PAGE No.

DATE / /

PRICE DETERMINATION IN DIFFERENT MARKETS

1. Perfect competition → Competitive market.
2. Monopoly
3. Monopolistic competition } Imperfect competition.
4. Oligopoly.

MARKET

1. Buyer and seller
2. Goods and Services
3. Price
4. Market knowledge

* CLASSIFICATION OF MARKET

1. Local area market
   Perishable goods.

2. Regional Market → Semi durable goods.

3. National Market → Industrial goods.
   Eg. Plant & Machinery.

4. International Market → Metals. e.g. Gold, Silver.

- Short Peroid Market
  Supply can be changed but limited.

- Very short peroid market.
  Supply cannot be changed.

- long peroid market.
  Supply can be changed unlimited.

- Very long peroid market.
  Known as Secular peroid.

- Spot market
  Transaction done on the spot.

- Future market.
  Transaction done in near market.

- Regulated Market.
  Govt. control. RBI → Bank.

- Unregulated market.
  No govt. control. Eg: Crypto.

- Wholesale market
  Transaction / goods in Bulk.

- Retail market
  Goods are sold to ultimate consumer.

PAGE No.
DATE / /

* Concept of Time Element was given by Alfred Marshall.

* Revenue

(1) Total Revenue (T.R) = Price X Qty.
= 10 X 20
= 200.

(2) Average Revenue (AR) = $\frac{TR}{Qty}$
= $\frac{200}{20}$
= 10

* AR = Price

(3) Marginal Revenue (MR) = $MR_n = TR_n - TR_{n-1}$
OR
** $MR = \frac{\Delta TR}{\Delta Q}$

* Calculate MR when elasticity is given.

$MR = AR \times \frac{e-1}{e}$

Eg. When $e = 1$ MR will be 0

$e > 1$ MR will be positive.

$e < 1$ MR will be negative.

EQUILIBRIUM PRICE

↓

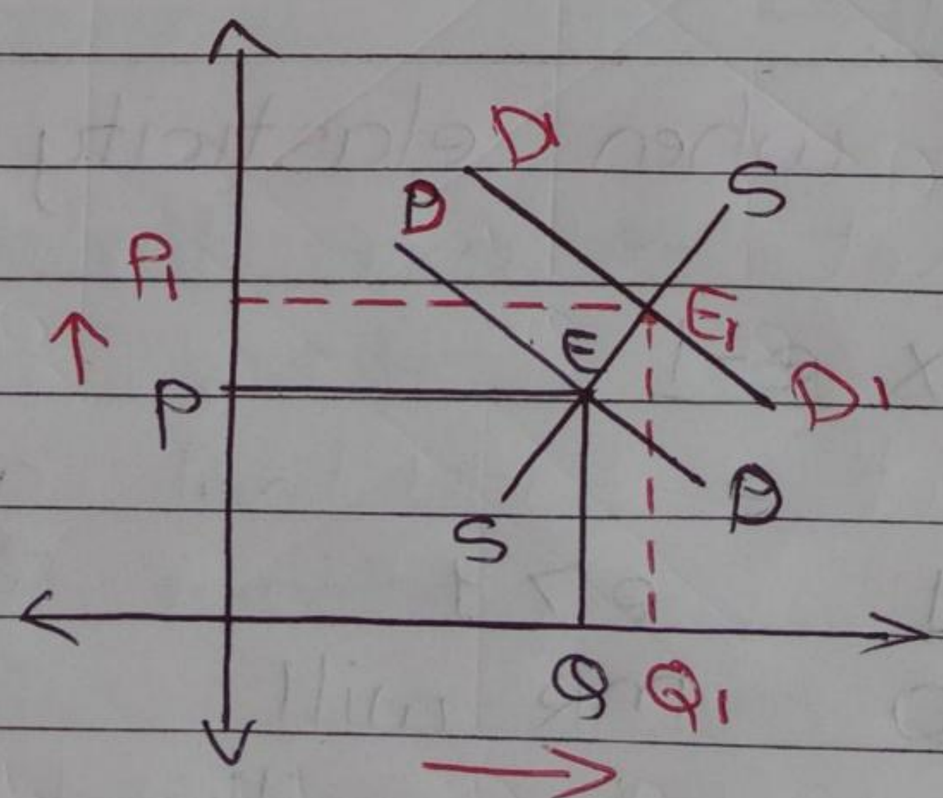
Market Clearing Price

When Qty demand = Qty supply

Price	Qty. demand	Qty. supply	Impact on price
5	100	500	P↓ Falls
4	200	400	
3	300	300	Constant
2	400	200	
1	500	100	P↑ Increases

Impact of change in demand and supply on Equilibrium Price and Qty.

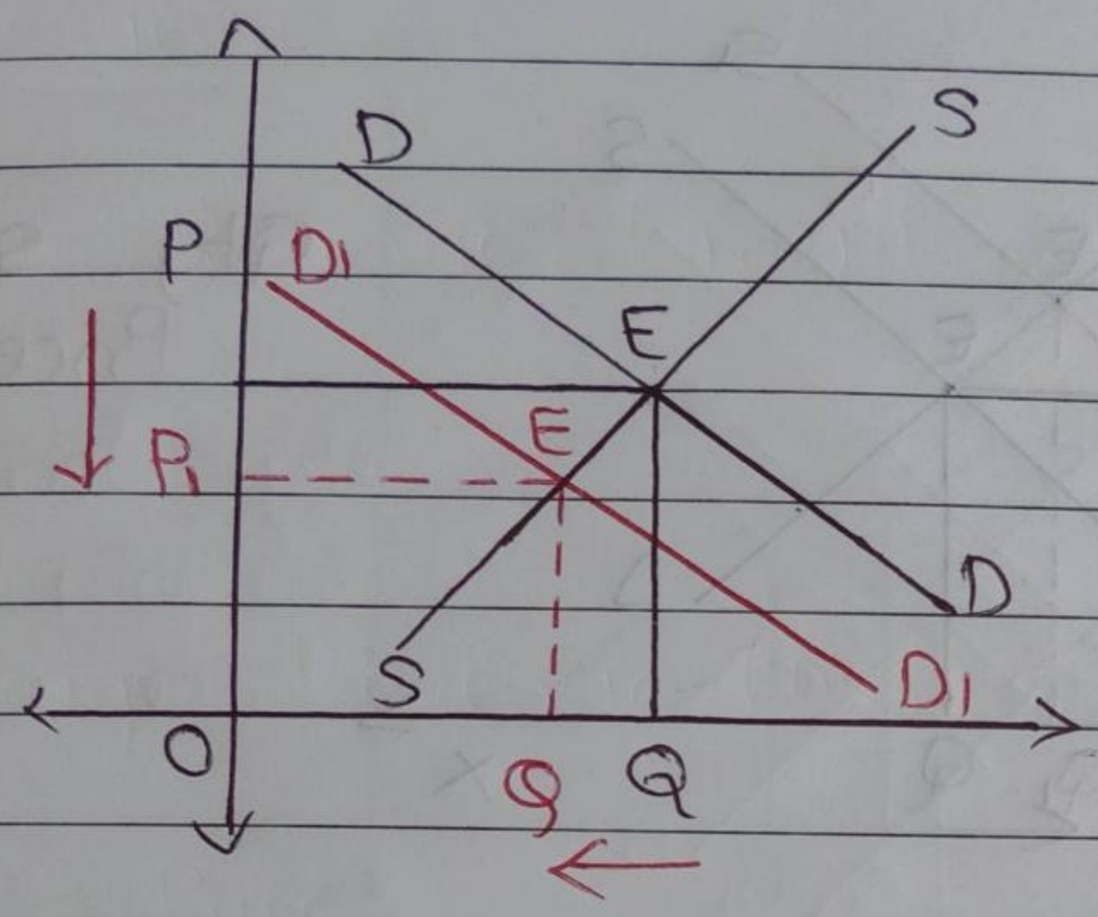
e 1: When demand ↑ Supply constant



Price & Demand Both ↑.

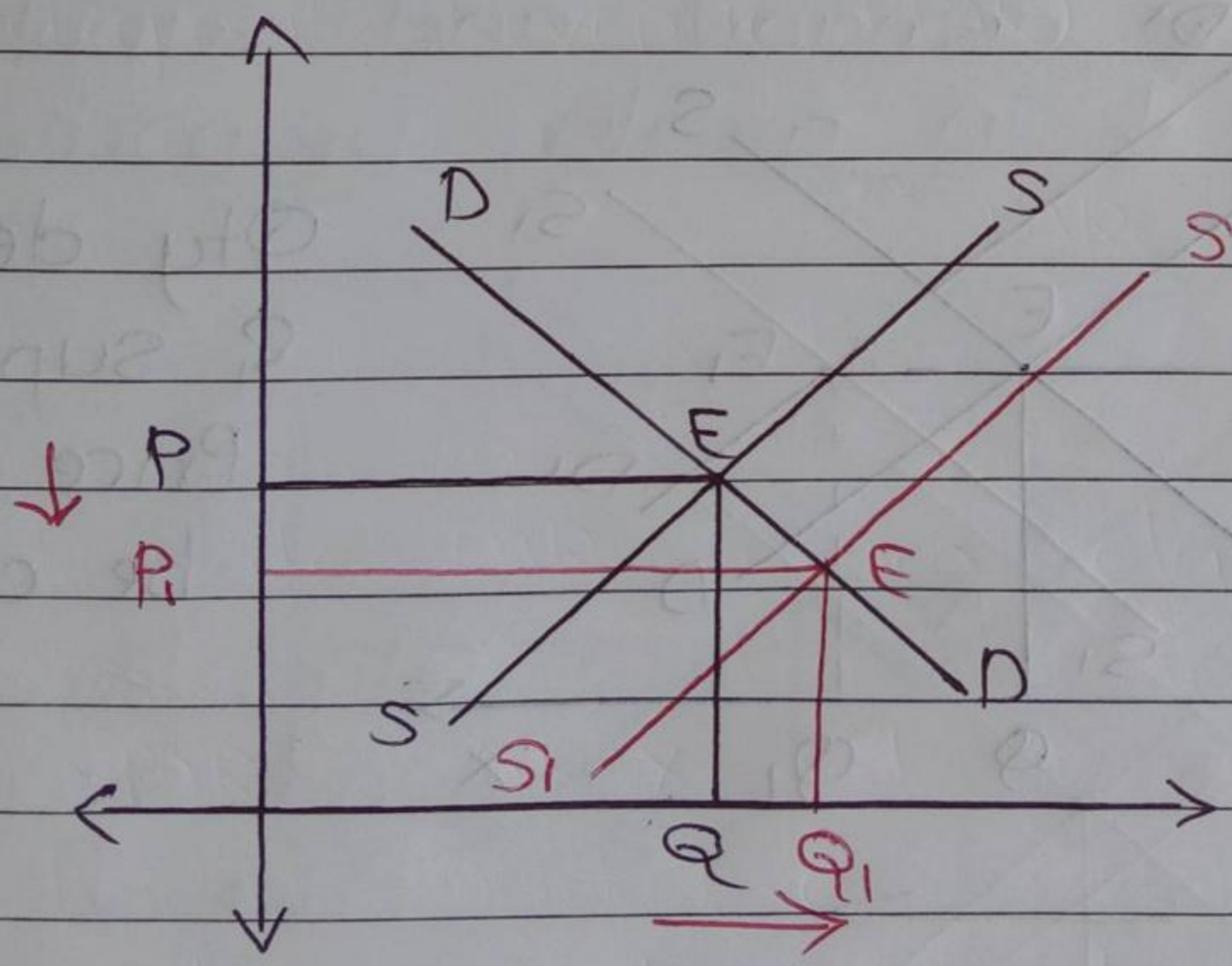
PAGE No.
DATE / /

Case 2: When demand decreases, supply constant.



Price & qty demanded ↓

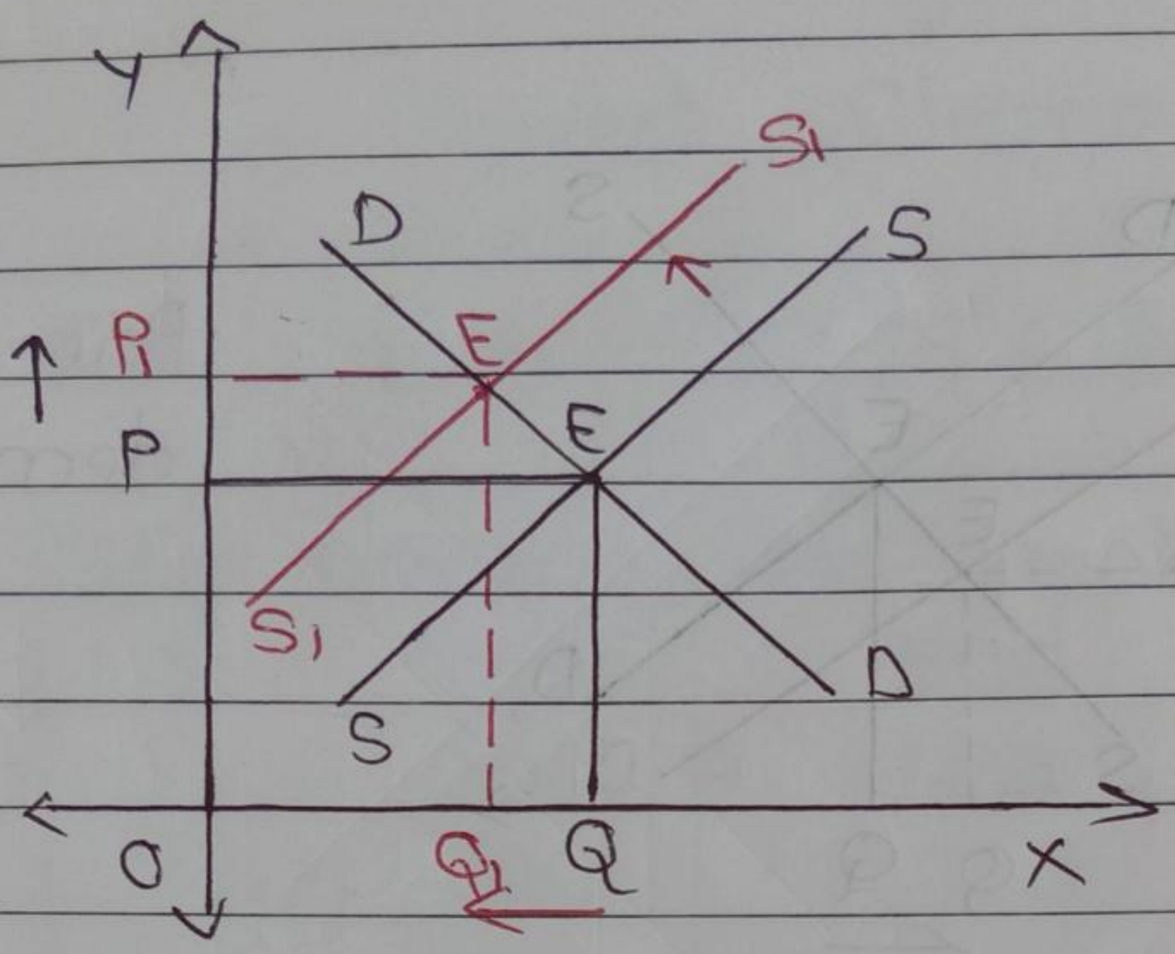
Case 3: When supply ↑ demand constant.



