

22/10/23

NATURE AND SCOPE OF BUSINESS ECONOMICS.PAGE No.
DATE

Unit 1: Economics

Unit 2: Type of Economy.

* UNIT-1. ECONOMICS

1. Economics arise from a Greek word 'Oikonomia' which means Household management.

Till 19th Cent. Economics was known as 'Political Economy'

2. Adam Smith is father of ^{Modern} Economics and his book published in 1776 "Wealth of Nation" is considered as 1st modern work of Economics

Full form of Adam Smith's Book:- "An Inquiry into the nature and causes of the Wealth of Nations"

3. fundamental problems of Econ

Human wants are unlimited &
Resources are relatively scarce.

4. Scarcity of resource means that there is no absolute scarcity there is relative scarcity for wants of society.

5. Economics decision making is a complex process.

6. Economics cannot solve all problems, it just provides a slight perspective to ^{solve} the problem.

7. Economics deals with → problem of allocation of Resources and
↳ also deals with process to increase the resources in future.

8. Economics is of 2 types → Micro - deals with individual units
↳ Macro - deals with aggregate units.

* In business economics we deal more of micro and less of macro economics.

* Micro economic analysis helps the business to understand its related issues

Business economics is primarily called as Managerial Economics. And when it is applied it is called as Applied Eco.

9) Business economics is also called as managerial Economics because it involves decision making.

10. B.E is also called as Applied Economics because it is applied practically → Hence it is pragmatic in approach

11. B.E is also considered as Science and art.

12. B.E also incorporates macro economics and it is interdisciplinary in nature.

13. It involves capital decisions and profit analysis (planning)

14. It involves the tools of decision making.

Economics is a discipline which is helpful in analysing the rationality and optimality of a given choice.

Economics is the study of the processes by which relatively scarce resources are allocated to satisfy the competing unlimited wants of human beings in a society.

The study of economics will enable us to develop an analytical approach that help us in understanding and analysing a wide range of economic issues.

Decision making refers to the process of selecting an appropriate alternative that will provide the most efficient means of attaining a desired end, from a number of alternative courses of action.

15) Decision making is selecting amongst the best alternative. It is also a complex process.

16) Problem in resource allocation: 4 Basic Questions.

What to produce → How to produce → for whom to produce → Save for future.

1) Capital goods → 1) Capital Intensive → Produce → Economic Growth.
or 2) Labour Intensive → 1) Rich

2) Consumer goods → 2) Labour Intensive. → 2) Poor

17) 2 positions in Economics

Positive Economics → Normative Economics.

* what is and what causes → * what ought to be

* describe and explain facts → * Based on opinions and values

* These statements can be tested and proved → * Statements cannot be tested

* Describe economics → * provide solution to economic

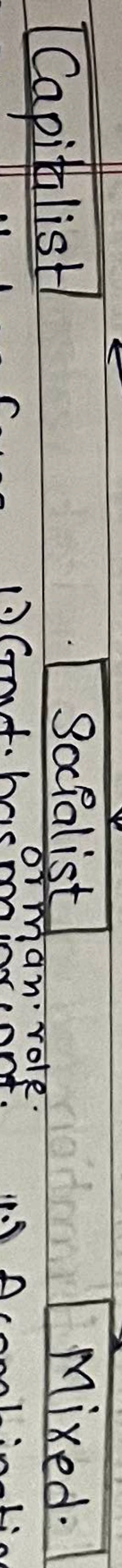
18) Economics is Normative in nature i.e. it is valued at open options and judgements.

19) The definition of 'Scarcity' is given by Robinson.

* Micro-Economics → is abstract and purely theoretical
Business Economics → Pragmatic in approach as it tackles practical problems.

UNIT - 2

1) Type of Economy



Capitalist
 1) Also called as free economy or laissez faire.
 2) No right to private property.

Socialist
 1) Govt. has major role.
 2) No right to private property.
 3) No consumer choice.
 4) Prices are not determined by market forces.
 5) Also called as command Economy, centrally planned Economy.

Mixed
 1) A combination of private & Govt. enterprise.
 2) There is consumer sovereignty.
 3) freedom of choice.
 4) Right to property.
 5) High state of taxation and corruption.

3) Consumer Sovereignty exists i.e. customer is king.

4) Profit motive is driving force.

5) Freedom of Enterprises and right into private property exist.

6) Labour are exploited.

7) It creates monopolies of firm.

Merits of Capitalism.

1) It offers incentive for technology and innovation.

2) Profit is the major objective.

3) There is a high degree of operational efficiency.

* Consumer sovereignty gets restricted.

8) Wealth of nation is enjoyed by all.

9) Introduced by Carl Max and Frederic Engels in 1848.

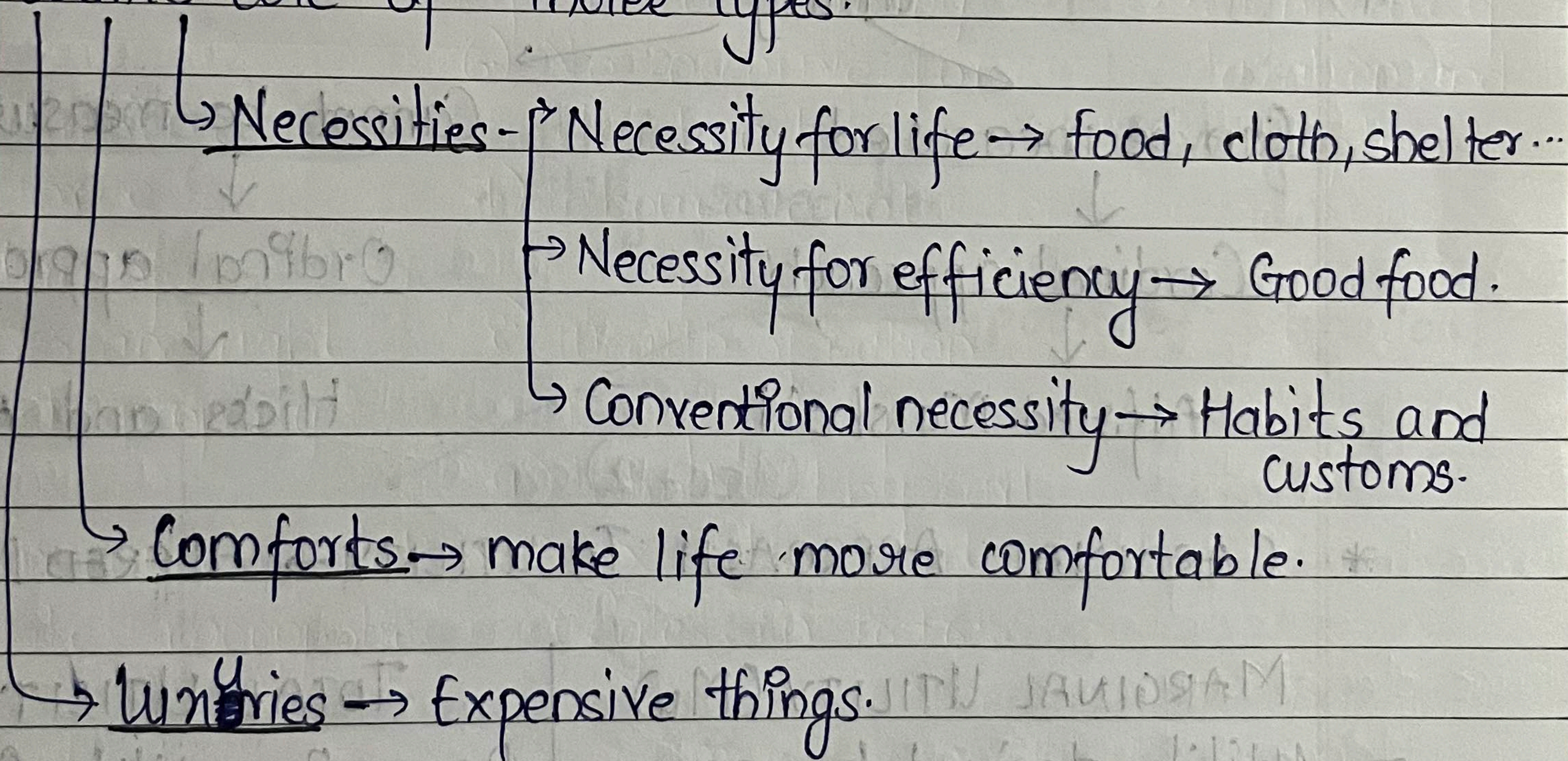
Demerits of Capitalism.

- 1) No human welfare.
- 2) It leads to formation of monopolies.

