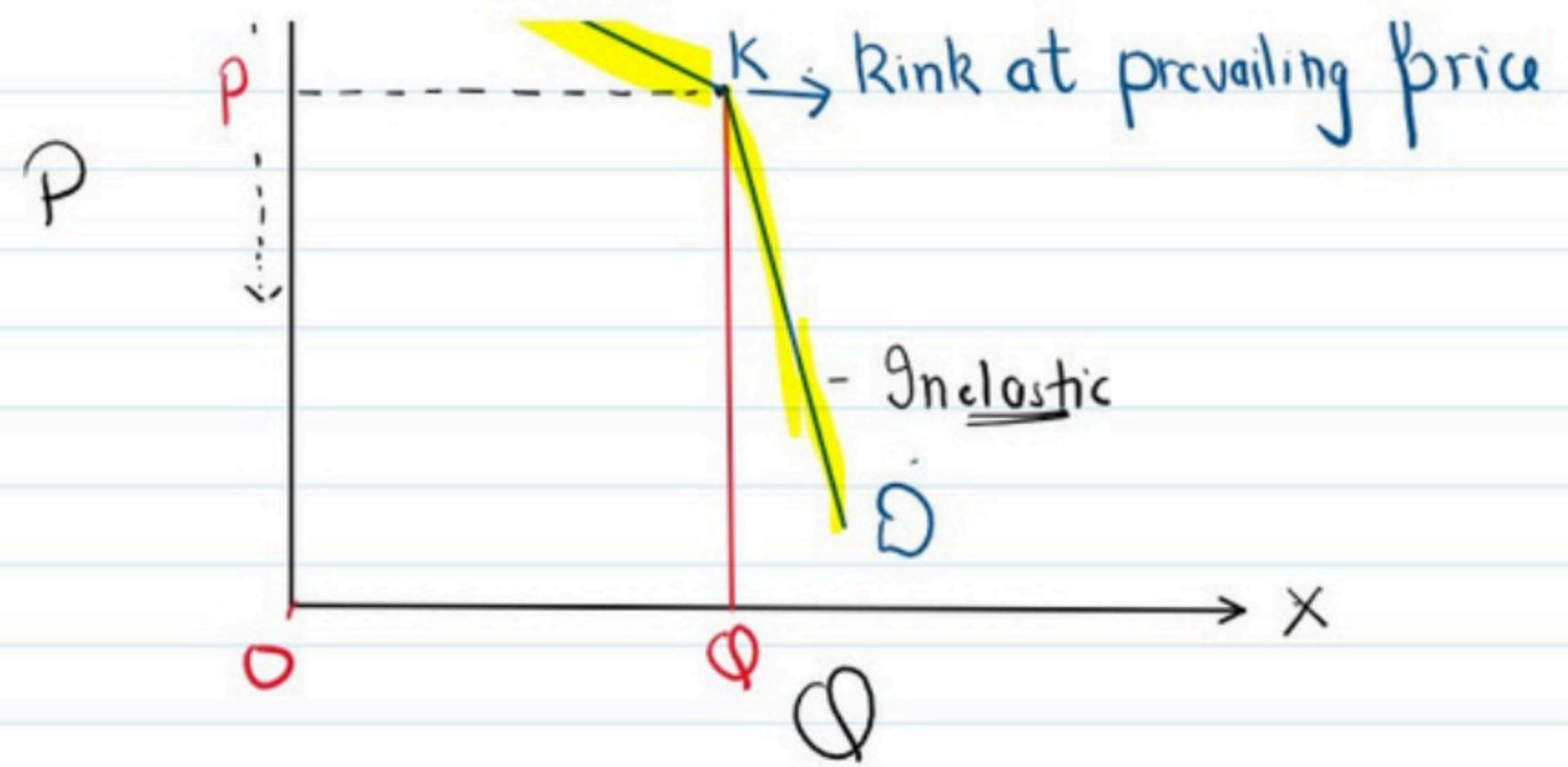
→ Makes changes in price which are best for all firms in industry.

* Kinked Demand Curve

— In oligopoly, price remain sticky or inflexible for a long time. They tend to change infrequently, even in case of declining costs.

→ Most popular explanation of this price rigidity is given by American economist Paul A. Sweezy.
→ Hence, this is called Sweezy's Model.





- Segment of demand curve above prevailing price level is highly elastic
- Segment of demand curve below prevailing price level is inelastic

* When oligopolist lowers the price below the prevailing price
 ↳ Its competitors will follow
 ↳ Little increase in sales.

* When oligopolist increases the price of product
 ↳ Competitors will not follow
 ↳ Massive ↓ in sales.

* Rigid / Sticky prices are explained by Kinked Demand Curve theory.

⇒ Other imp. Market forms:

1) Duopoly - Subset of oligopoly - Only 2 firms in a market

2) Monopsony - Single buyer in the market
 - Applicable to factor market

3) Oligopsony - Small no. of large buyers
 - Applicable to factor market

4) Bilateral Monopoly - 1 buyer + 1 seller
 - combination of Monopoly + Monopsony

7) Quasi
Monopoly

- 1 Buyer + 1 Seller

- combination of Monopoly + Monopsony.

x- Chapter Over — x

CA Hardik Manchanda