Qty supply ↑
Price ↓

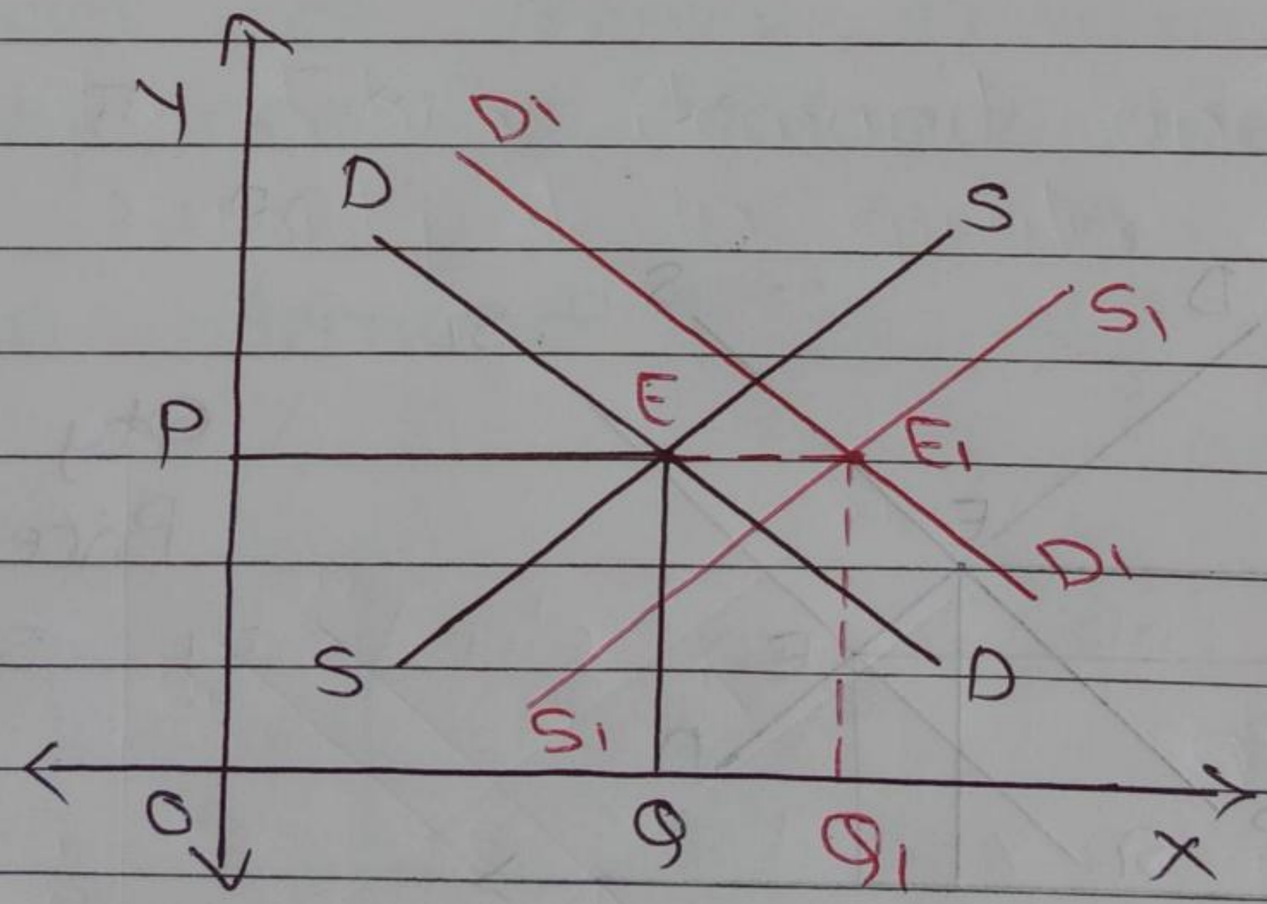
DATE

Case 4: When supply ↓ demand constant



Qty supply ↓
Price ↑

Case 5: When both demand and supply ↑ in same proportion.



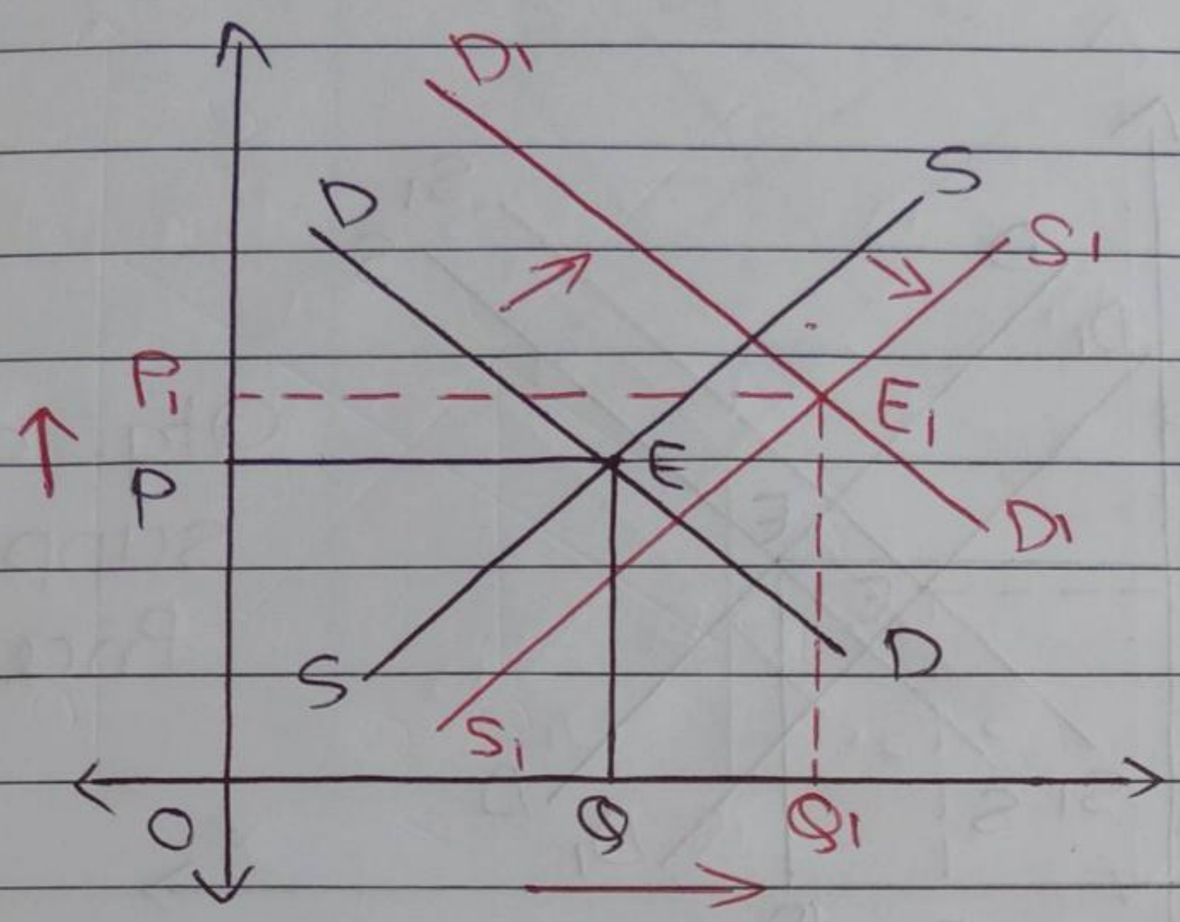
Qty demand & supply ↑
Price will be constant

⟶

* If Both Qty. D. & Supply falls

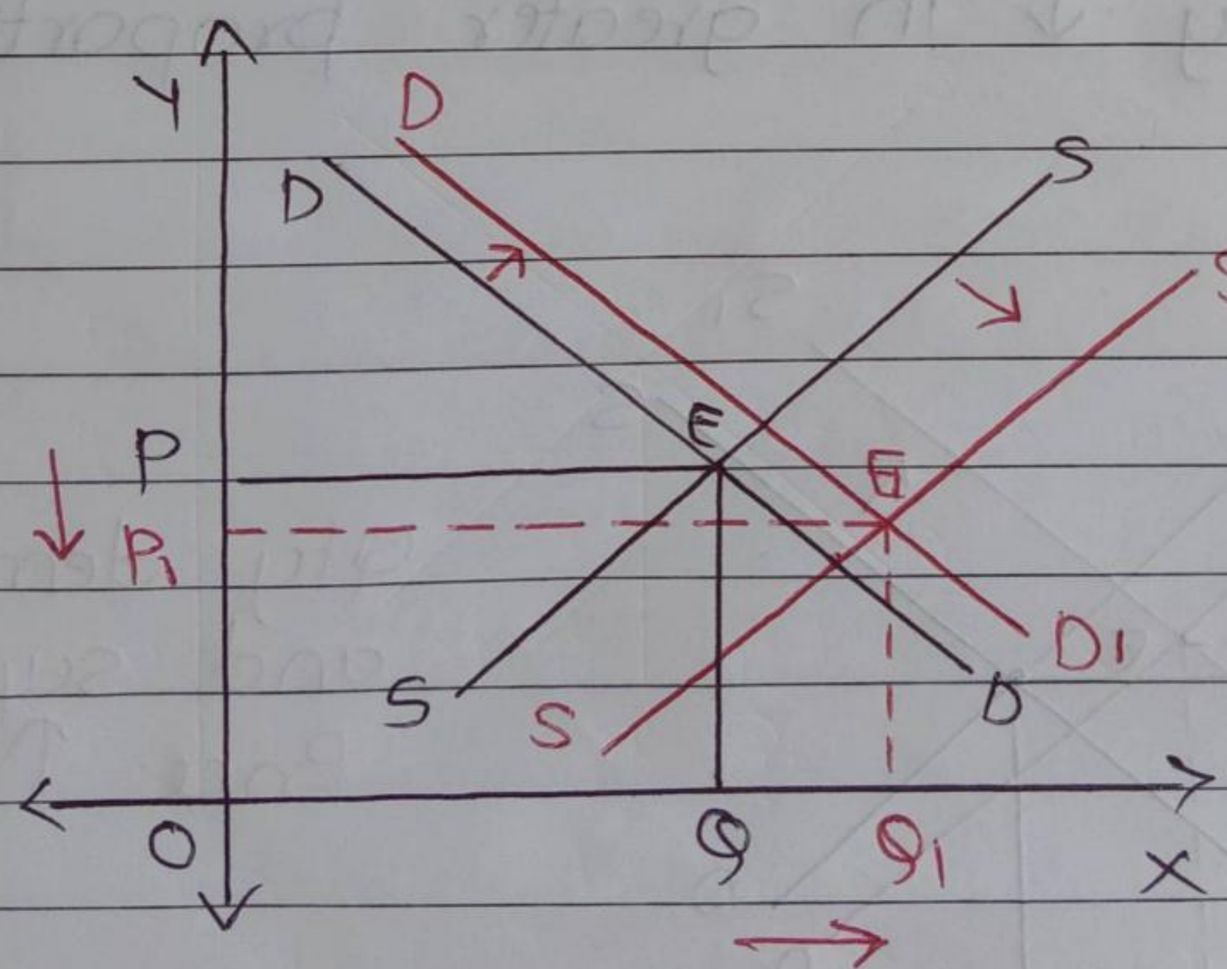
Price will same but Qty demand & supply will fall.

Case 6 : When both demand and supply ↑ but demand ↑ in greater proportion.



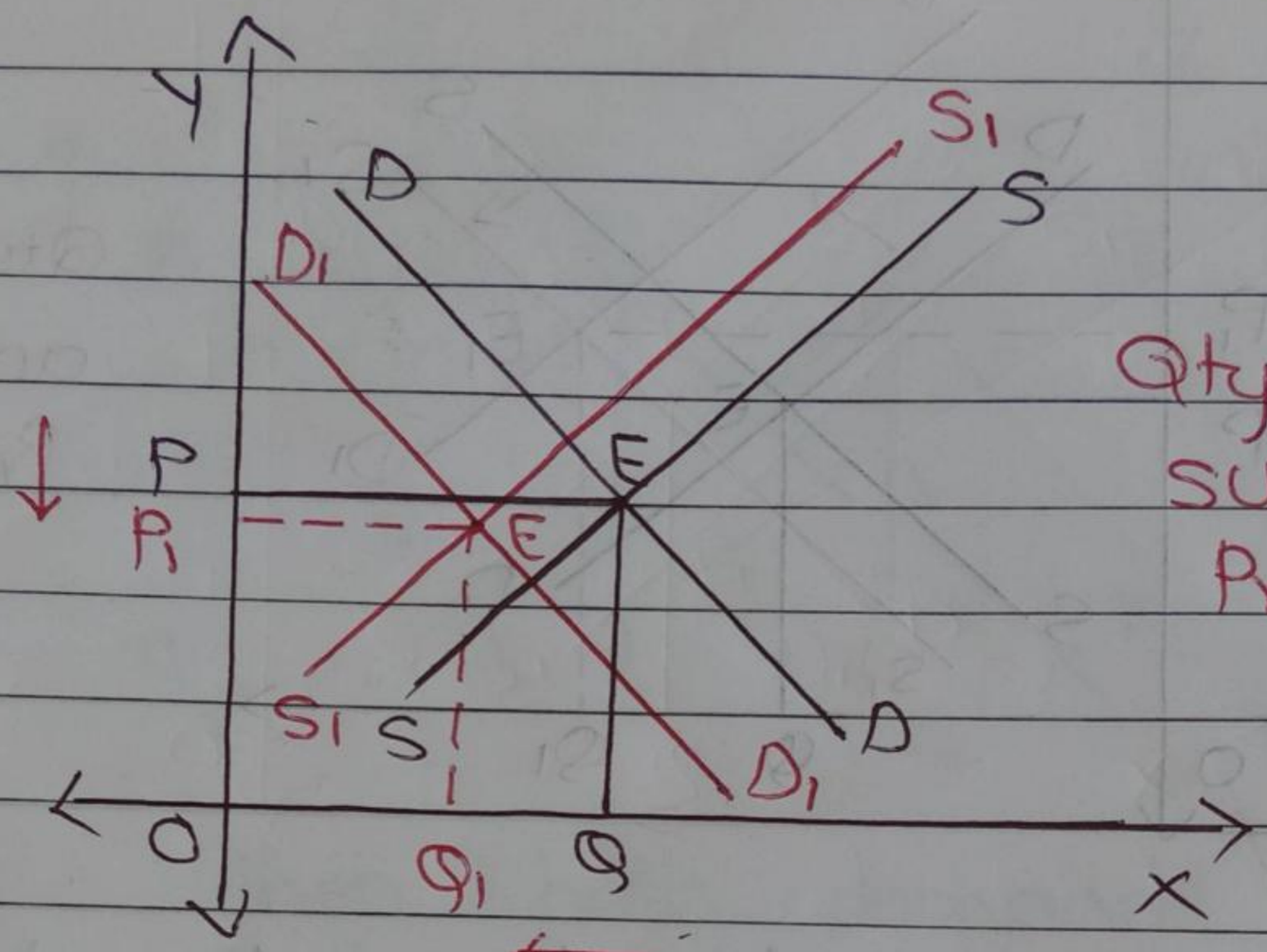
Qty. demand and supply ↑ Price also ↑.

Case 7: When both demand and supply ↑ but supply ↑ increases in greater proportion.



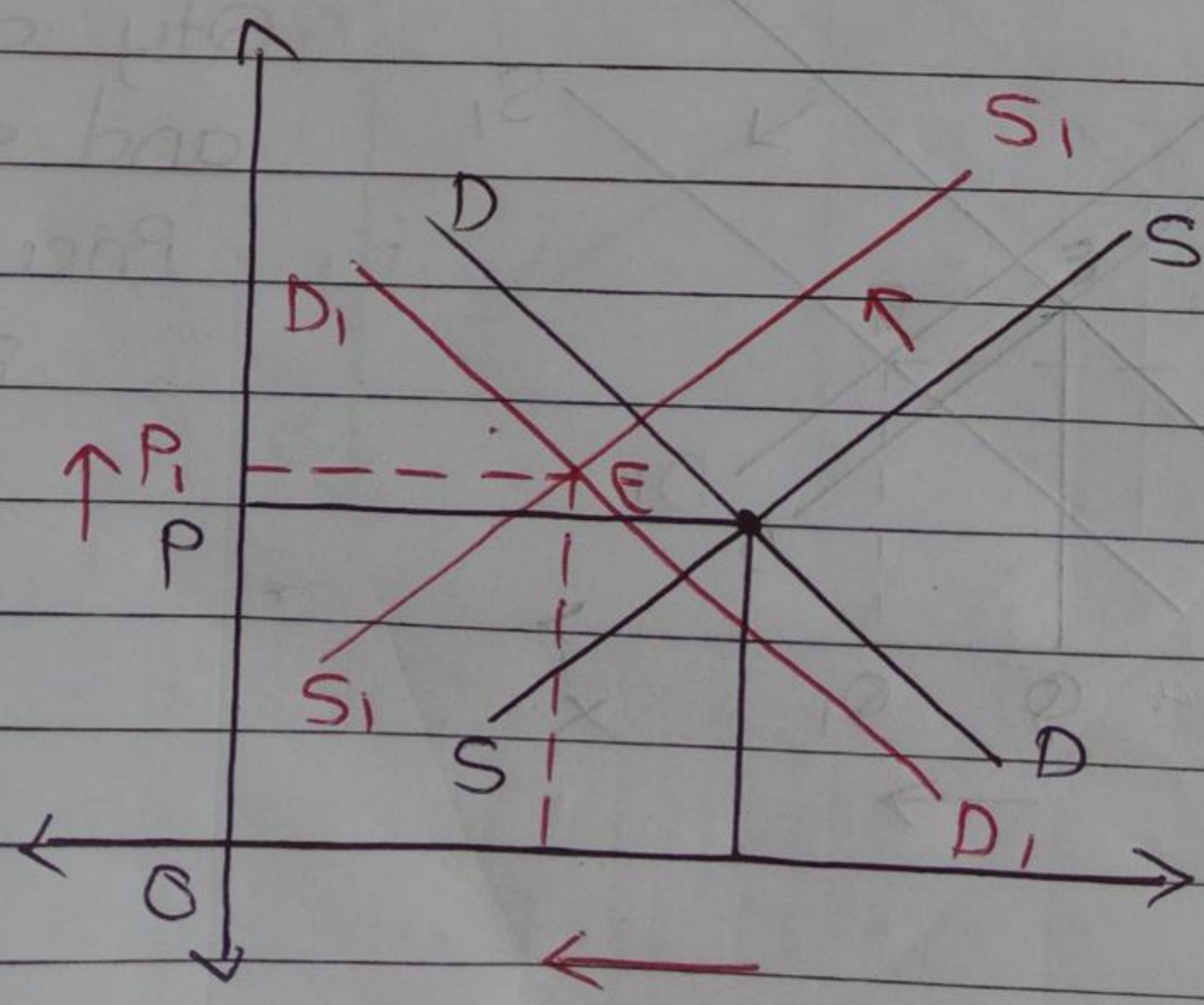
Qty demand and supply ↑ Price will Fall.