CONSUMER DEMAND AND SUPPLY

* WANTS UNIT 1 - CONSUMER

- Consumer has certain wants.
- All tastes, desires of Human beings are called as Wants.
- Wants are:
 - 1) Alternative
 - 2) Competitive
 - 3) Complementary
 - 4) Subjective.
- All wants cannot be satisfied, but maximum wants are capable of being satisfied.
- Wants may change from time to time.
- Wants are of three types:



*** UTILITY**

- 1) Utility is want satisfying power of a commodity.
- 2) Utility ≠ usefulness
- 3) Utility = anticipated satisfaction
↳ differ from person to person.
- 4) Utility is subjective content ↳ Gift/donation
- 5) A person can have utility even without consumption.
- 6) In economics, the concept of utility is ethically neutral.
- 4) Utility

Can be measured

↓
Cardinal approach
↓
Alfred Marshall
(Lec-12)

Cannot be measured.

↓
Ordinal approach
↓
Hicks and Allen.

*** CARDINAL APPROACH TO UTILITY → ALFRED MARSHALL**

MARGINAL UTILITY (MU)

- Utility derived by consuming a product is called as Marginal Utility.

- formula = $TU_n - TU_{n-1}$

- MU is diminishing through out

- MU can be +ve, -ve, or 0.

TOTAL UTILITY (TU)

Assuming utility is measurable and additive, sum of all marginal utility is total utility

- $TU = MU_1 + MU_2 + \dots + MU_n$

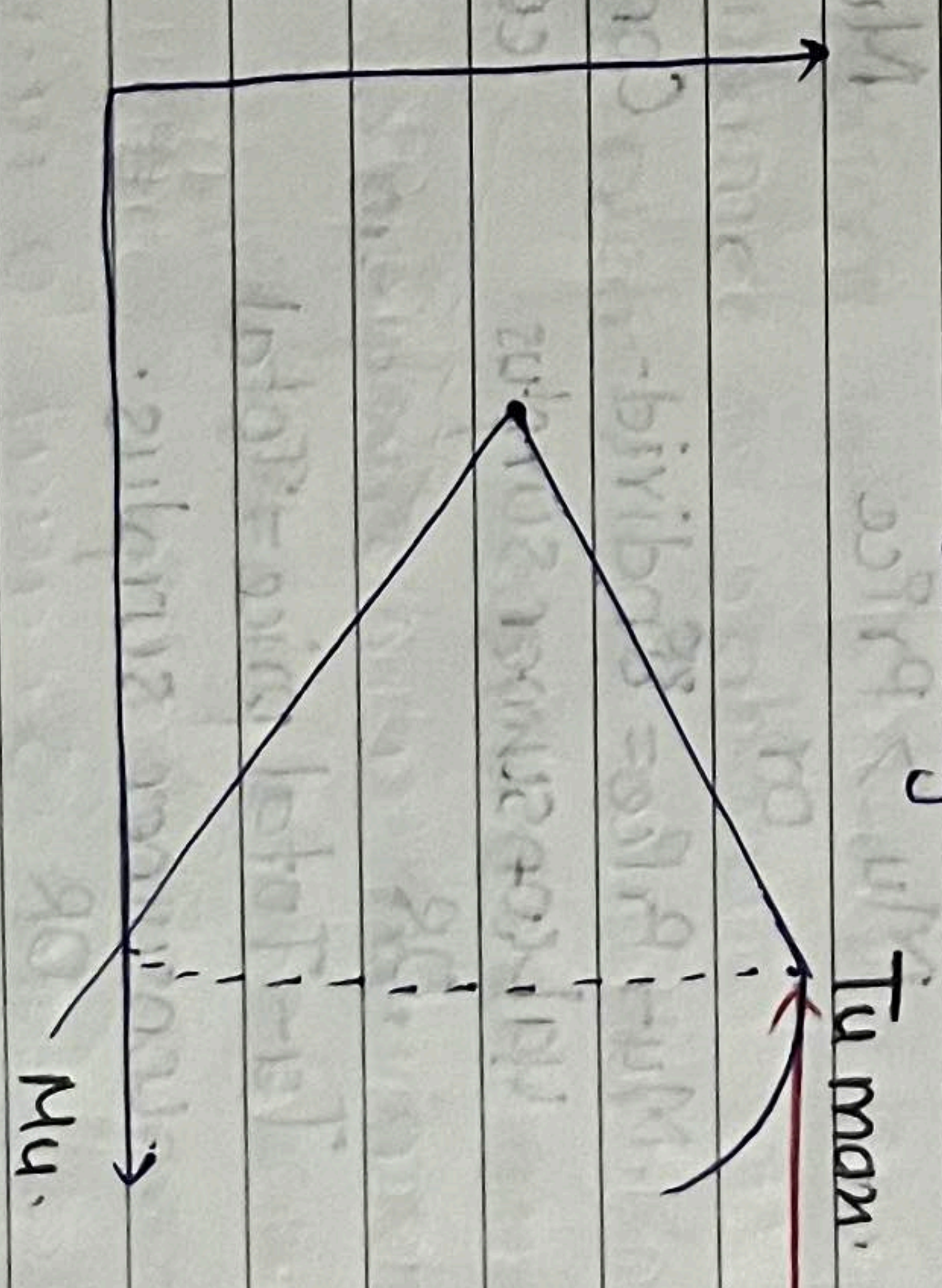
- Total utility curve is always positive or declining.

- Money is the measuring good of utility.

*** UTILITY SCHEDULE :- Table showing MU and TU derived.**

No. of mangoes ate	Utility	Marginal Utility	Total Utility
1.	10	10	10
2	6	6 ($TU_n - TU_{n-1}$)	16
3	3	3	19
4	0	0	19
5	-2	-2	17.

Utility Curve: A graphical representation of utility schedule.



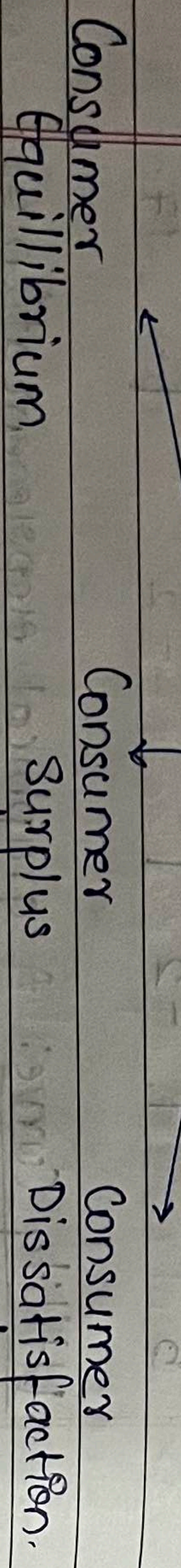
- MU is diminishing.
- TU is increasing @ diminishing state.
- Where MU is zero TU is maximum
- Where TU is maximum → That point is called as Point of Saturation.
- MU can be negative.

LAW OF DIMINISHING MARGINAL UTILITY.
- Alfred Marshall

- As consumer increases the consumption of goods his M_u declines
- So ^{the} more he has of a goods his utility from that good goes down.

- Exception to L.D.D.M.U.
 - Hobbies & Rare Collection
 - Abnormal person
 - Bulky/Indivisible goods.

* MARSHALL'S CONSUMER BEHAVIOUR

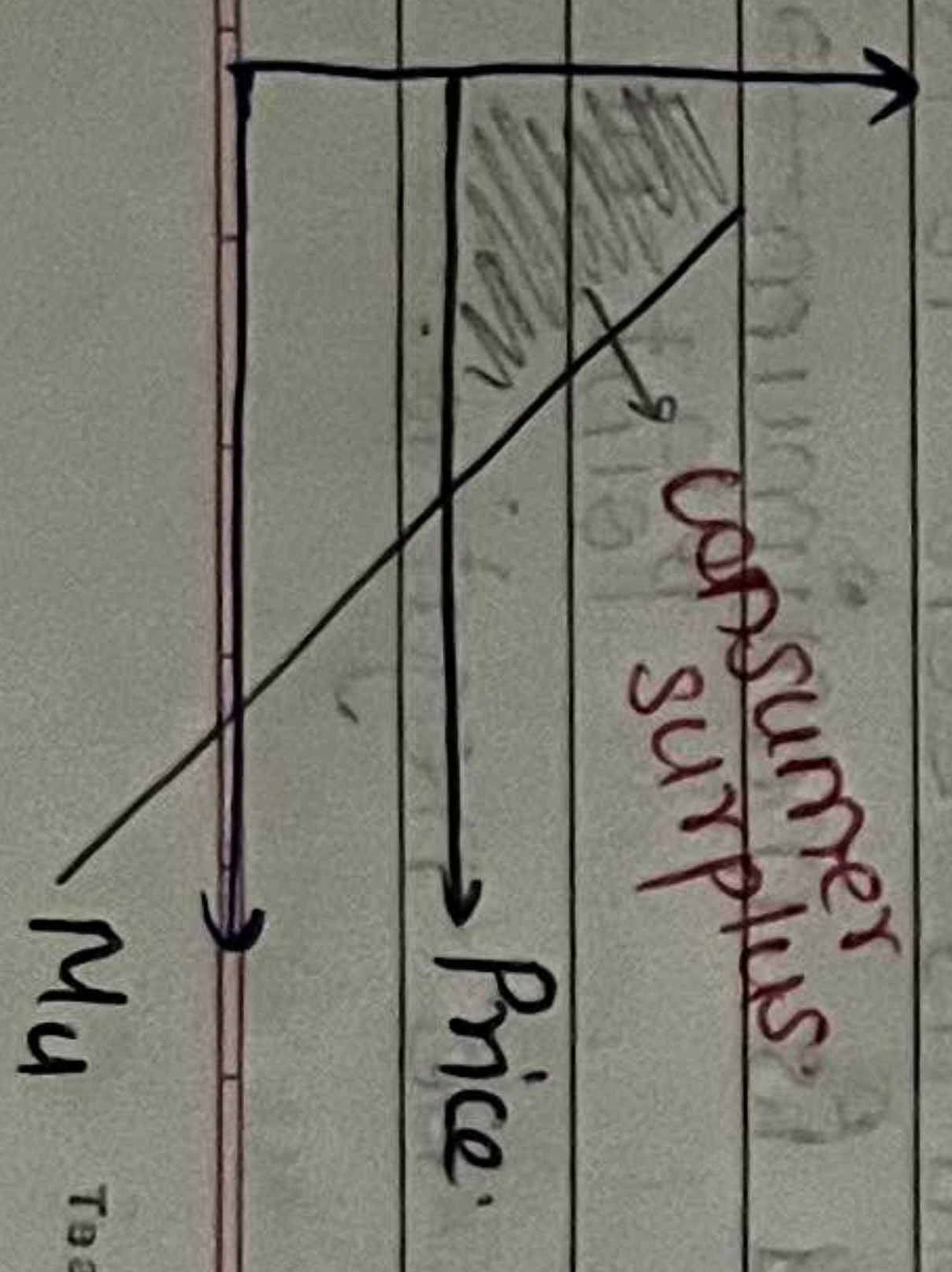


- $M_u = \text{price paid}$
- $M_u > \text{Price}$ OR $M_u < \text{Price}$

Effect of price change.
 $M_u - \text{Price} = \text{Individual consumer surplus}$ OR $M_u < \text{Price}$ Consumer stops consuming or buying.

Price Inc. = Buy less
 Price dec = Buy more.
 Hence $Tu - \text{Total price} = \text{Total consumer surplus}$ OR $\text{Sum of } - \text{Sum of total } M_u \text{ price paid}$.

Demand curve shows the concept of marginal utility.



Teacher's Signature:

kyu choda : kya pane ke liye

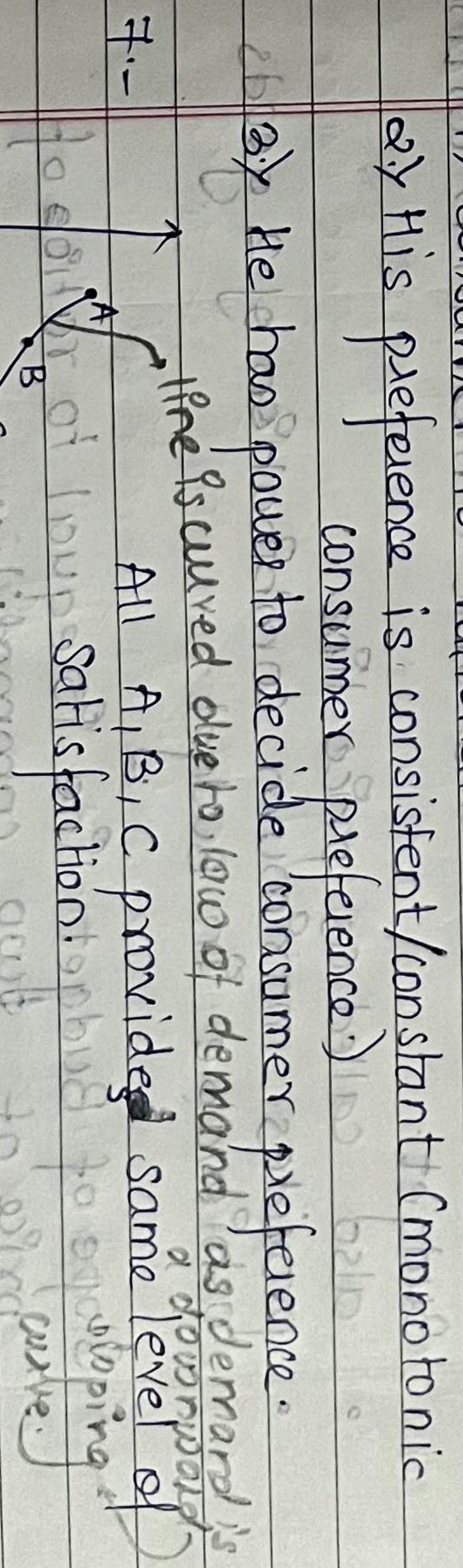
ASSUMPTIONS OF LAW OF D.M.U.

- Units must be homogenous units.
- There must be standard unit of consumption.
- There must be continuous consumption.
- Law is not applicable on prestigious goods.
- Law is based on unrealistic assumptions.

* ORDINAL CONCEPT OF UTILITY

- Indifference curve :- (IC)
 provided by Hicks and Allen considered as ordinal concept.
 As per IC, all combination provides same level of satisfaction.
 It is also called as Iso-utility curve or equal utility curve.
 This is based on law of consumer preference.

- Assumptions of IC -
- rationally consumers is rational
- His preference is consistent/constant (monotonic consumer preference)
- He has power to decide consumer preference.



- Properties of IC -
 - IC cannot intersect each other
 - IC will not touch each other, or y axis \rightarrow This shows he is interested in only one product.

Teacher's Signature:

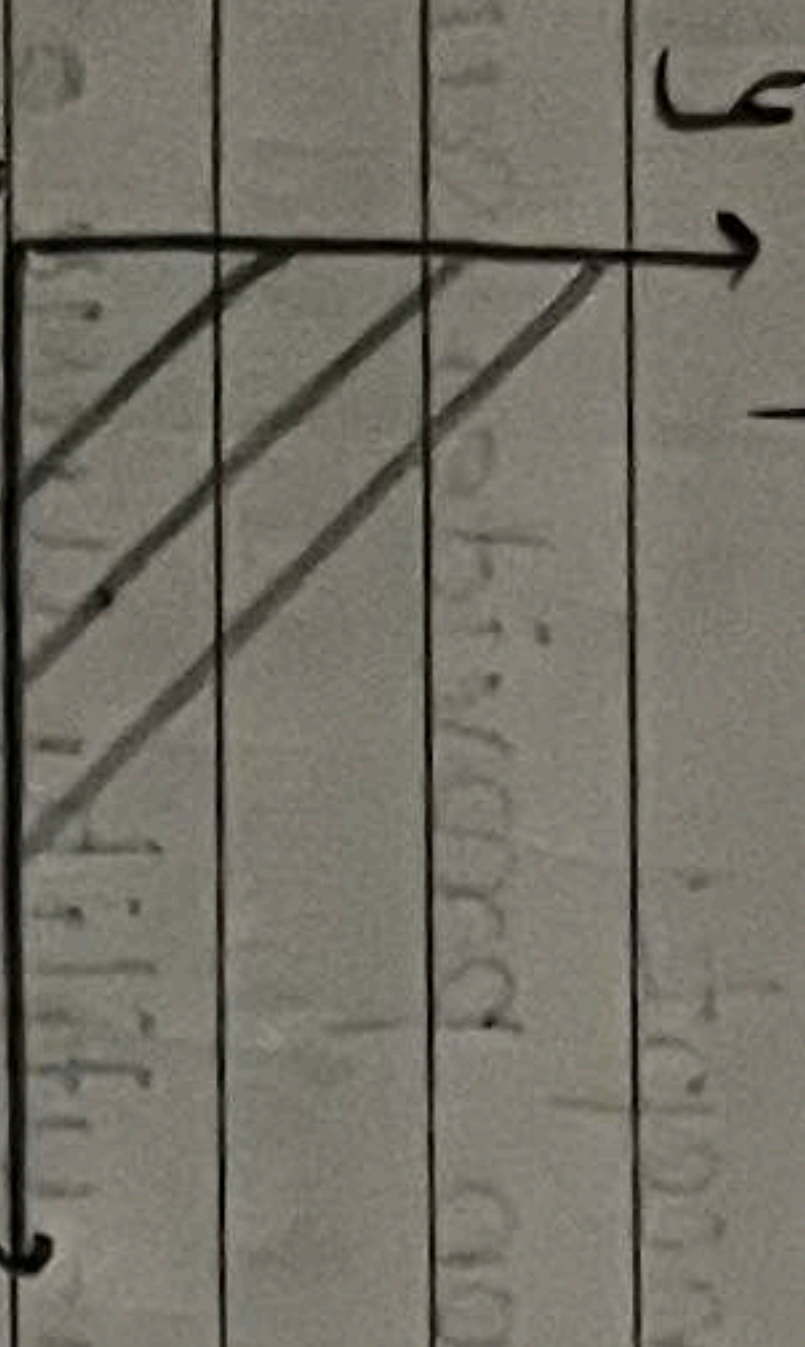
c) Higher level of IC show higher level of Satisfaction.