Case 8: When demand and supply both ↓ but demand ↓ in greater proportion.



Qty. demand & supply ↓ Price also ↓

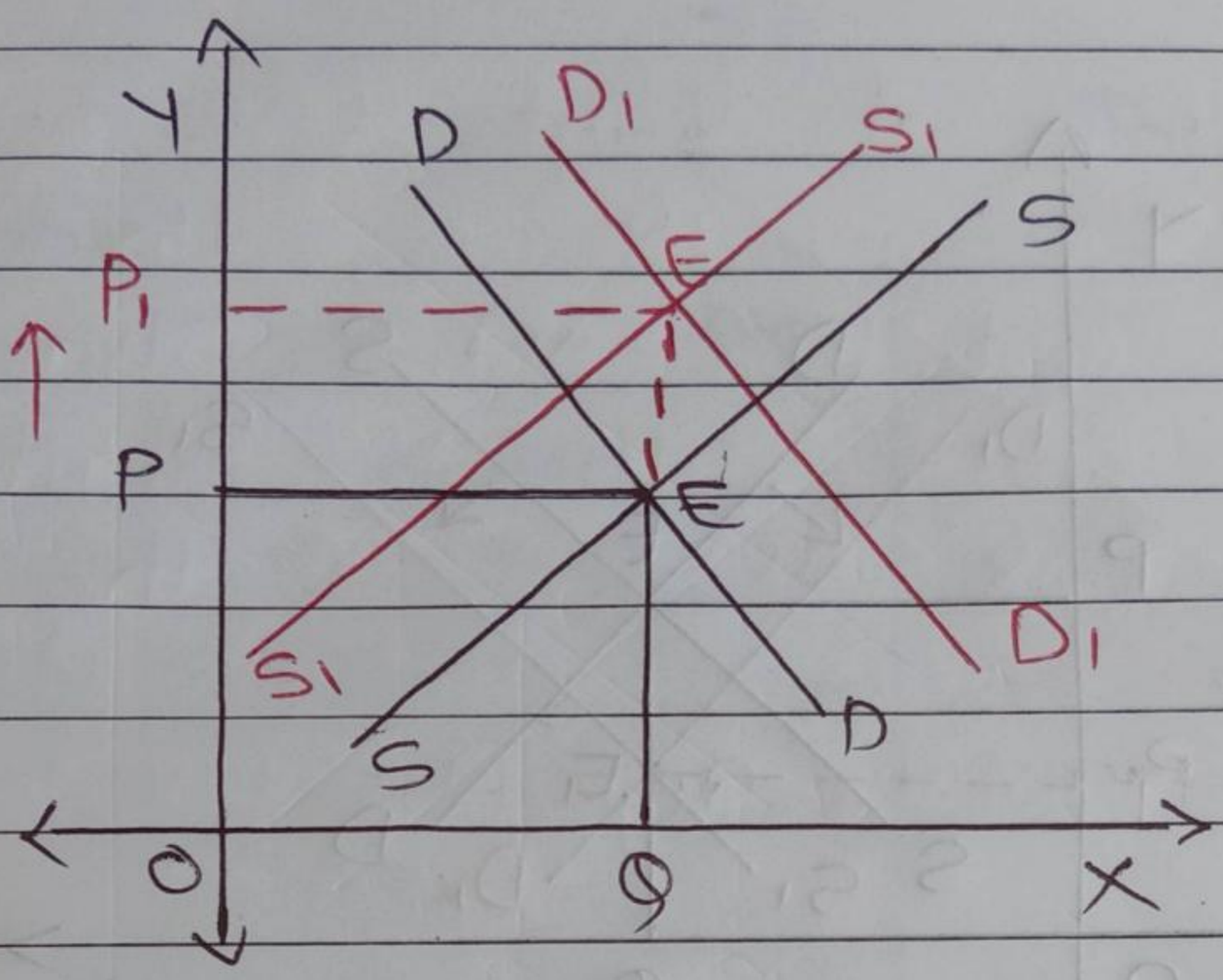
Case 9: When demand and supply ↓ but supply ↓ in greater proportion.



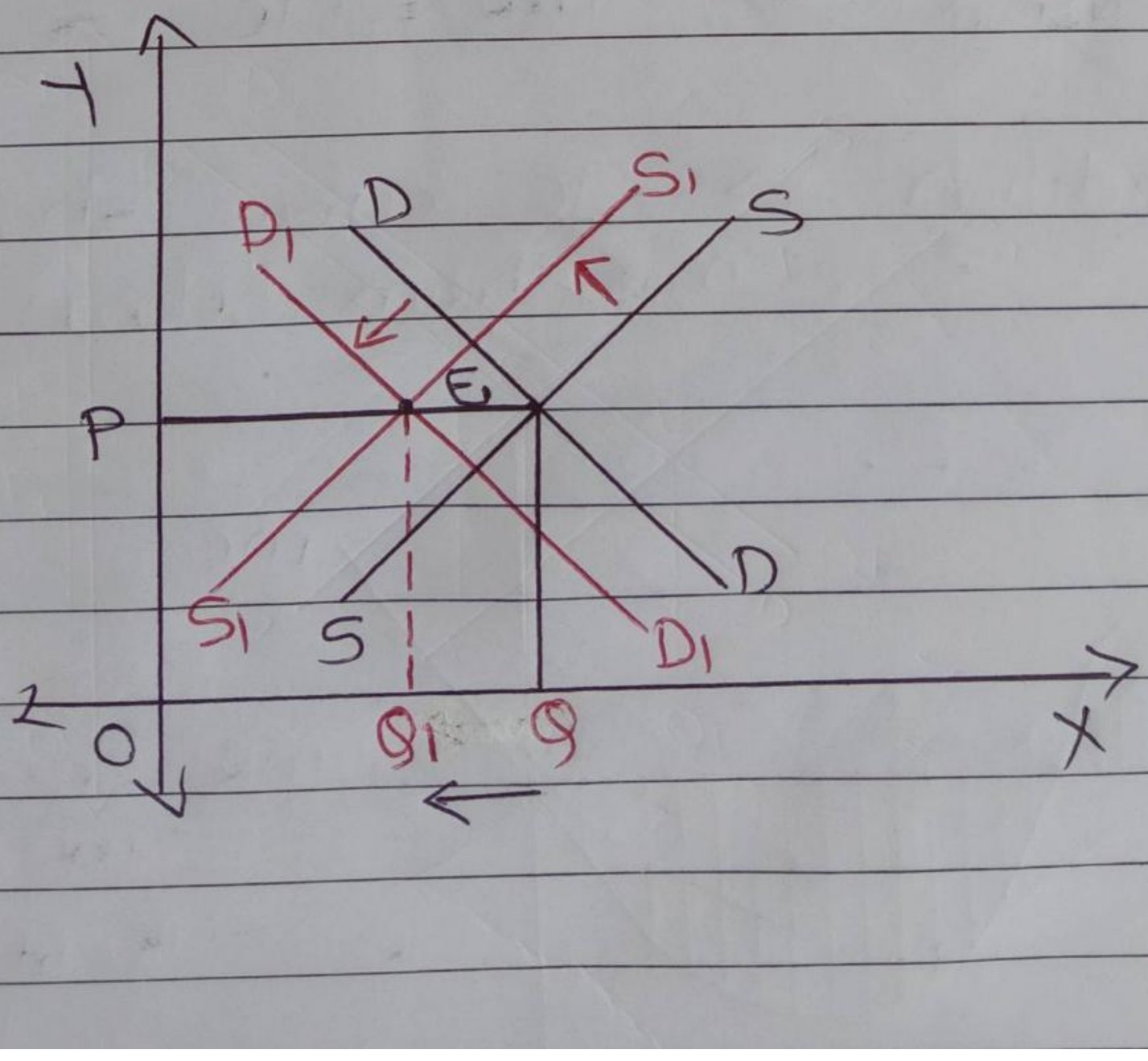
Qty demand and supply ↓ Price ↑.

PAGE No.
DATE / /

Case 10 : When demand ↑ supply ↓



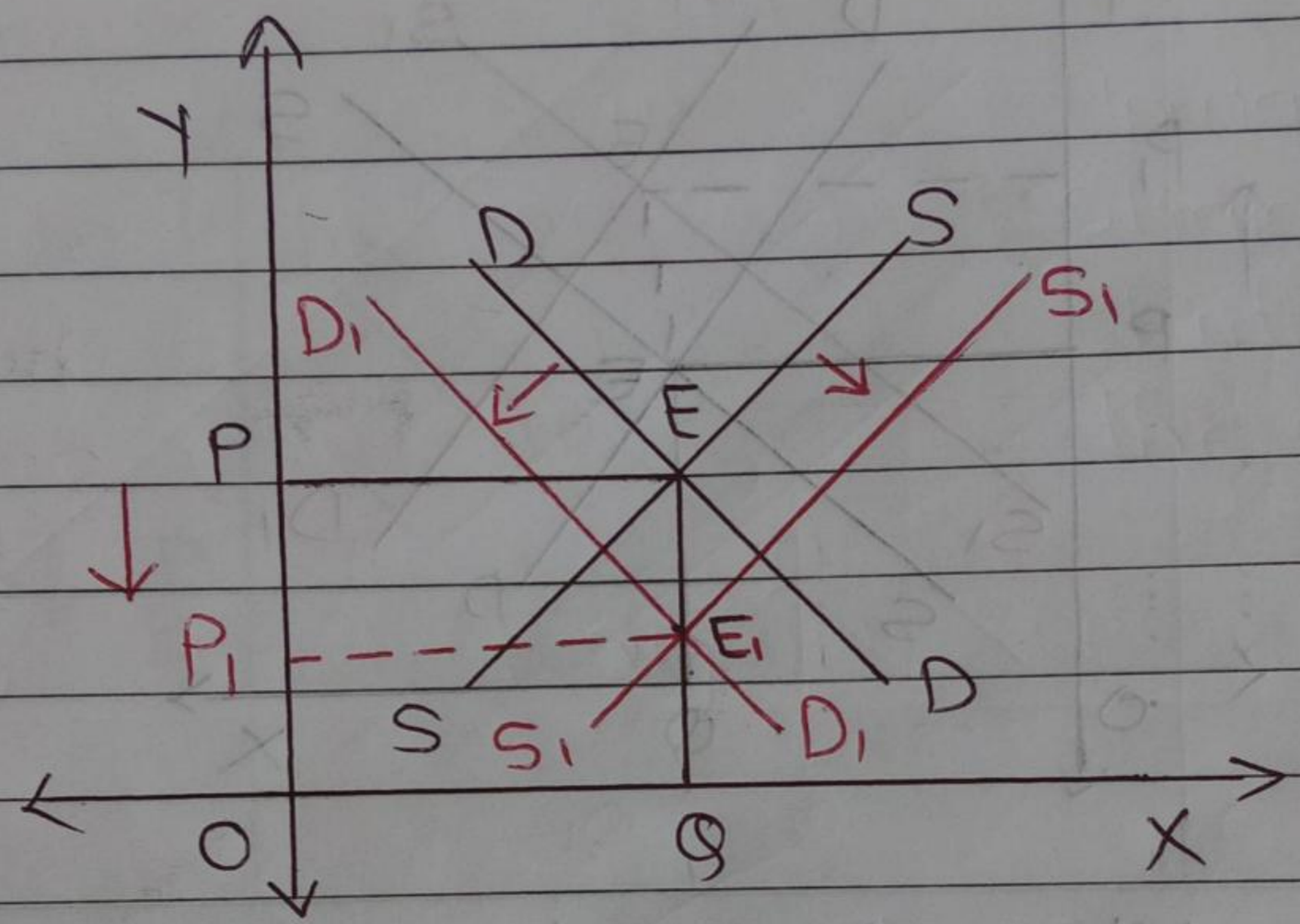
Case 11 : When both demand and supply ↓ in same proportion.



PAGE No.

DATE / /

Case 12: When demand ↓ supply ↑



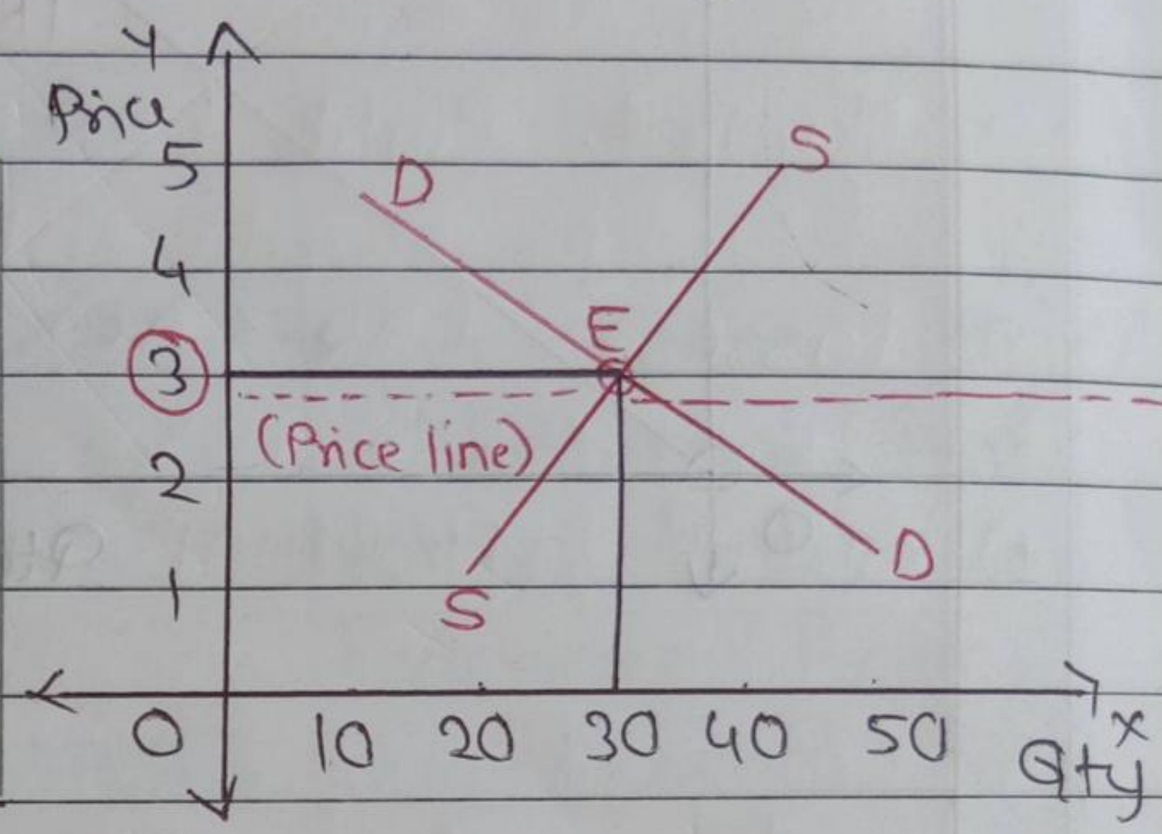
PAGE No.
DATE / /

* Revenue concept under Perfect Competition/ Competitative market.