d) IC ~~curve~~ slopes downward towards right & convex in shape.

Good's are Substitute
↓
complementary.

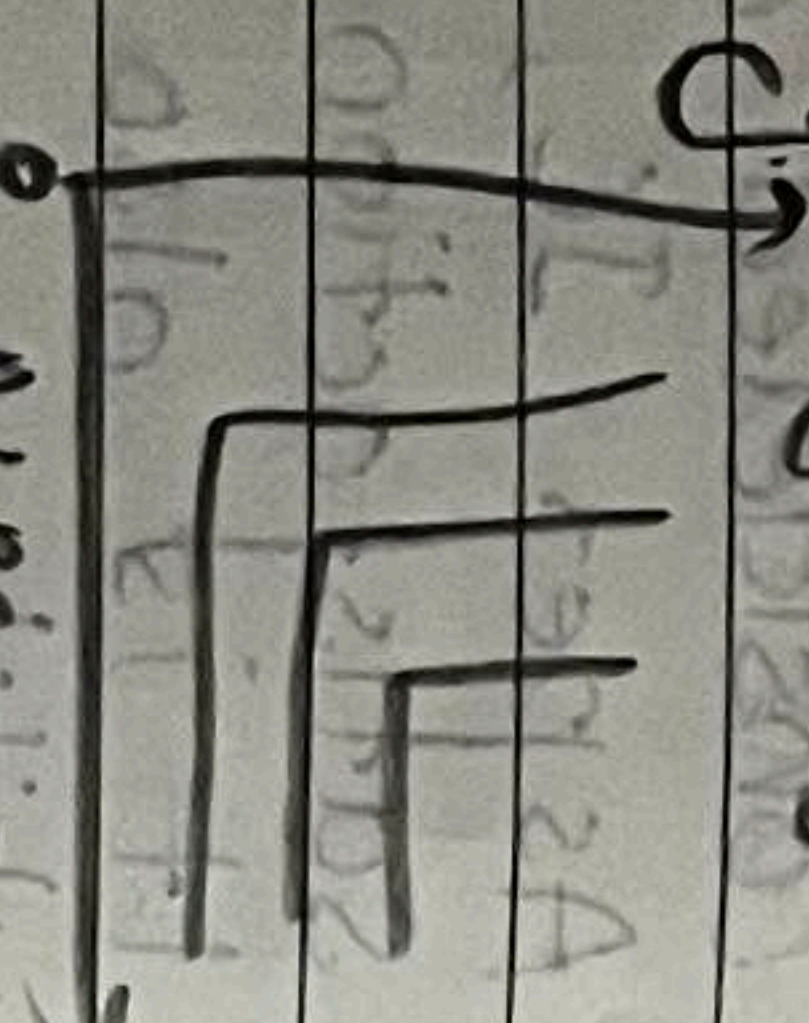
IC is a parallel, straight line to y-axis

Perfect Substitute



Utility for both goods is same.

Complementary goods



(fixed quantity of both goods)

* BUDGET LINE:-

Provides all the attainable combination within Budget.

also called as price line.

provides maximum combination of 2 goods achievable in Budget.

Slope of Budget line is equal to ratio of price of two commodities

i.e. Slope of Budget = $\frac{P_1}{P_2}$

* INDIFFERENCE MAP.

Shows all combination of consumer plotted on a graph showing his preference. Highest level of Indifference curve shows highest level of satisfaction, he will try to reach highest levels by reaching at maximum points.

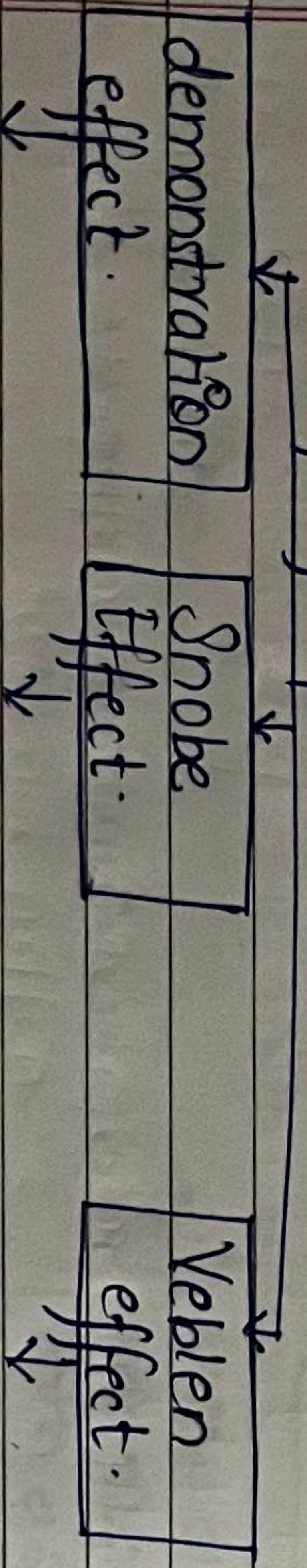
* How equilibrium is achieved in ordinal concept?

If consumer reached highest level of satisfaction he is said to achieve equilibrium.

UNIT 2 - DEMAND:

* DETERMINANTS OF DEMAND
Demand is affected by following factors:

- a.) Income of consumer - Income ↑ Demand ↑
- b.) Price of product - Price ↓ Demand ↑
- c.) availability of substitute - Price of n ↑ Demand of Y ↑
- d.) Taste and preference



Demand arise by looking the product with someone.
Demand reduce because product became common among people.
Costly goods are purchased by status seeking rich people (Black water.)