Industry
(Price maker)

Price	Q.D.D	Q. Supplied
1	50	10
2	40	20
3	30	30
4	20	40
5	10	50

Industry

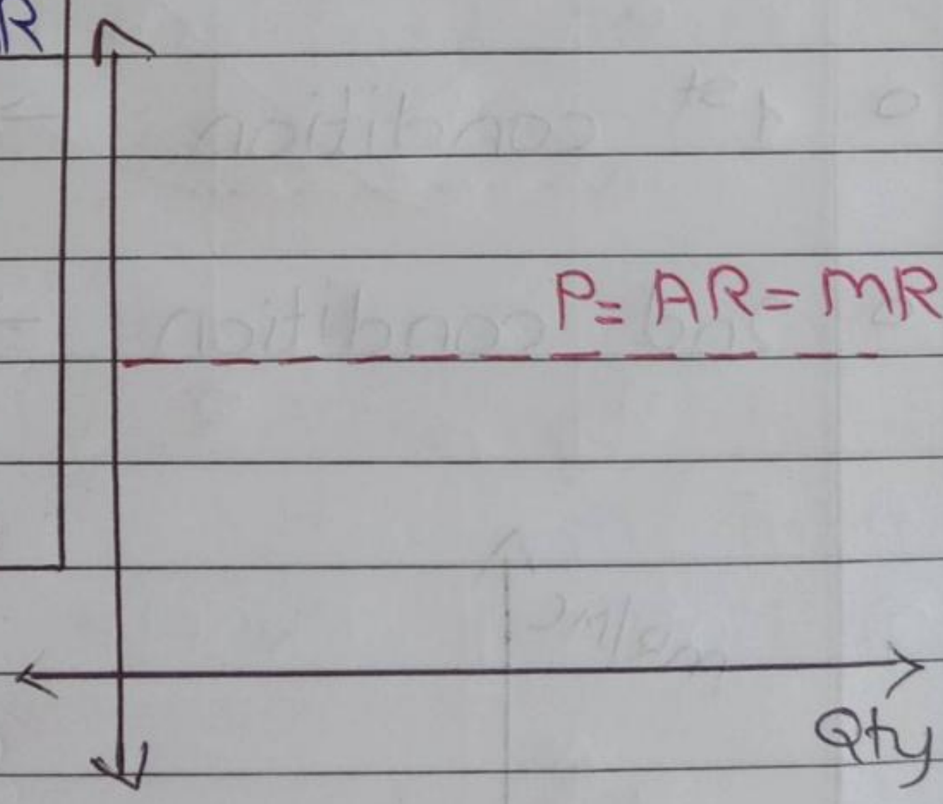


Firm (Price Taker)

Price	Qty	TR	AR	MR
3	1	3	3	-
3	2	6	3	3
3	3	9	3	3
3	4	12	3	3
3	5	15	3	3

Horizontal shape.
(Perfectly Elastic)

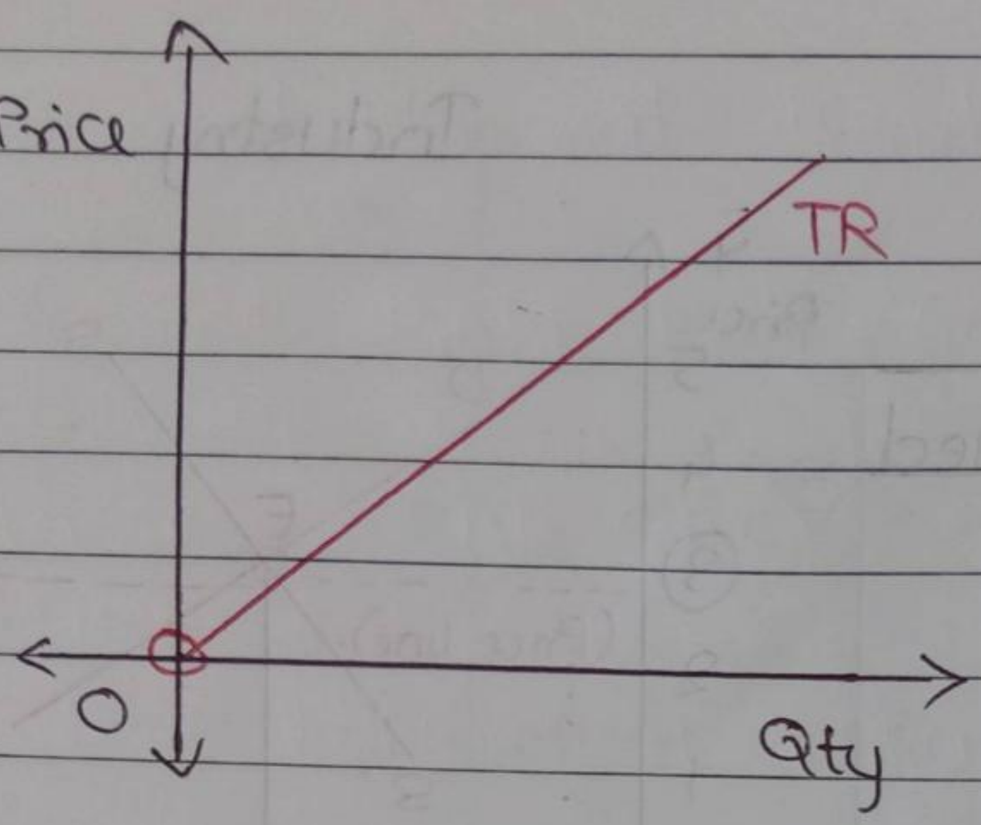
Firm



* Average Revenue is also called as Demand curve.

DATE / /

* Total Revenue under Perfect Competition



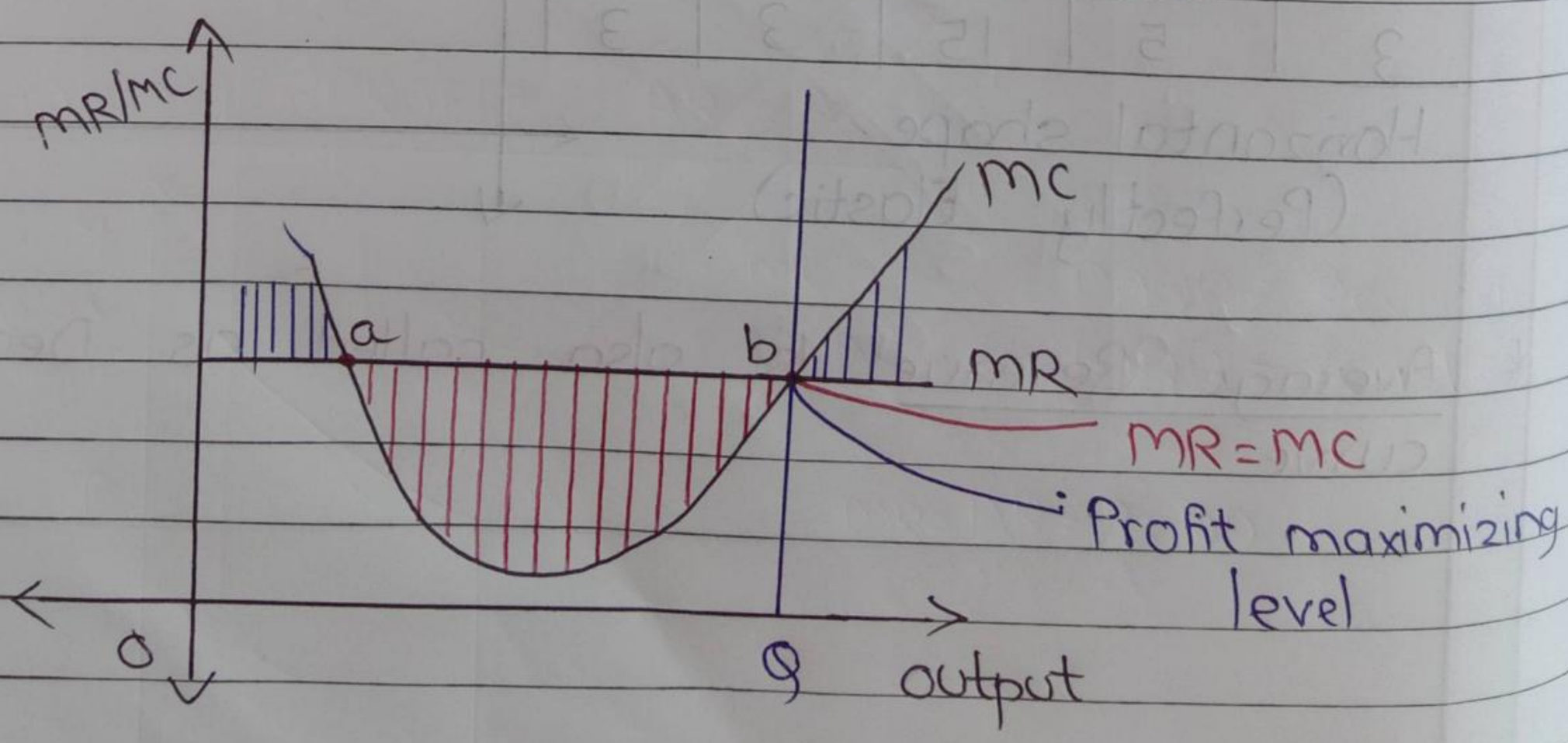
Upward Sloping Straight line starting from the origin.

MR and MC approach

↓

Quantity and Output.

- 1st condition → MR = MC
- 2nd condition → MC curve should cut MR from below.



MR > MC → output Increases
MR < MC → output Reduces

* MR = MC → Profit Maximizing output

PAGE No.
DATE / /

* AR and AC Approach → Profits and losses

Average cost (AC) = AFC + AVC
20000 = 8000 + 12000

Case	AR	AC	Relation	
1	30000	20000	AR > AC	Super Normal Profit / Abnormal Profit
2	20000	20000	AR = AC	Normal Profit / Zero Economic Profit.
3	15000	20000	AC > AR > AVC	Sub-Normal Profit
4	12000	20000	AC > AR = AVC	Maximum Bareable loss.
5	10000	20000	AC > AR < AVC	Shut down Point.

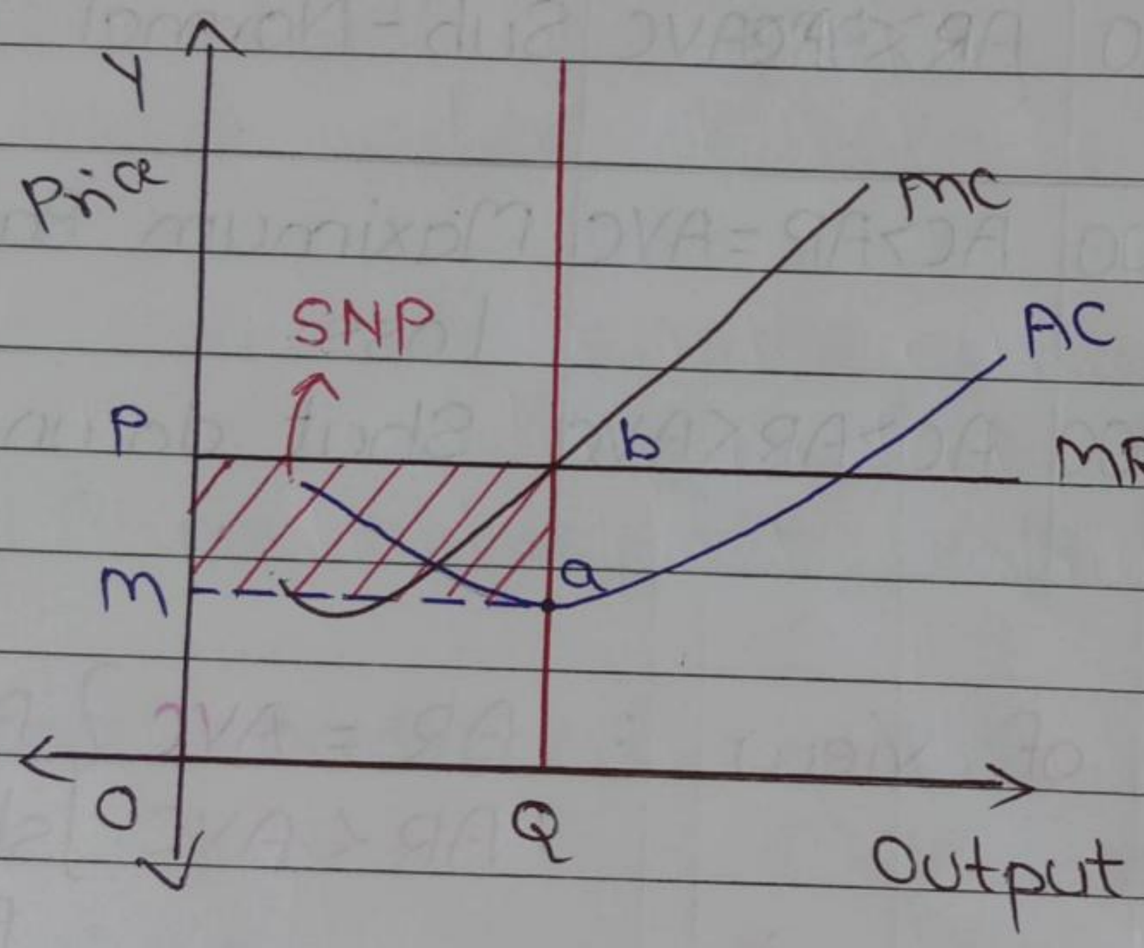
* From MCQ Point of view : AR = AVC } Both
AR < AVC } shutdown Point.

DATE / / /

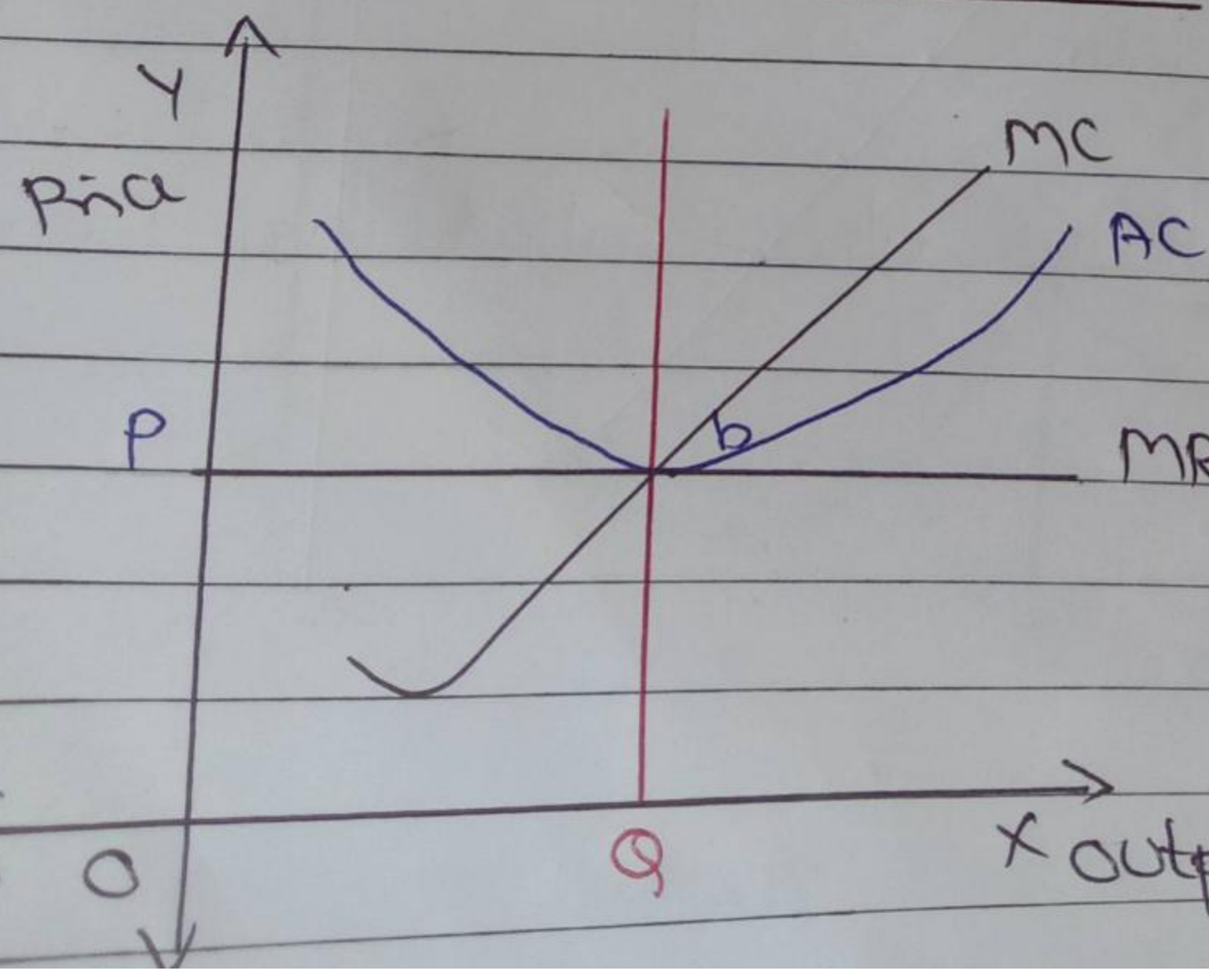
* SHORT RUN EQUILIBRIUM UNDER PERFECT COMPETITION

- Super Normal Profit (AR > AC)
- Normal Profit (AR = AC)
- lossess (AR < AC)

1) SUPER NORMAL PROFIT (AR > AC)