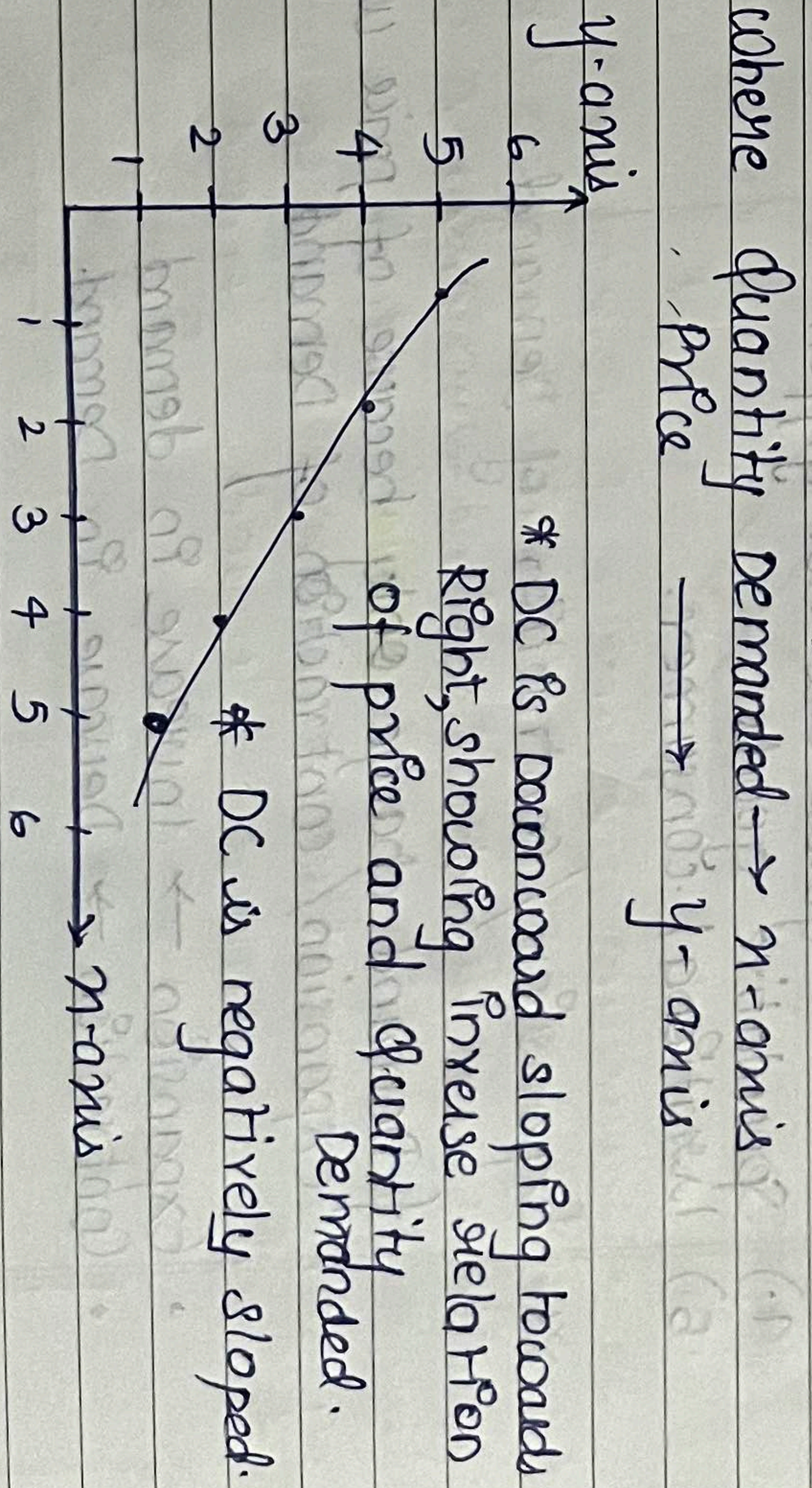
- e.) Population and size of population.
- f.) Availability of credit facility.

Page No. / /
DATE / /

* Demand Schedule :- A table showing price & quantity demanded.

Price	Quantity Demanded.
5	1
4	2
3	3
2	4
1	5

* Demand Curve :- Graphical Representation of Demand Schedule.



* DC is Rectangular hyperbola curve.

* Individual Demand curve is steeper,
Market Demand curve is flatter.

Page No. / /
DATE / /

* LAW OF DEMAND.

- Provided by Alfred Marshall.
- Shows inverse relation of price and quantity demanded.

• If price goes up, quantity demand goes down, other things remain constant.

* Exceptions to law of demand.

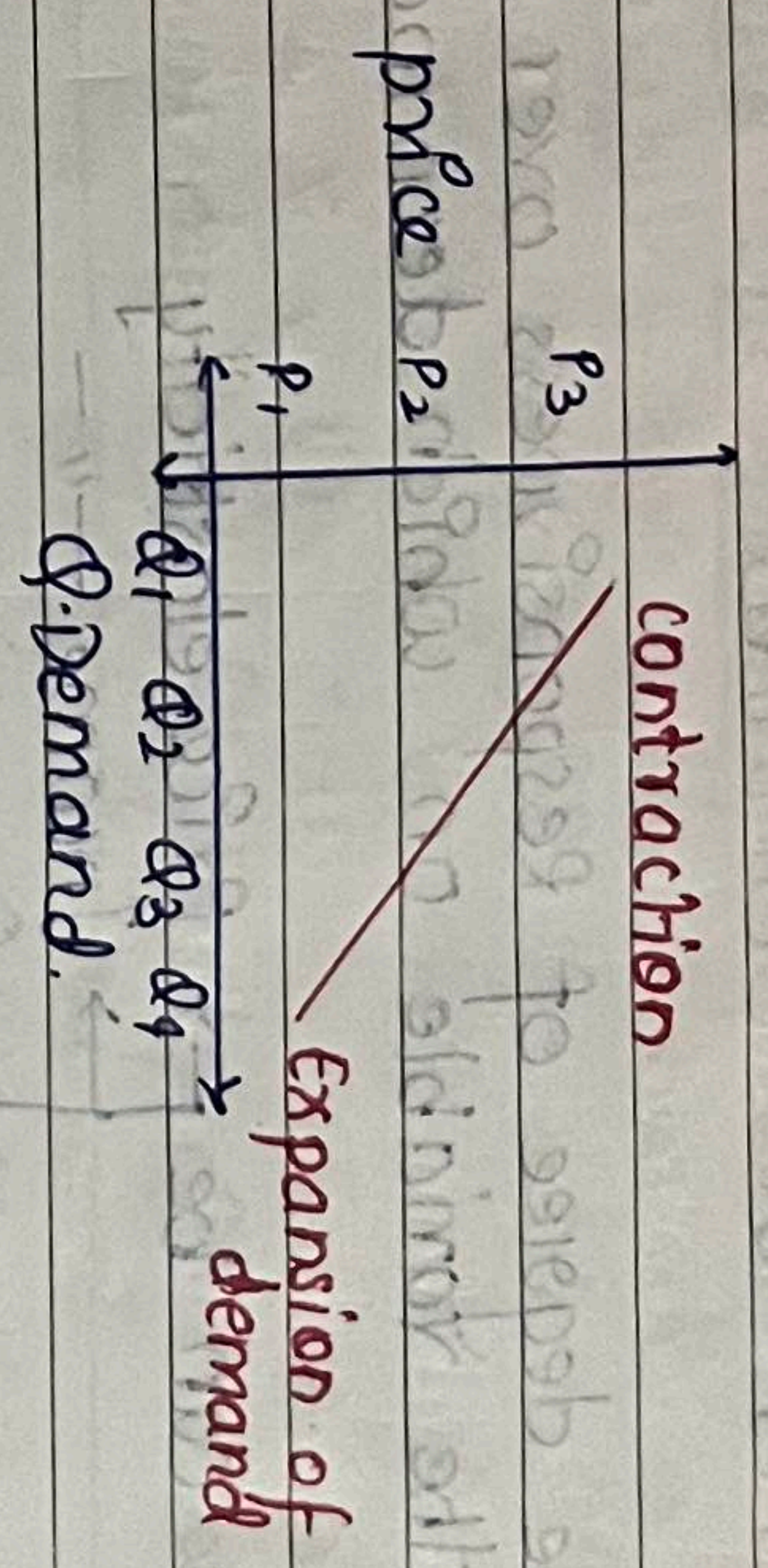
- 1) Conspicuous goods
- 2) Giffen Goods Necessity
- 3) Giffen Goods
↳ All giffen goods are inferior but all inferior goods are not giffen.
- 4) Speculative goods
- 5) Irrational consumer.

* Expansion/contraction of Demand.

If Demand change only because of price we call it expansion/contraction of Demand.

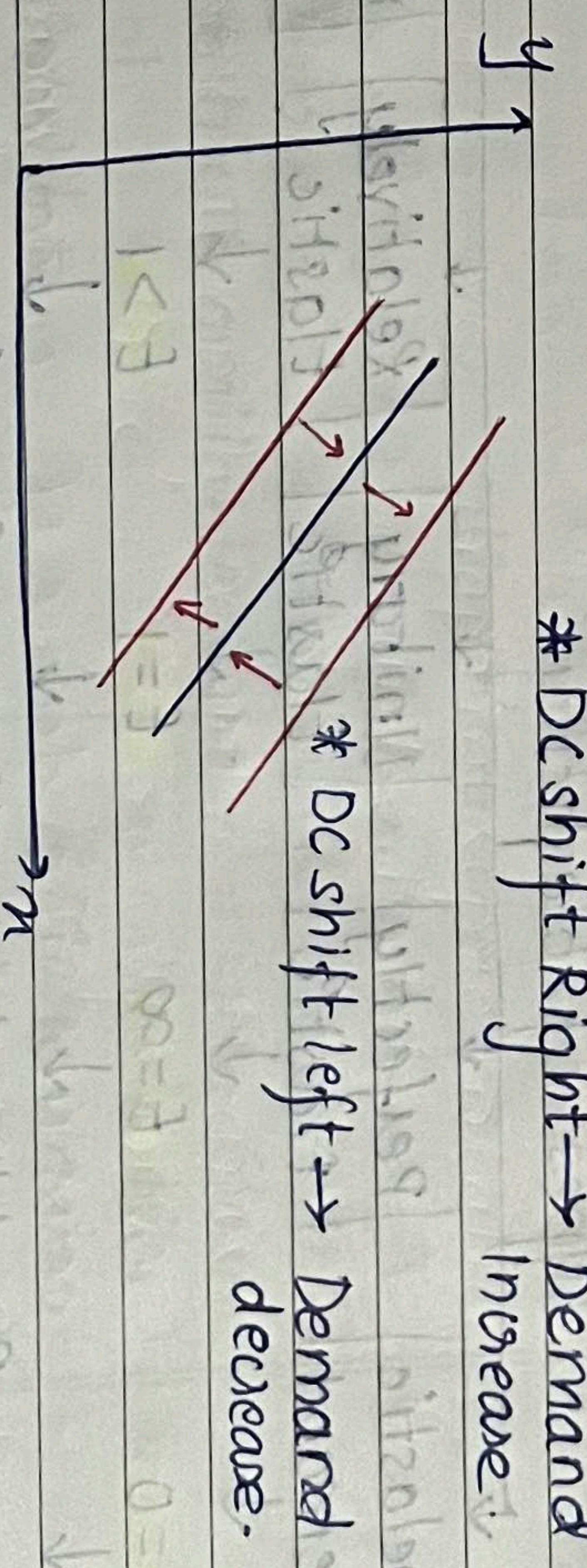
- Expansion → Increase in demand
- Contraction → Decrease in Demand.