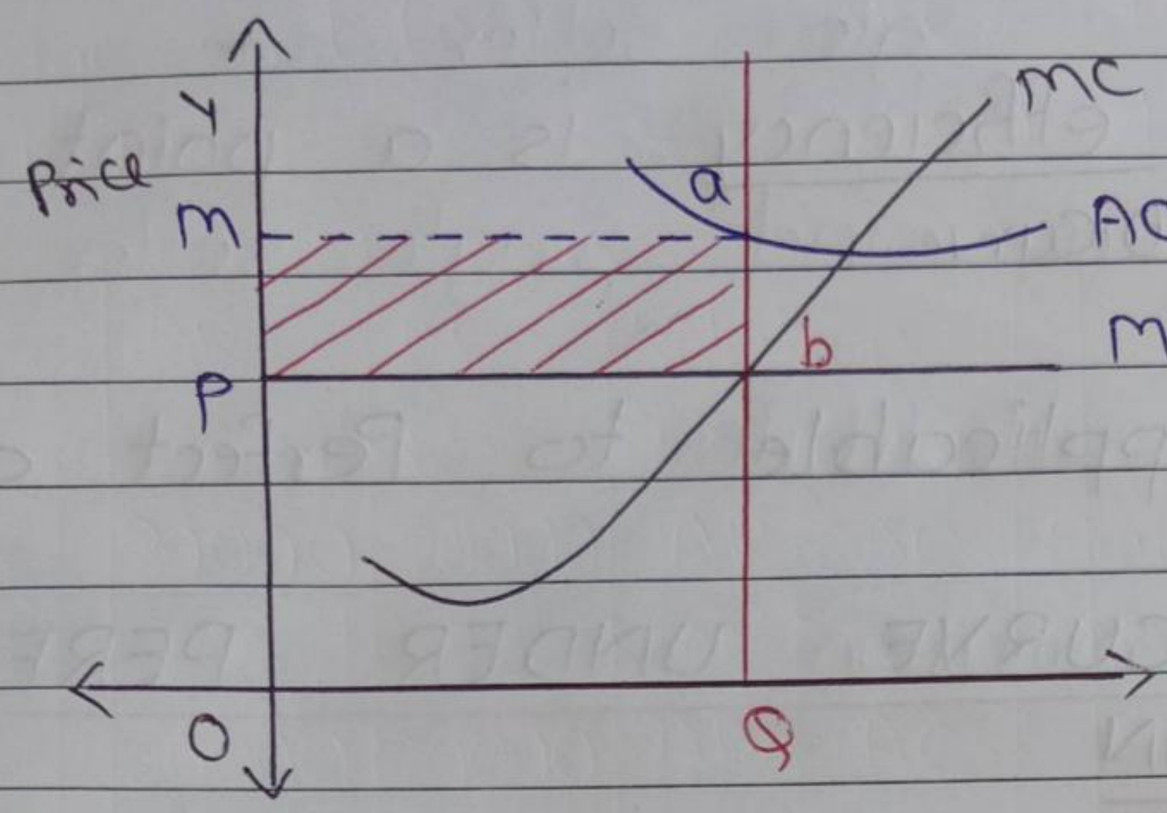


2) NORMAL PROFIT AR = AC



PAGE No.
DATE / /

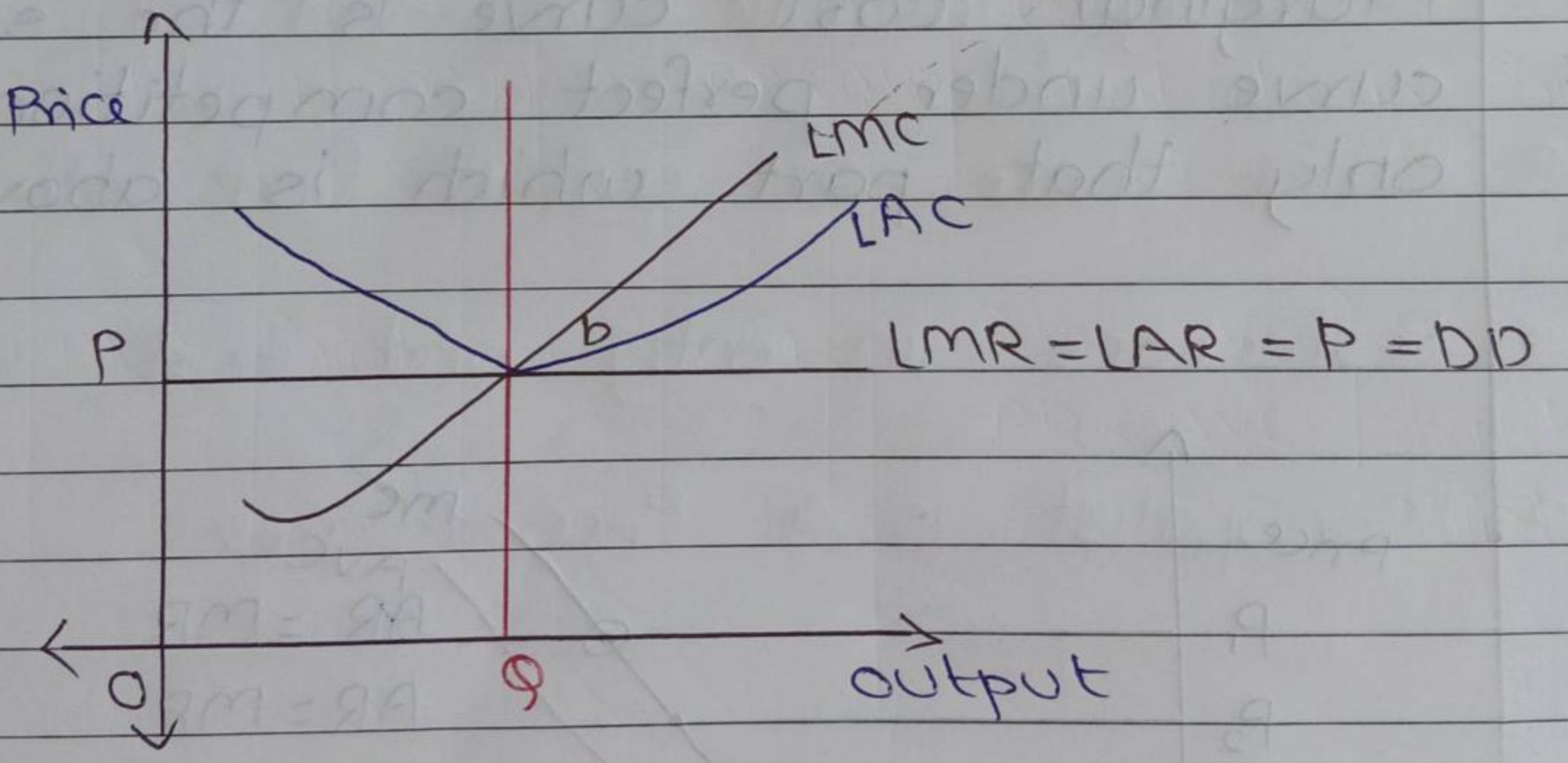
3) LOSSES (AR < AC)



MOQA = cost
POQB = Revenue
MPBA = Losses.

* LONG RUN EQUILIBRIUM UNDER P.C

o Normal Profit : LAR = LAC



Long Run PC Normal Profit because of free entry and exit.

In long Run, production is done at optimum level. i.e. Minimum of LAC.
(Applicable only in Perfect competition)

DATE / /

Productive efficiency is a point where MC = AC.

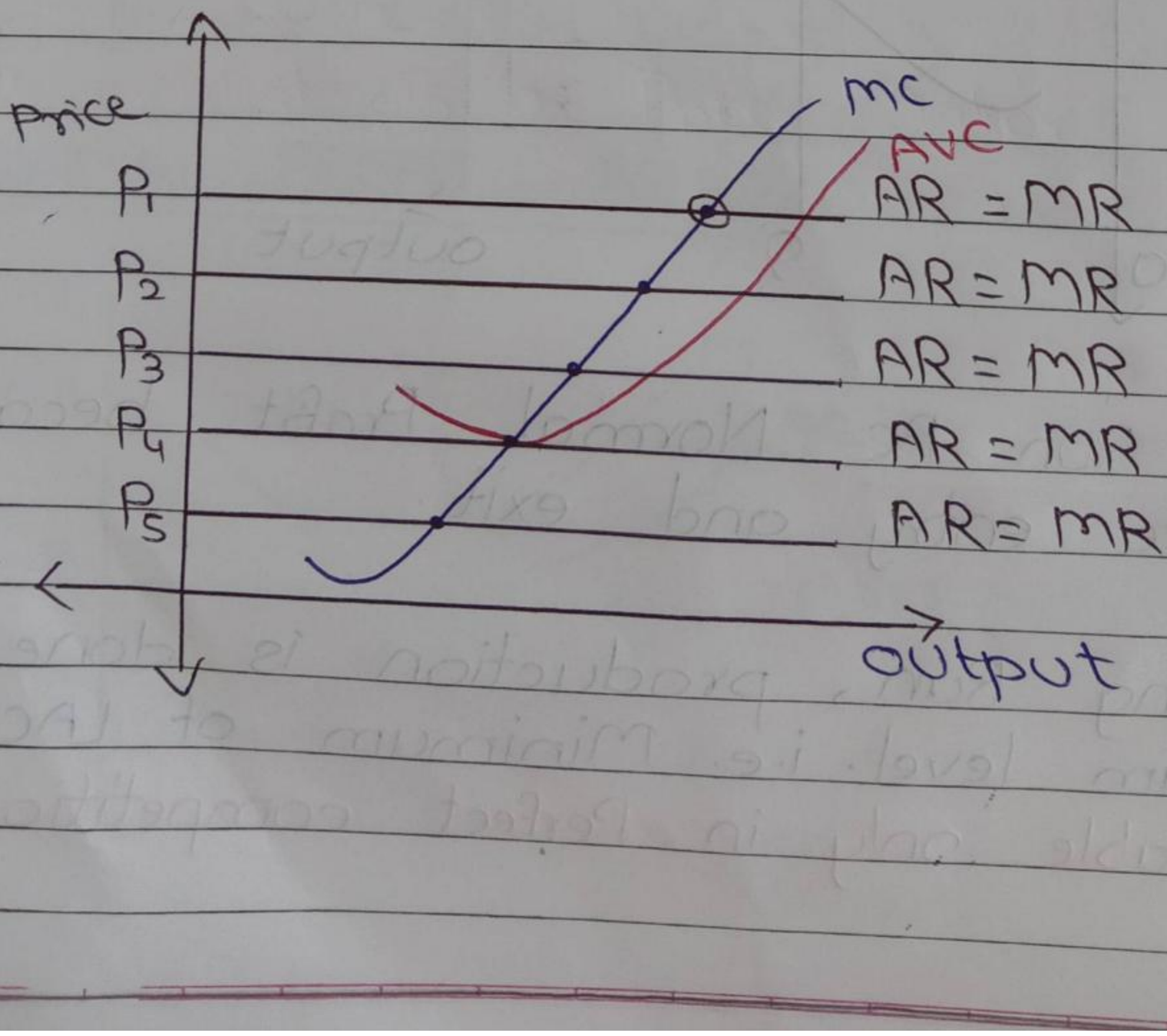
★ Allocative efficiency is a point where MC = AR → D Curve.
↓
Supply C

(only Applicable to Perfect competition)

* SUPPLY CURVE UNDER PERFECT COMPETITION

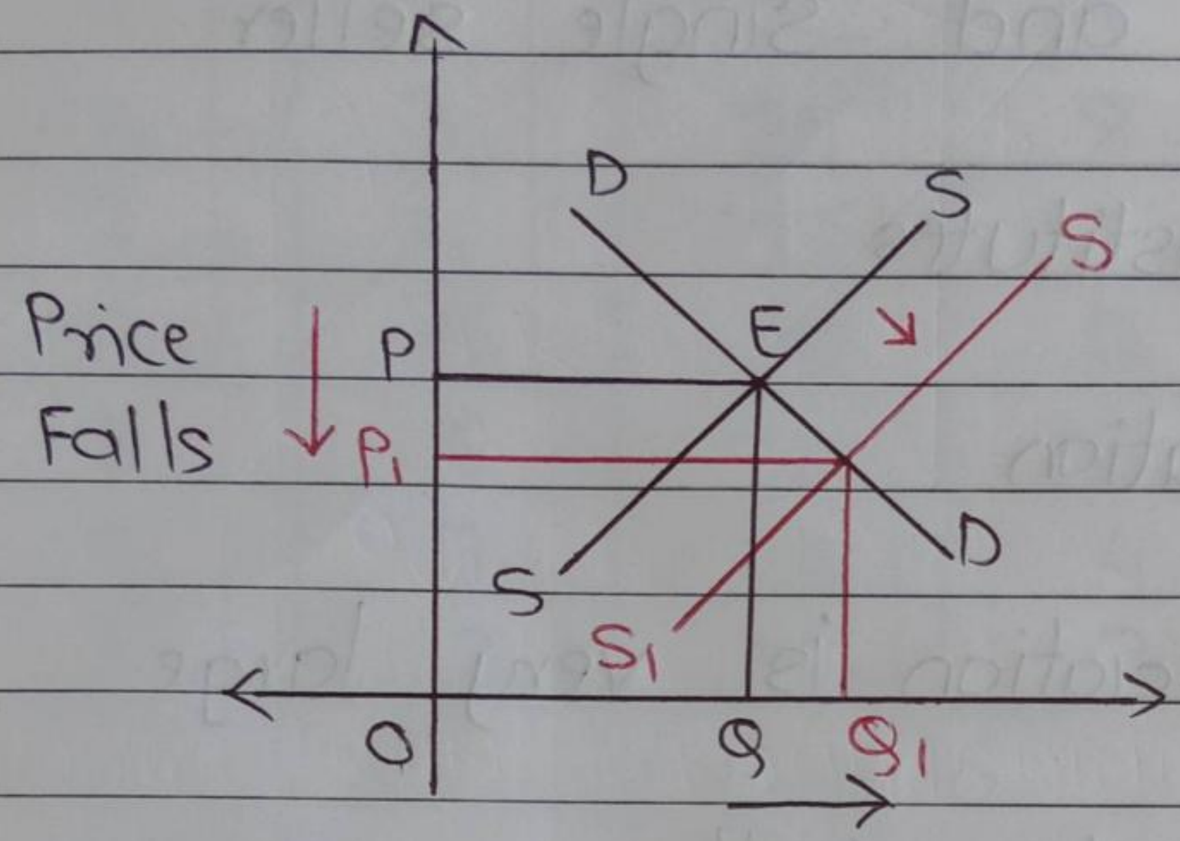
- Concept of supply curve exists only under Perfect competition.

- ★ Marginal cost curve is the supply curve under perfect competition but only that part which is above AVC.



PAGE No.
DATE / /

* Industry under Perfect Competition, Long Run when more sellers are added supply curve will shift to the Right and Price will fall.



MONOPOLY

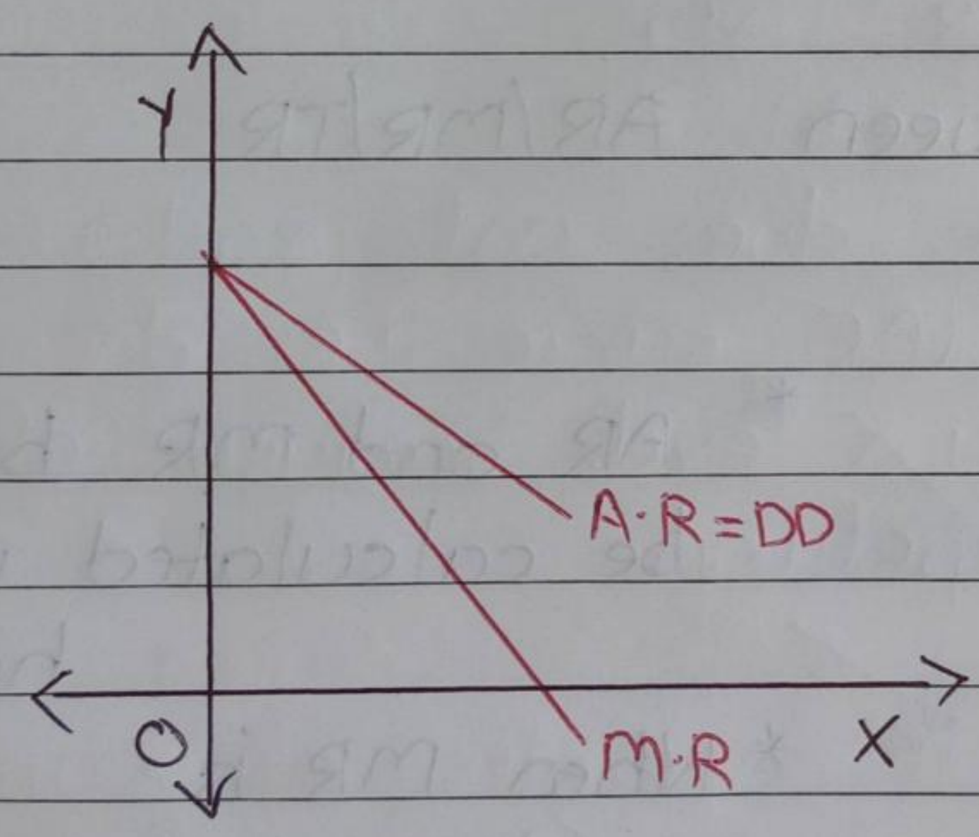
Single seller

- Many buyers and Single seller.
- No close substitutes
- Price discrimination
- * Product differenciation is very large.
- * Firm and Industry both are same.
- * Relatively Inelastic demand curve.
- * Either price or output (not both)
- Restrictions in entry and exist
- * Monopolist is a Price Maker.

PAGE No.
DATE / /

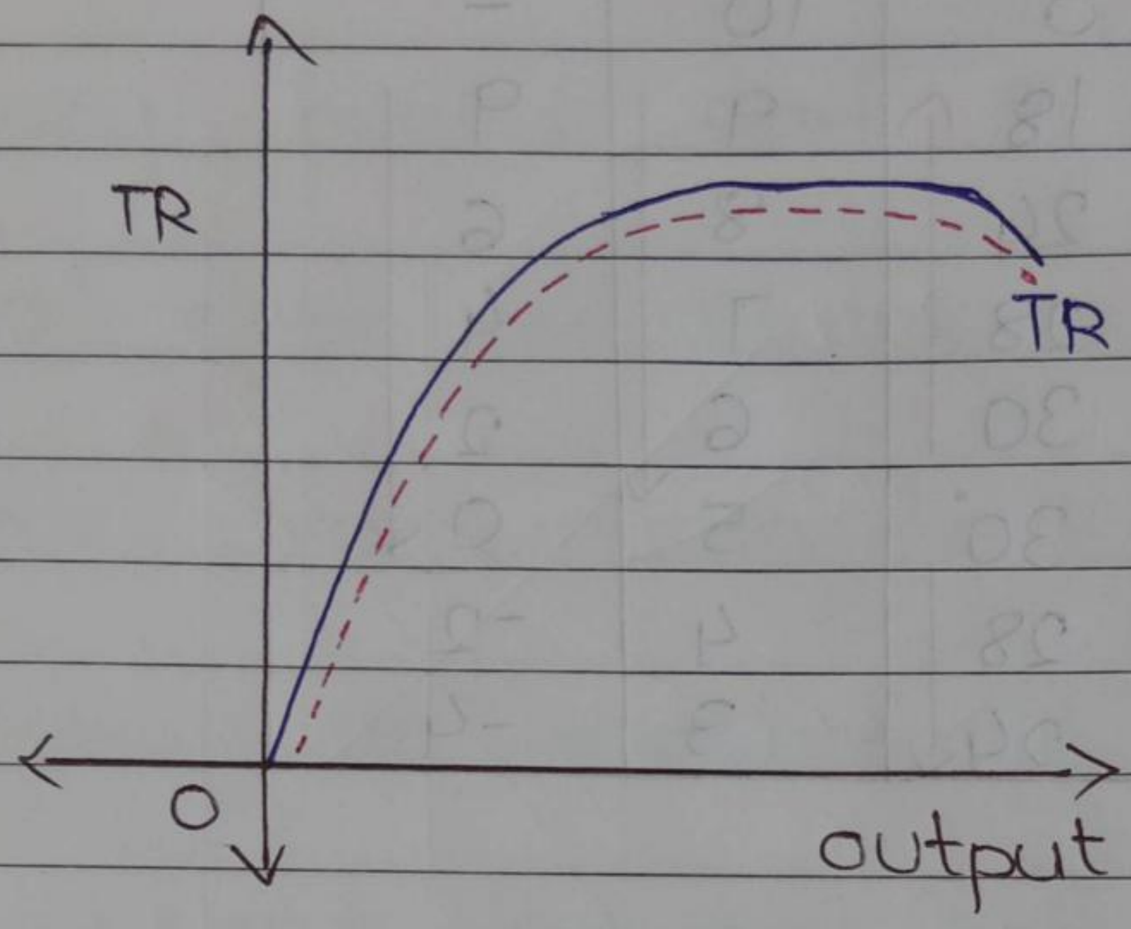
REVENUE CONCEPT UNDER MONOPOLY

Price	Qty	TR	AR	MR
10	0	0	10	-
9	2	18	9	9
8	3	24	8	6
7	4	28	7	4
6	5	30	6	2
5	6	30	5	0
4	7	28	4	-2
3	8	24	3	-4



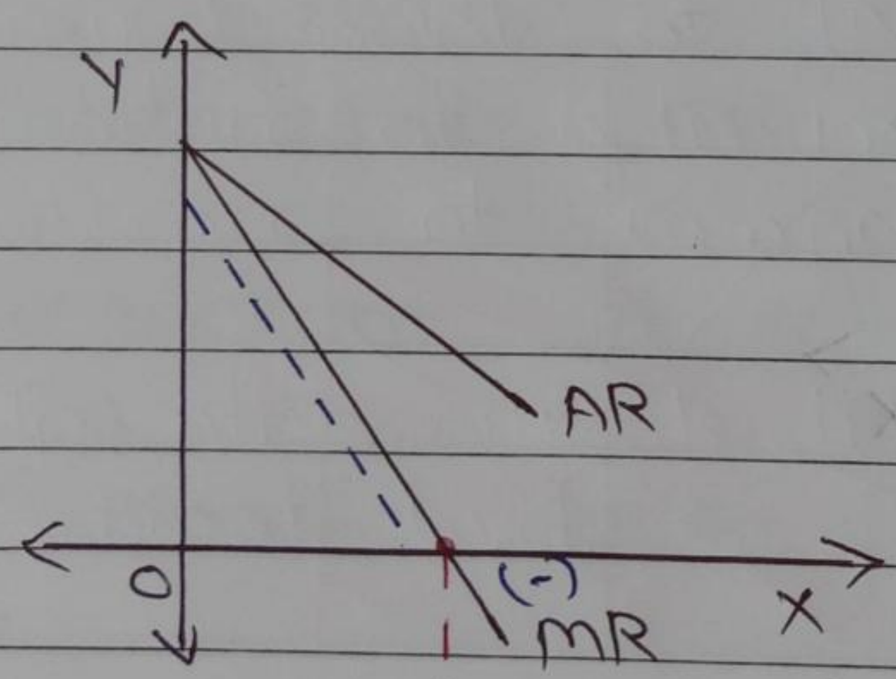
PAGE No.
DATE / /

* TOTAL REVENUE CURVE UNDER MONOPOLY.



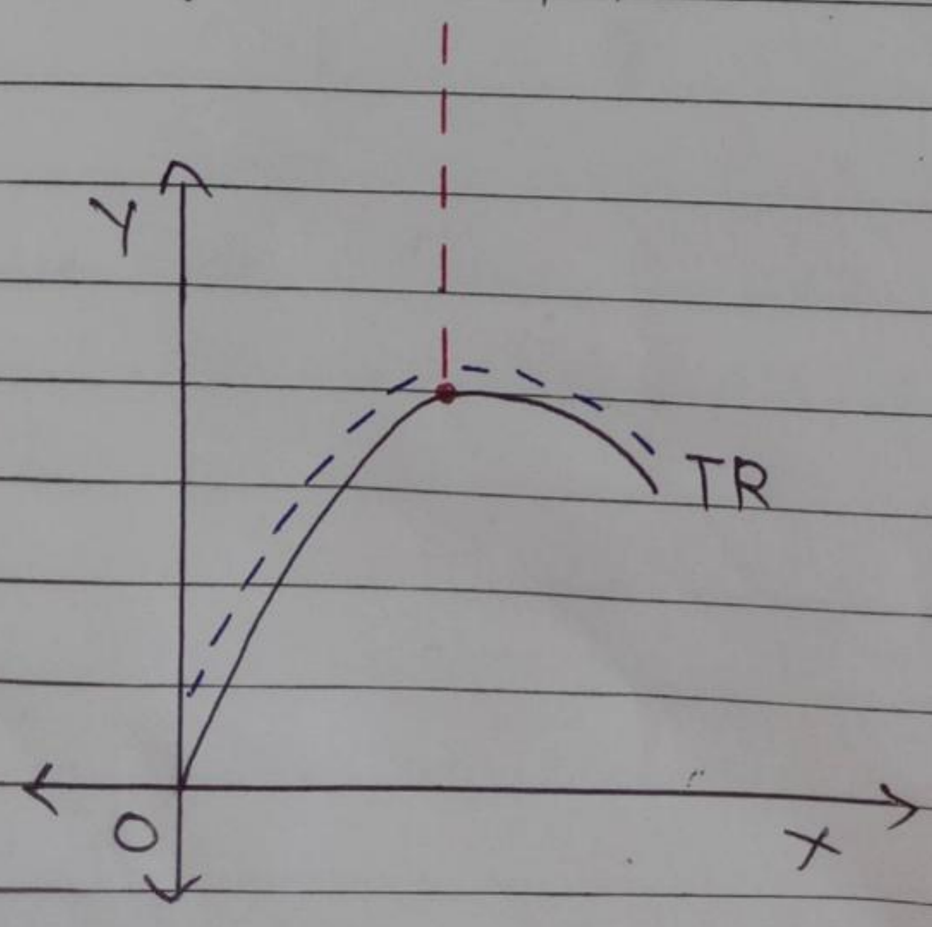
'Inverted U' or 'Dome shape curve'.

* Relationship between AR/MR/TR



* AR and MR both can be calculated with the help of TR.

* When MR is positive TR is Rising.



* When MR is zero TR is maximum.

* When MR is(-) TR falls.

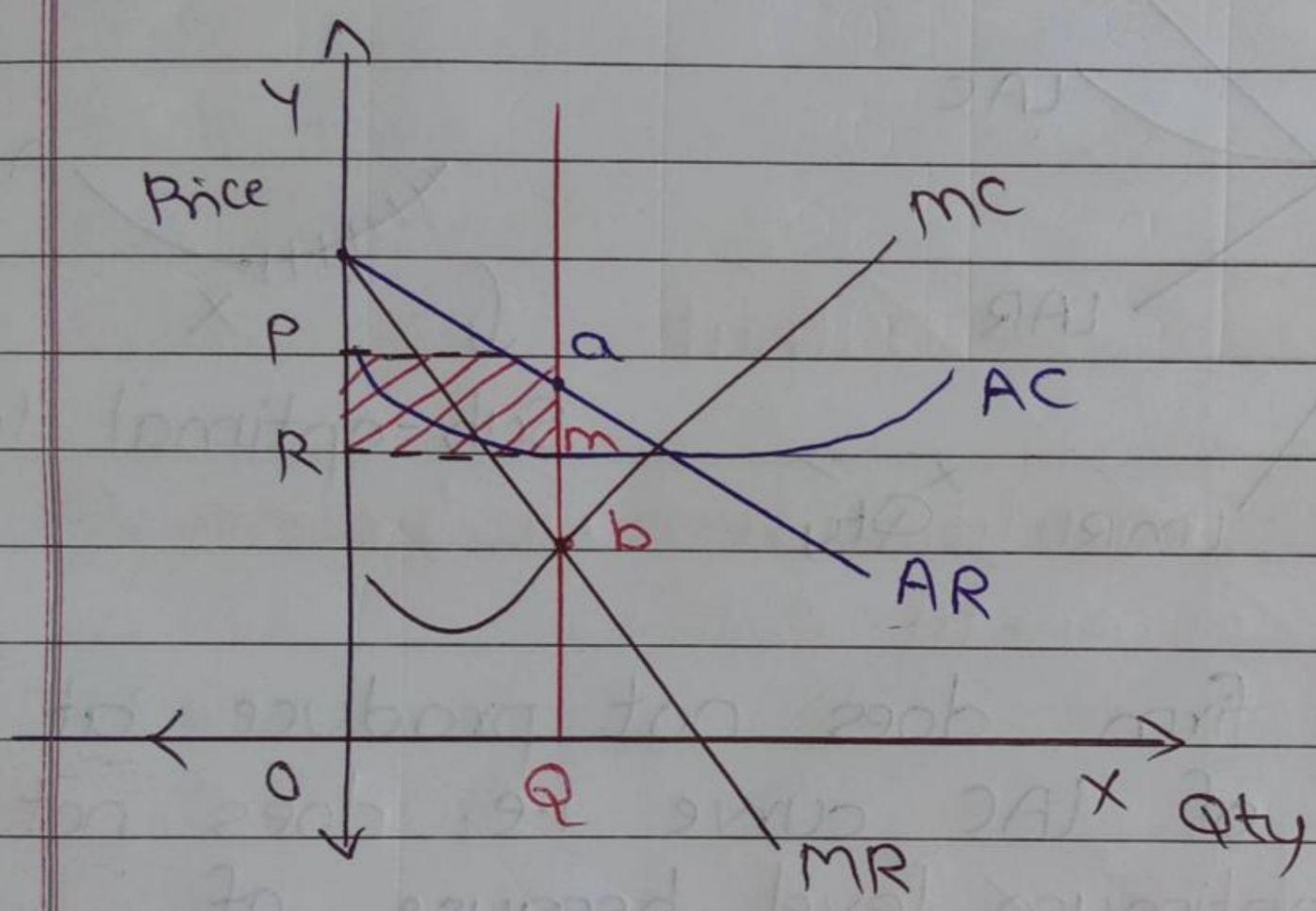
*monopoly in short Run may also earn normal Profits.

PAGE No.
DATE / /

* SHORT RUN EQUILIBRIUM UNDER MONOPOLY

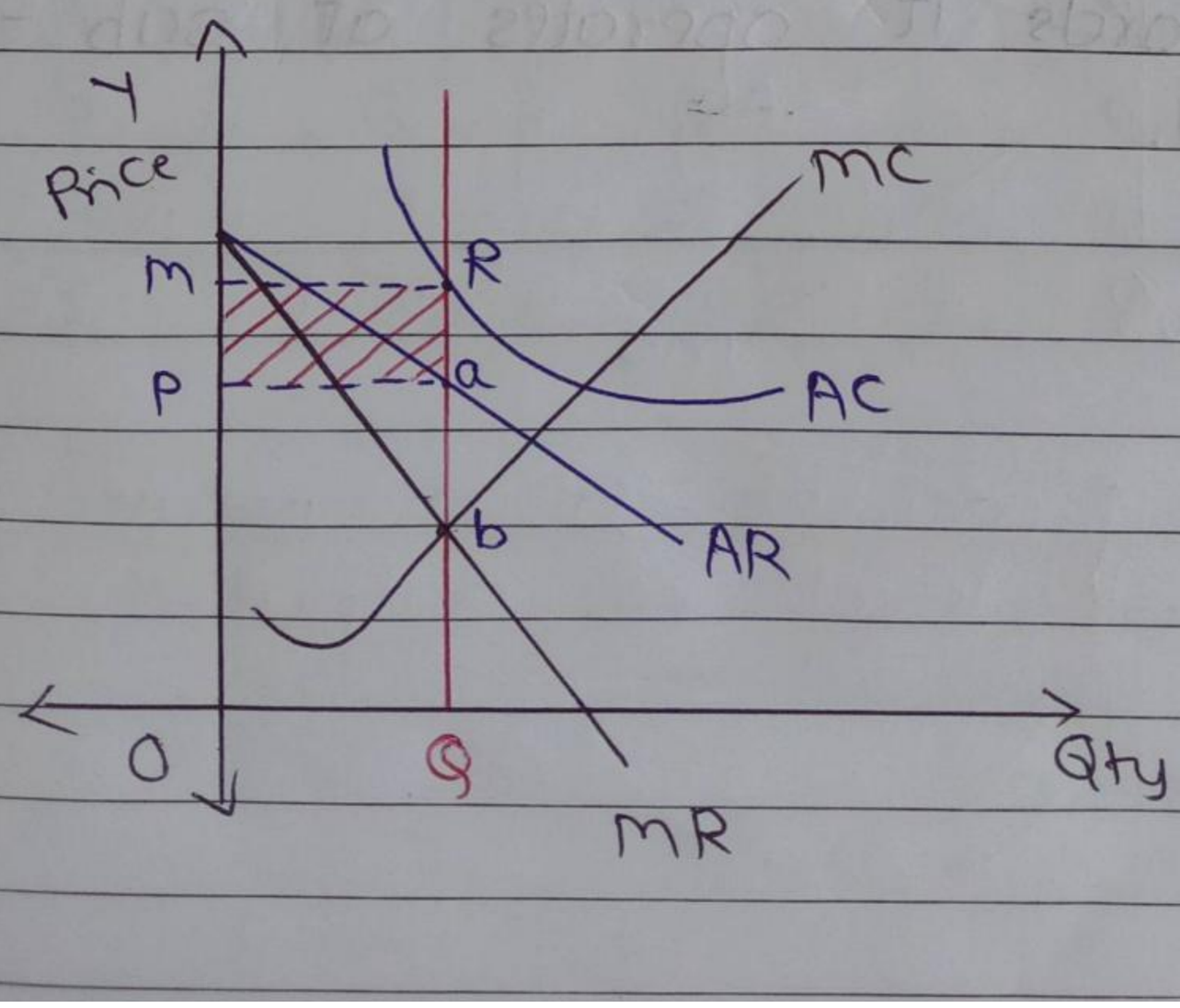
- Super Normal Profit.
- Losses

SUPER - NORMAL PROFIT (AR > AC)



POQA = Revenue
ROQM = Cost
PRAM = SNP

LOSSES (AR < AC)