• We stay on demand curve either more upward or downward.

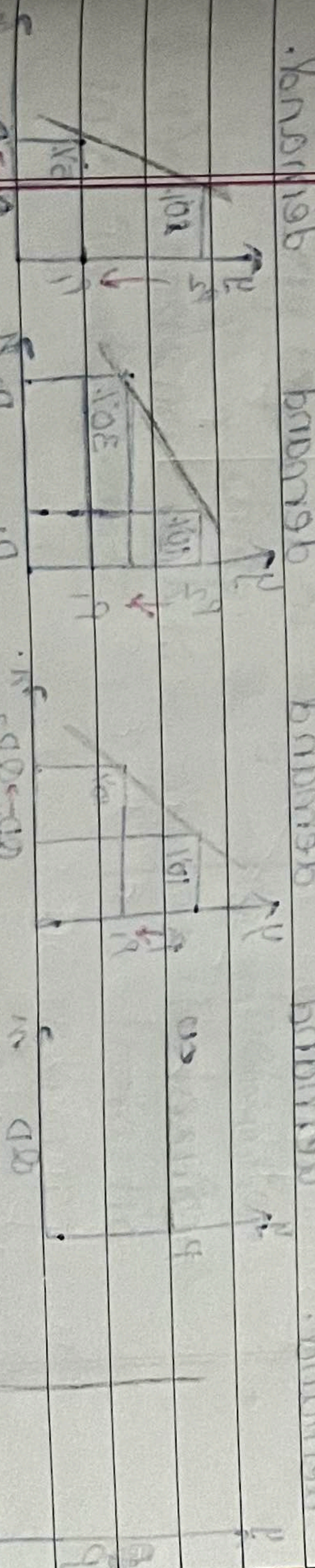


* Increase or decrease in demand.

If the demand change because of any factor (other than price) Eg: change in income, Taste, population, substitute



* New Demand curve will be formed.



* ELASTICITY OF DEMAND

- Shows the degree of responsiveness over change in one of the variable on which demand depends.
- So these can be
 - Price elasticity
 - Income
 - Gross
 - Advertisement

Unless otherwise specified, Elasticity means Price elasticity.

Types of Elasticity:

- ↓ **Elastic demand**
- ↓ **Perfectly Elastic**
- ↓ **Unitary Elastic**
- ↓ **Relatively Elastic**
- ↓ **Relatively Inelastic**

$E=0$

$E=\infty$

$E=1$

$E>1$

$E<1$

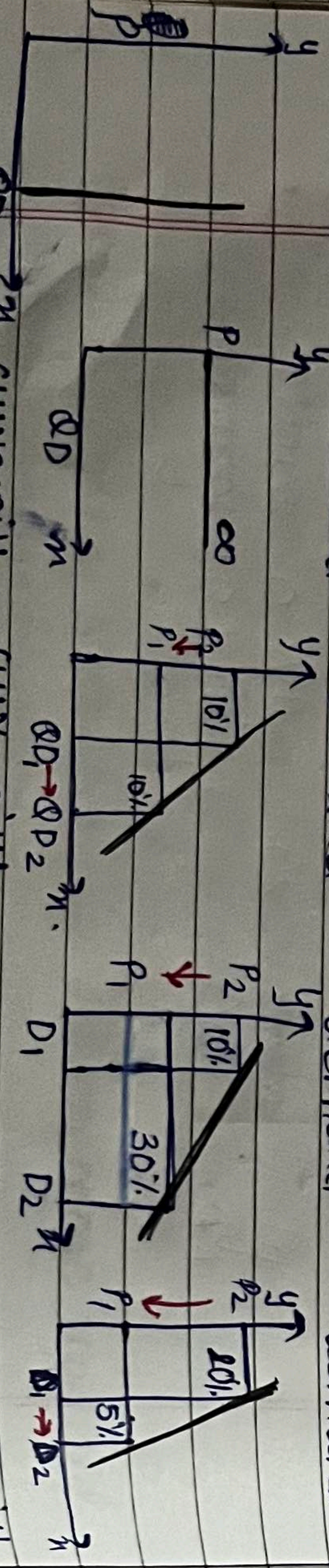
If change in variable does not have any effect on demand.

If change in variable has huge impact on demand.

If change in variable has equal impact on demand.

If change in variable has greater impact on demand.

If change in variable has less impact on demand.



Curve will be straight line parallel to y-axis.

Curve will be parallel to x-axis.

Curve will be rectangular Hyperbola.

Curve will be flat.

Curve will be steeper.

Teacher's Signature:

* Formula for Elasticity. (General)

$$\frac{\% \text{ change in } QD}{\% \text{ change in Variable}} \quad \text{OR} \quad \frac{\Delta Q}{Q} \times \frac{P}{\Delta P}$$

* Measurement of Elasticity (Methods).

- Percentage Method
- Total outlay Method
- Point Elasticity OR Geometric Elasticity
- Arc Elasticity OR Average Elasticity

↓ $\% \text{ change in } QD$ Total outlay

↓ $\% \text{ change in } P$ variable

↓ $\% \text{ change in } P = \frac{P_2 - P_1}{P_1} \times 100$

↓ $\% \text{ change in } Q = \frac{Q_2 - Q_1}{Q_1} \times 100$

- 1) close substitute available
- 2) Petrol.
- 3) Many substitute
- 4) spent more on commodity
- 5) luxury
- 6) necessities
- 7) product of multiple uses
- 8) very expensive or very cheap.
- 9) consumer habits
- 10) Tied Demand

Portulacae
Effect on elasticity.

Highly Elastic.

Highly Elastic.

More elasticity.

Highly Elastic.

Elastic.

Inelastic.

Elastic.

Inelastic.

Inelastic.

Inelastic.

Teacher's Signature:

* Income Elasticity

when the demand change owing to change in income

• $\frac{\% \text{ change in } QD}{\% \text{ change in Income}}$ OR $\frac{\Delta Q \times Y}{Q \times \Delta Y}$

• It can be of 5 types (same as before)

* Advertisement Expenditure Elasticity

• It shows the degree of responsiveness of advertisement expenditure on demand.

• $\frac{\% \text{ change in } QD}{\% \text{ change in Adverts. Exp.}}$ OR $\frac{\Delta Q \times A}{Q \times \Delta A}$

* Cross elasticity

• measures the degree of responsiveness of change in price of one commodity on demand of other commodity.

It arise due to availability of substitute.

• $\frac{\% \text{ change in } QD}{\% \text{ change in Price of } Y}$ OR $\frac{\Delta Q_x \times P_y}{Q_x \times \Delta P_y}$

* FORECASTING

Forecasting is predicting a future event.

• forecasting depends upon area of operation.

Types of forecasting.

Based on scope.

- 1) Macrolevel
- 2) Industry level
- 3) firm level.

Based on time.

- 1) Short term
- 2) long term.

* DEMAND DISTINCTION.

a) Producer goods:- which are used for production of other goods Eg: Plant and machinery

b) Consumer goods:- which are used for final consumption Eg: food.

c) Durable goods:- which do not wear out quickly. Eg: Building

d) Non-durable goods:- which cannot be consumed more than once. Eg: Milk.

e) Semi-durable goods:- They have characteristic of durable & Non-durable goods. Eg: clothes.

f.) Desired Goods:- The Demand arises because of some other goods.
Eg: Matchbox for Cigarette.

g.) Autonomous goods:- The Demand of good product independent of other goods. Eg: food.