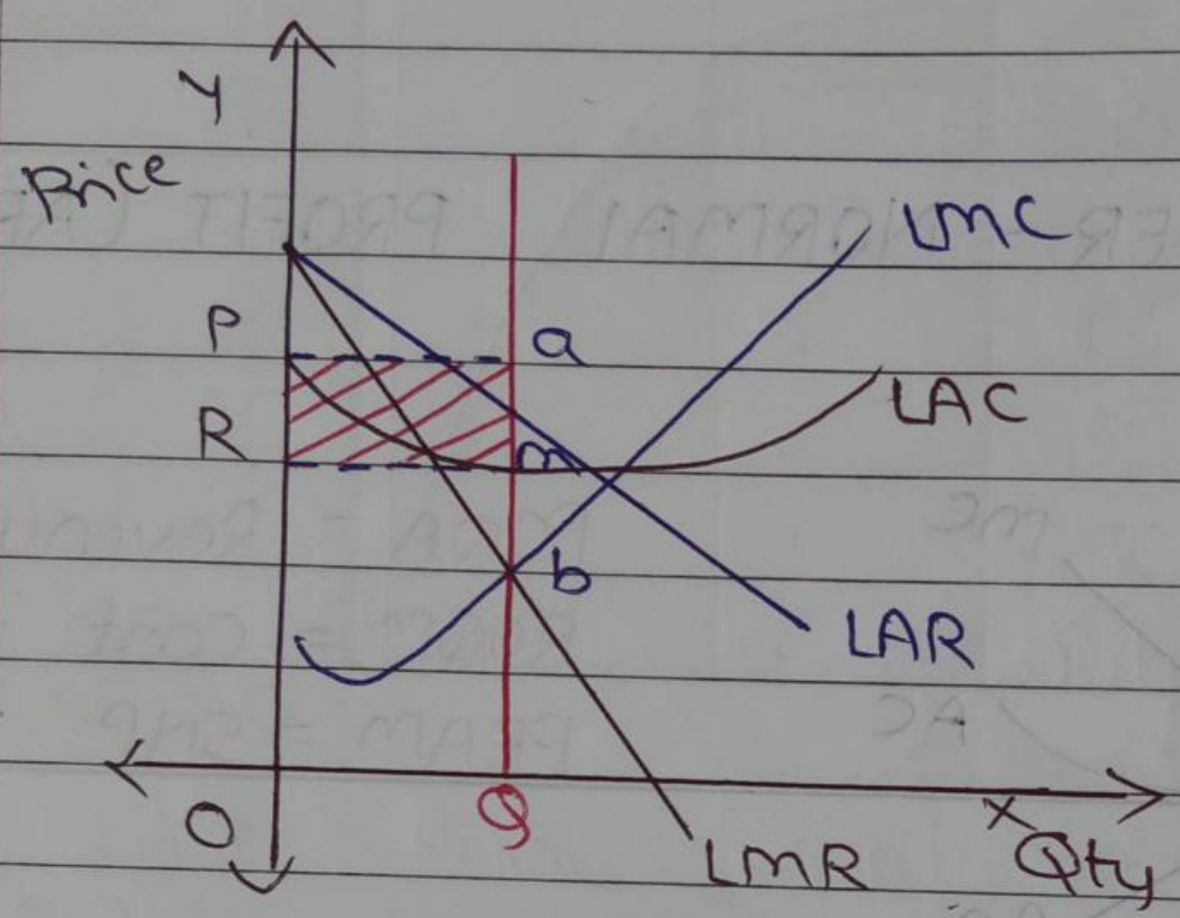


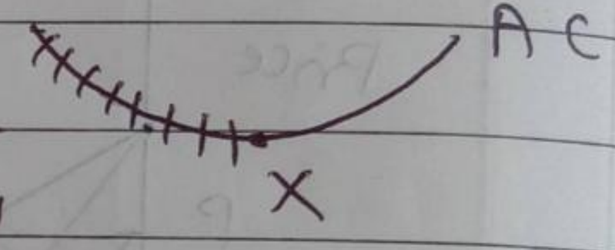
POQA = Revenue
MOQR = cost
MPAR = Loss

PAGE No.
DATE / /

* LONG RUN EQUILIBRIUM UNDER MONOPOLY

- Supernormal Profit (LA > LAC)





Sub-optimal level

* A monopoly firm does not produce at the lowest point of LAC curve i.e. does not produce at optimum level. because of absence of competition.

* In other words it operates at sub-optimal level.

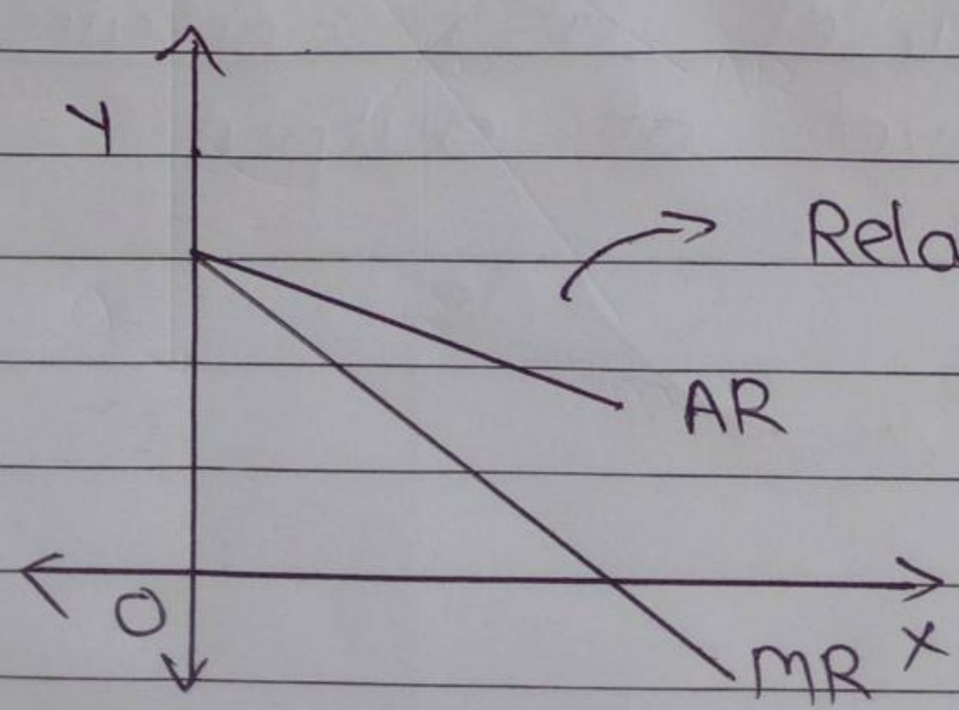
MONOPLASTIC COMPETITION

Monopoly + competition

- There is competition due to fairly large number of buyer and seller.
- The monopaly element is due to the fact that products are similar but not identical.
  (close substitutes not perfect substitutes)

* Revenue concept under Monoplastic competition.

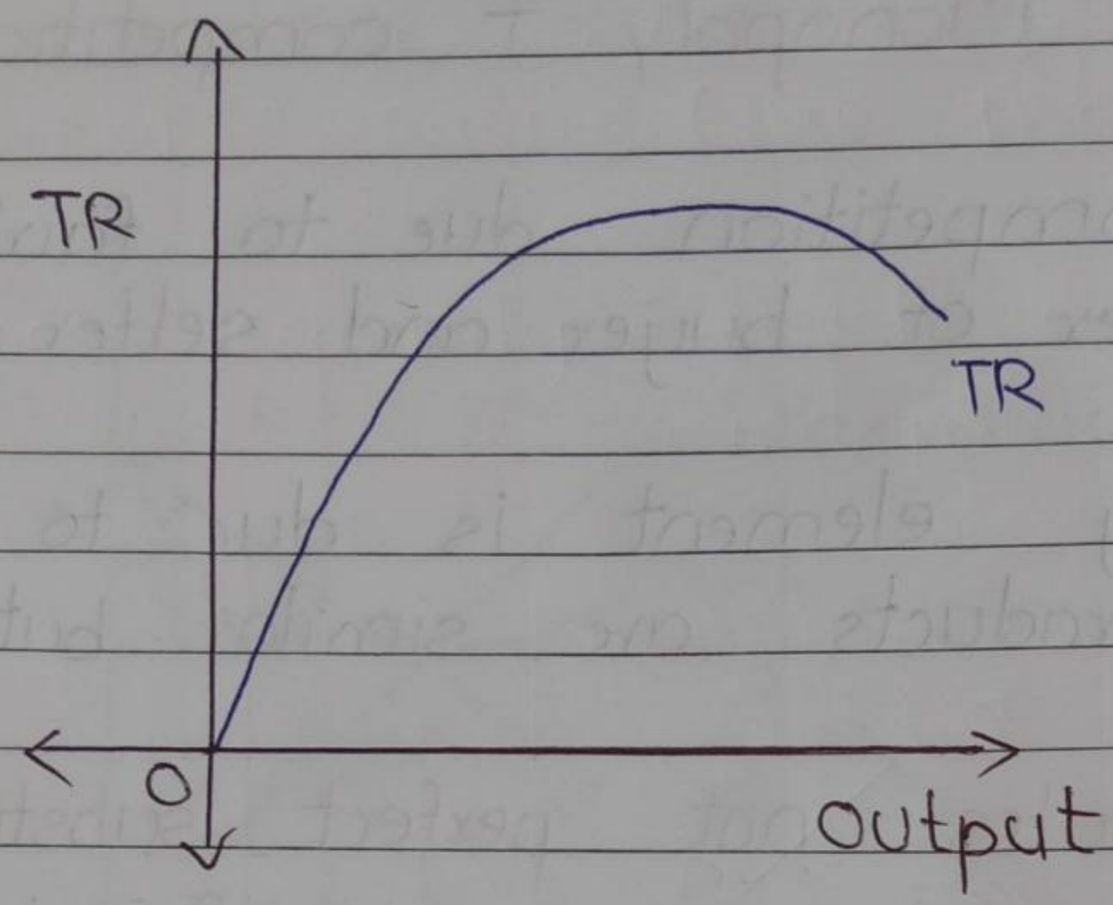
Price	Qty	TR	AR	MR
10	0	0	10	-
9	2	18	9	9
8	3	24	8	6
7	4	28	7	4
6	5	30	6	2
5	6	30	5	0
4	7	28	4	-2
3	8	24	3	-4



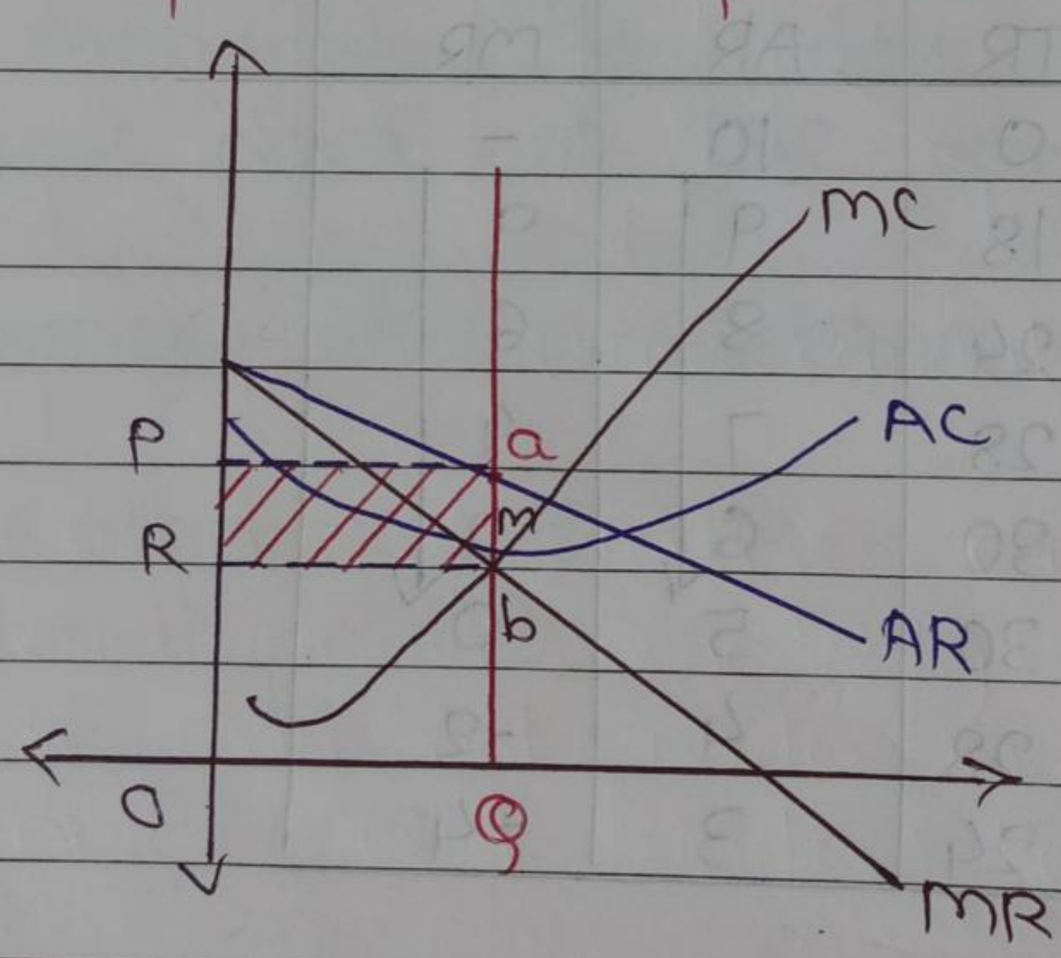
→ Relatively elastic demand curve.

PAGE No.
DATE / /

* Total Revenue curve.



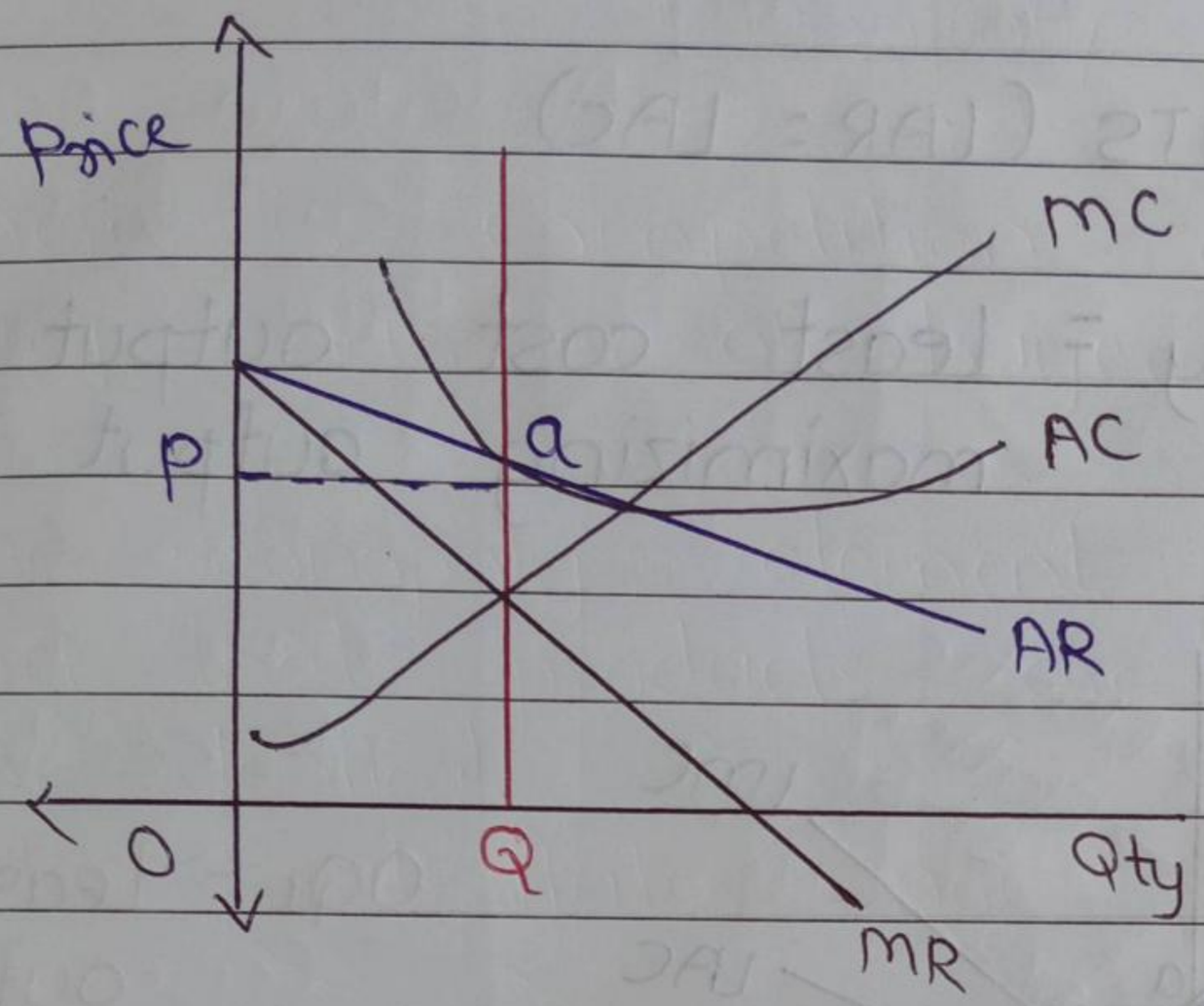
* Short Run Equilibrium under Monoplastic competition.



POQA = Reven
ROQm = cost
PRMA = SNP

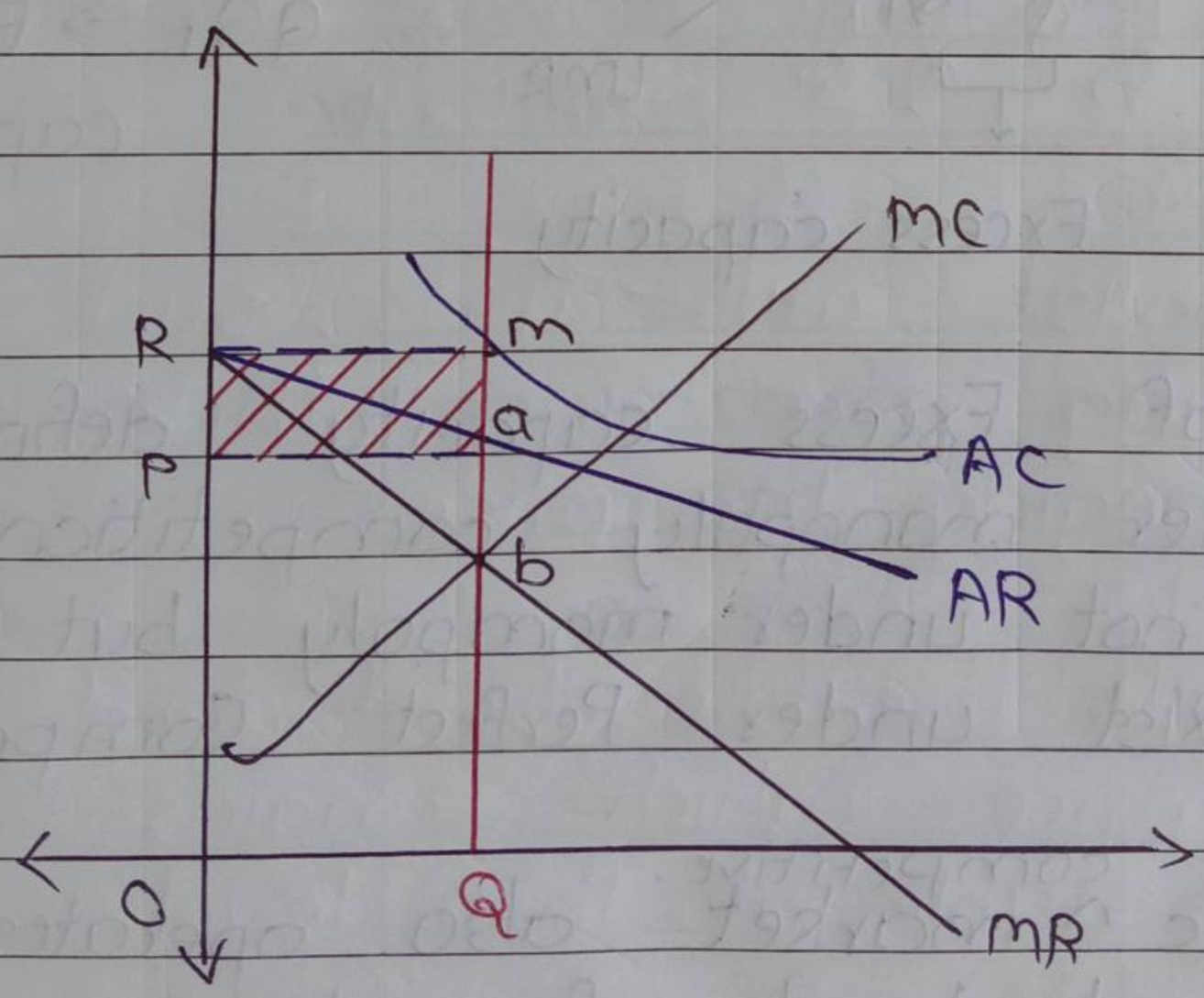
PAGE No.
DATE / /

(2) NORMAL PROFIT AR = AC



POQA = Revenue
POQA = cost

(3) Losses (AR < AC)



ROQm = cost
POQA = Revenue
RPAm = loss

PAGE No.
DATE / /

OLIGOPOLY

↓ ↓

Few sellers

- More than 2 but less than 10.
- Comet Model → Output is controlled not price.
- Stackel berg Model → Leader Firm controls the output.
- Bertrand Model → Firm control the price.

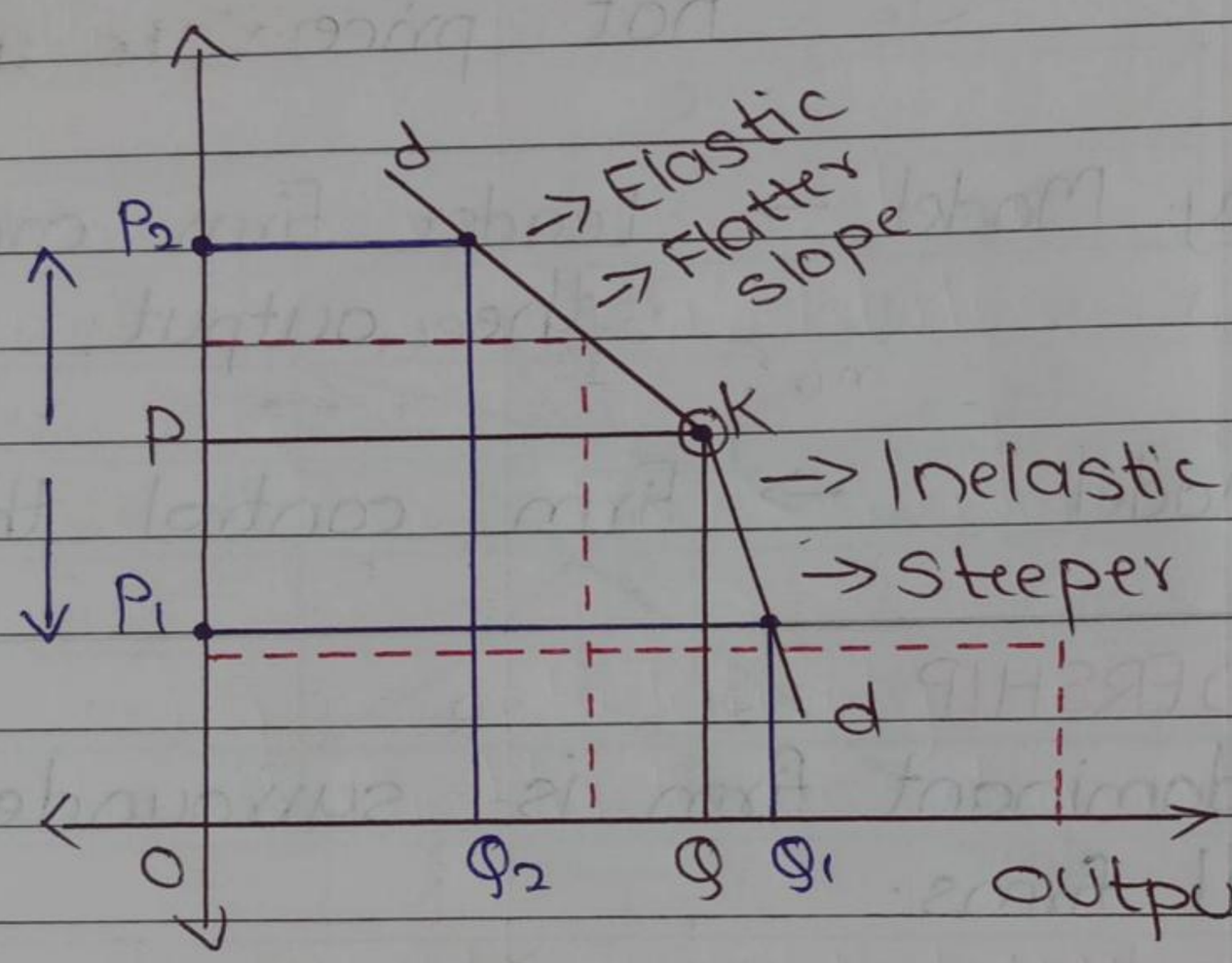
* PRICE LEADERSHIP

A large dominant firm is surrounded by many small firms.

* Live and Let Live Strategy where dominant firm accepts the presence of small firms and set the price

KINKED DEMAND CURVE

- Price Rigidity
- American economist
  - Paul Sweezy



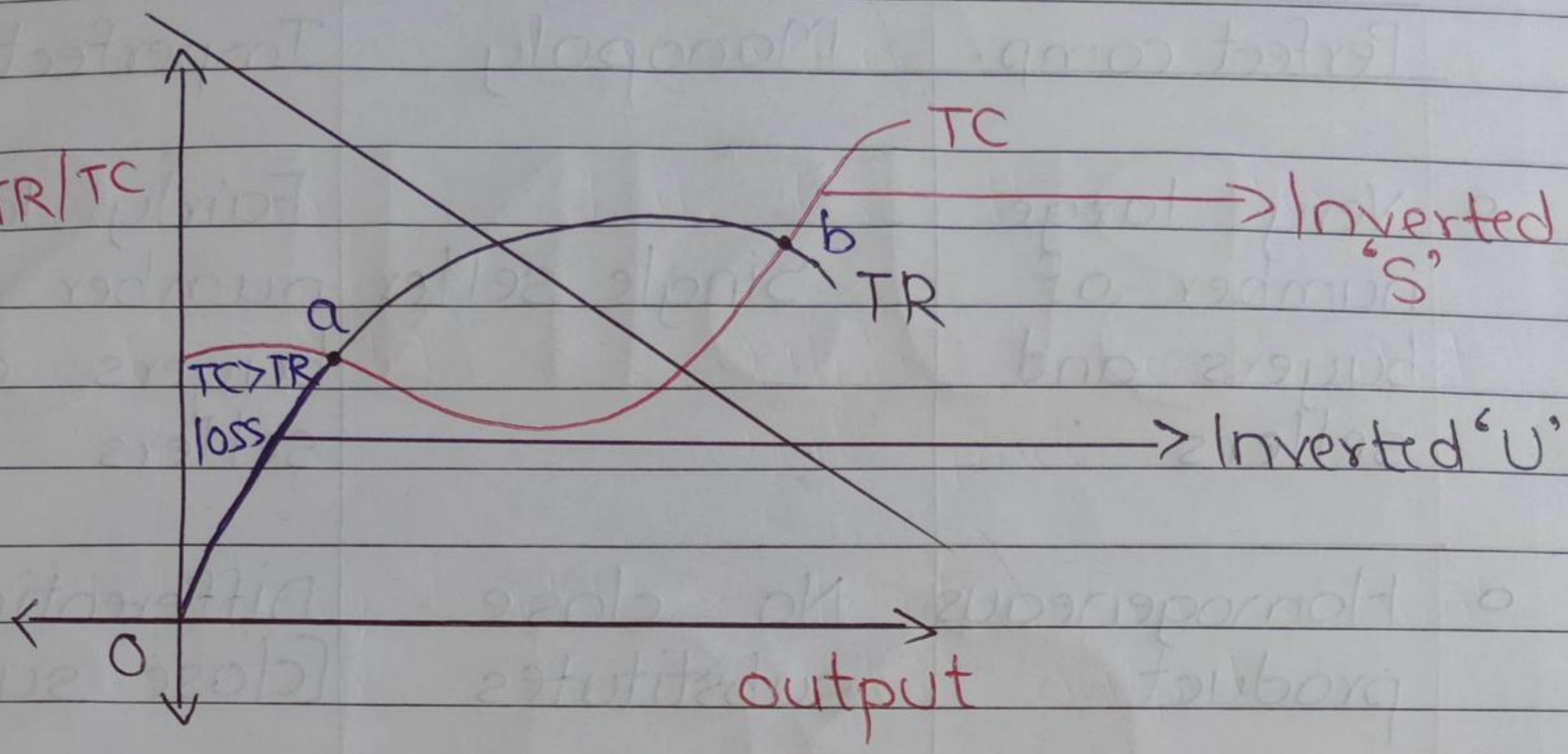
Case 1
Price ↓

Case 2
Price ↑

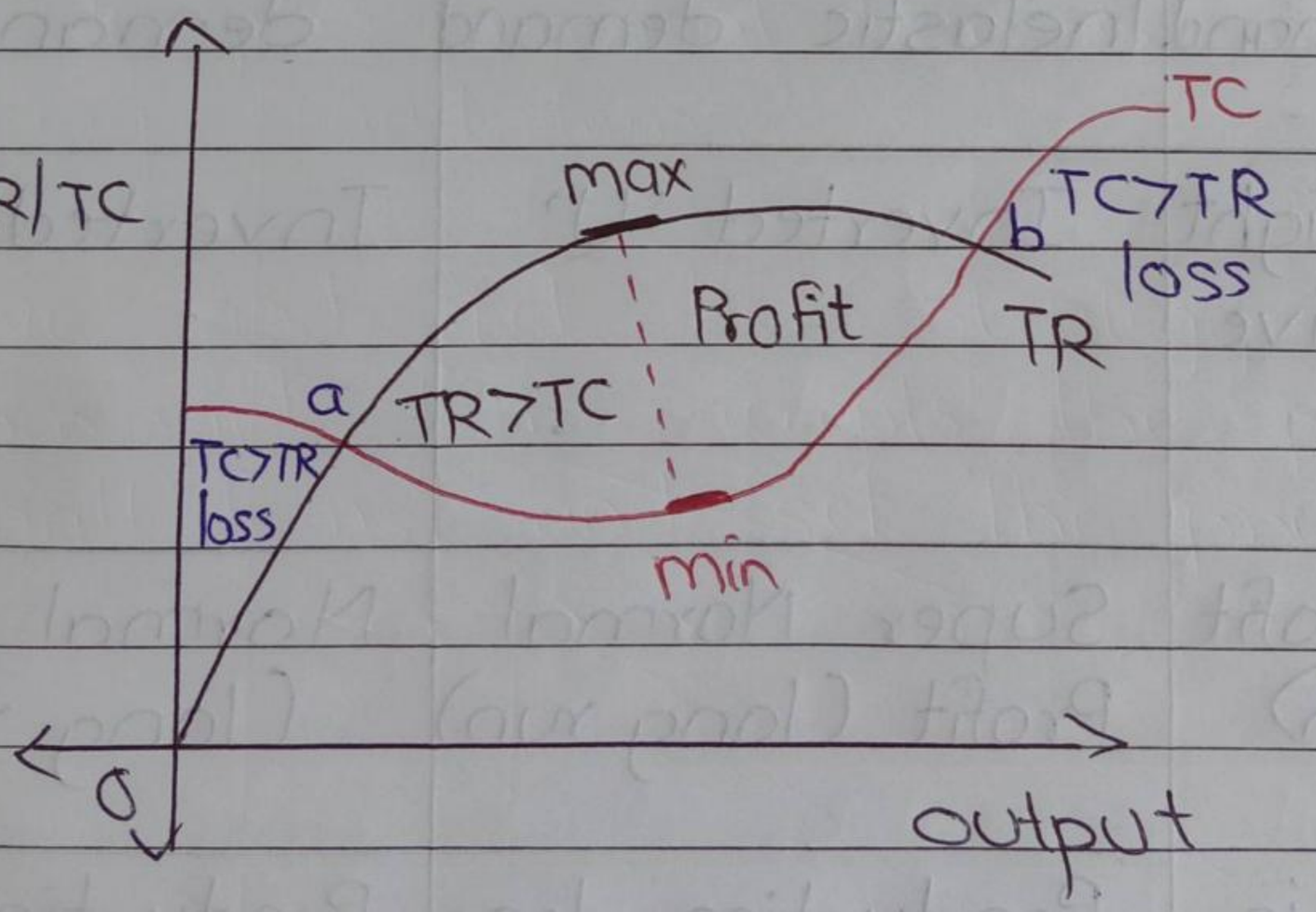
- Each oligopolist will thus, stick to the prevailing price since there is no gain in changing the price.
- A kink will, therefore be formed at the prevailing price which remains Rigid or stable at this level.

PAGE No.
DATE / /

* TR and TC under Monopoly



* TR and TC under Monopoly



PAGE No.
DATE / /

* DIFFERENCE

	Perfect comp.	Monopoly	Imperfect comp.
o	Very large number of buyers and sellers	Single seller	Fairly large number of buyers and sellers
o	Homogeneous product	No close substitutes	Differentiated [close substitutes]
o	Price taker	Price maker	Price maker [own brand]
o	Perfectly elastic demand	Relatively Inelastic demand	Relatively elastic demand.
o	TR is straight line positive slope	Inverted 'U'	Inverted 'U'
o	Normal Profit (long Run)	Super Normal Profit (long run)	Normal Profit (long run)
o	Production is done at minimum of AC. [optimum]	Production done at sub-optimal level. [Falling part of LAC]	Production done at sub-optimal level. [Falling Part of LAC]

PAGE No.
DATE / /

	Perfect Competition	Monopoly	Imperfect competition.
○	Efficient allocation of Resources	Inefficient allocation of Resources	Inefficient allocation of Resources
○	No wastage of Resources.	Wastage of Resources	Huge wastage of resources (Due to adv. expense)
○	Full capacity utilization.	Excess capacity (may or may not)	Excess capacity.