~~Star~~

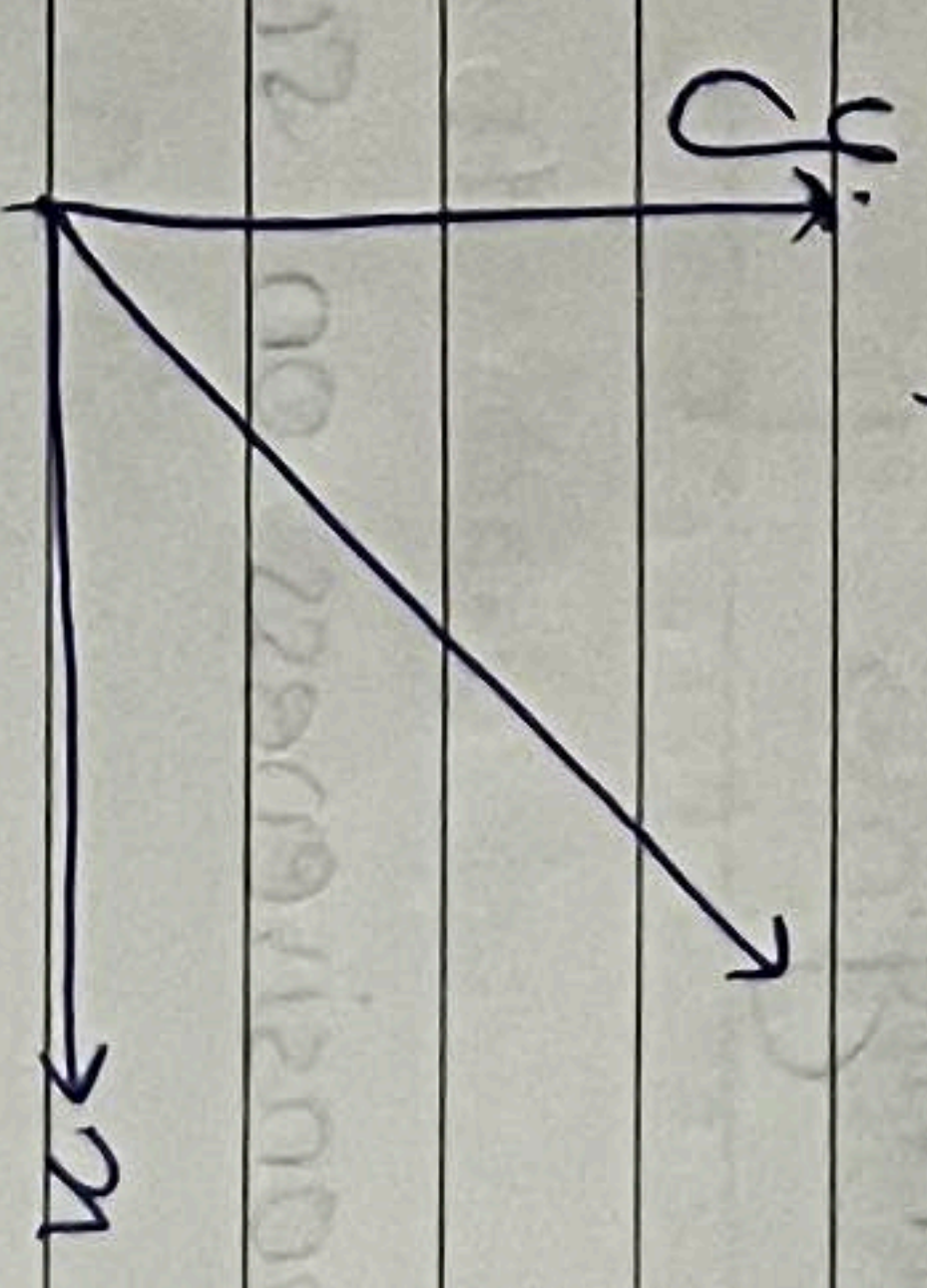
*

SUPPLY

Supply curve:- It is a graphical representation of supply schedule.

• It is a positive sloping curve.

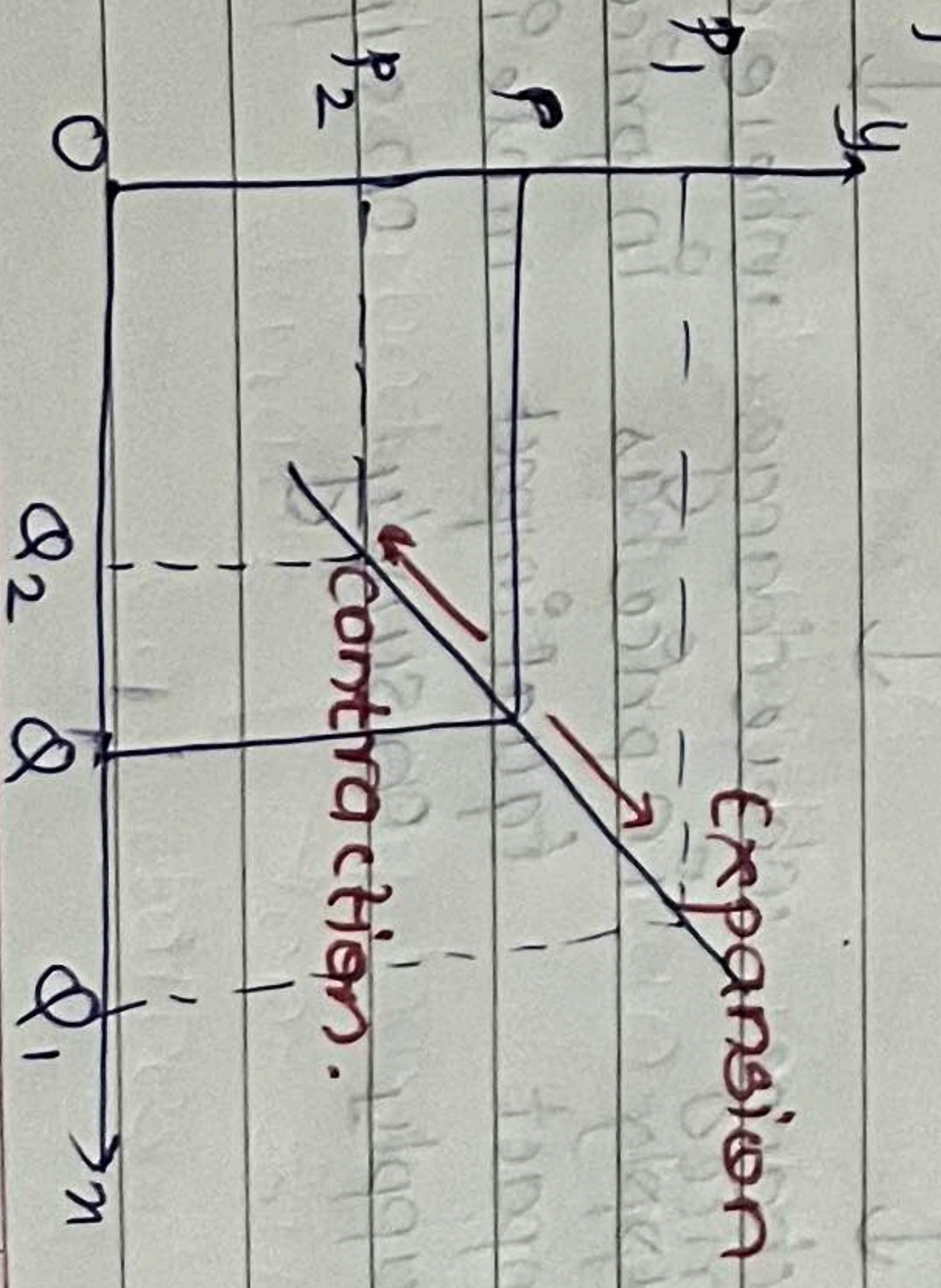
• Curve is positive and slope towards right.



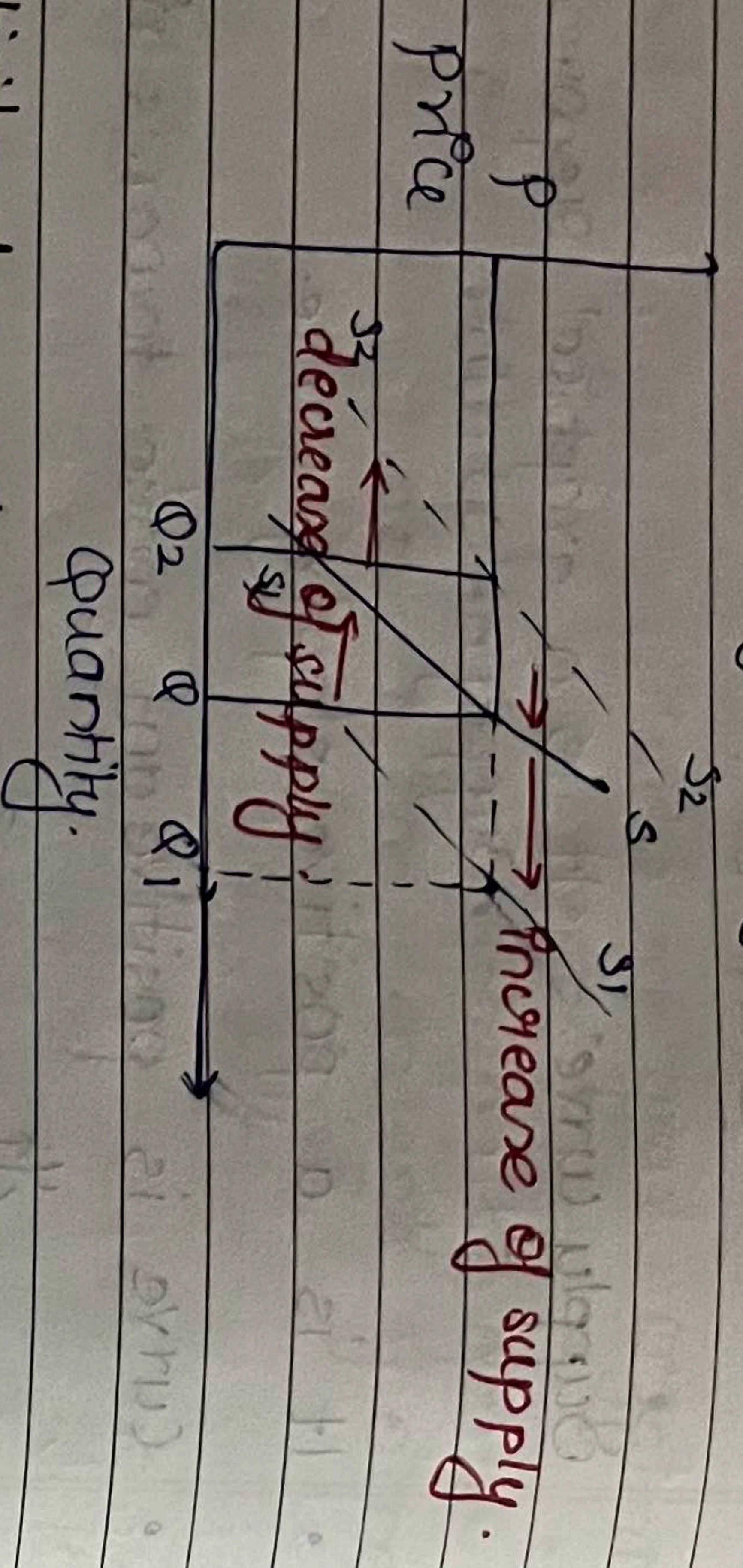
Supply schedule:- Table showing price and quantity supplied.

Price	Quantity
10	20
20	40
30	60
40	80

* Expansion & contraction



* Increase & decrease of supply:



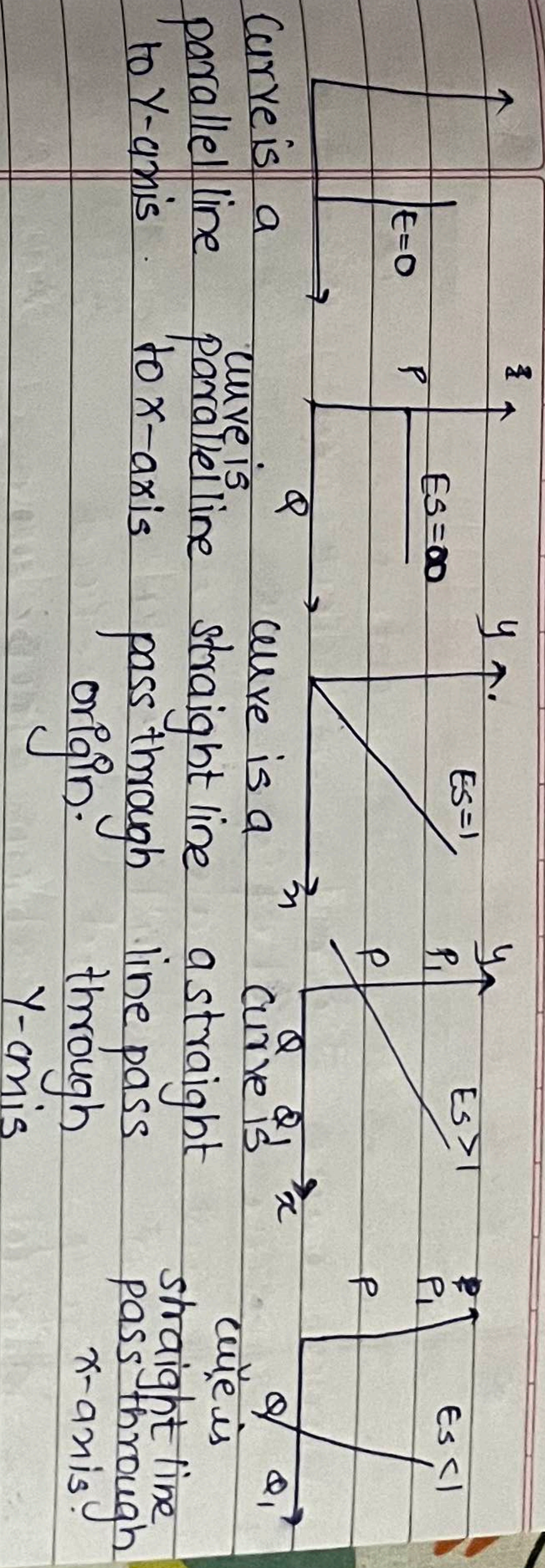
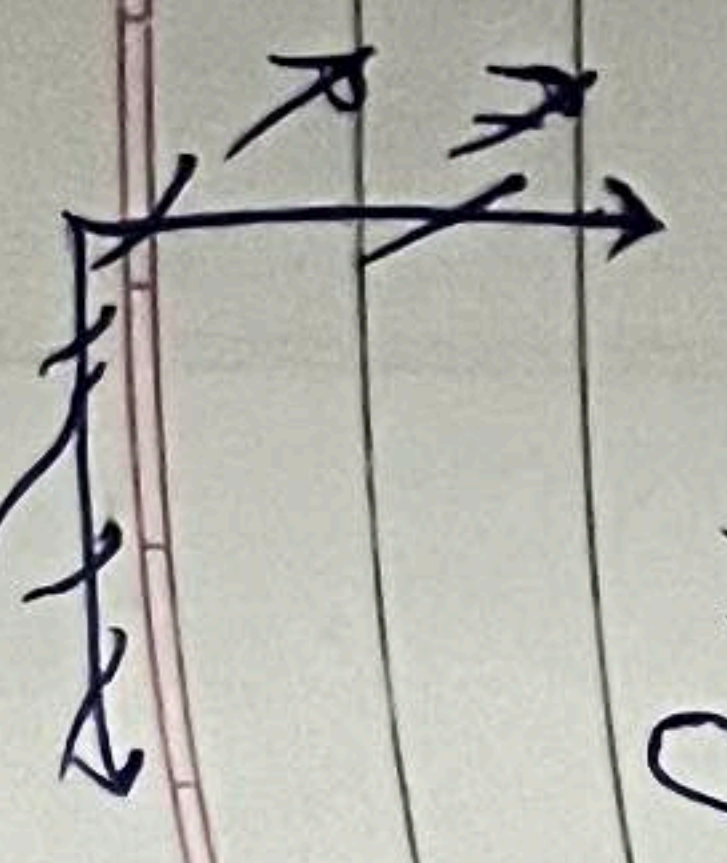
* Elasticity of supply.

Provides degree of responsiveness on supply owing to price.

• % change in quantity supplied or $\frac{\Delta Q}{Q} \times 100$
 • % change in price $\frac{\Delta P}{P} \times 100$

Types of Elasticity

Perfectly Inelastic $E_s = 0$	Perfectly Elastic $E_s = \infty$	Unitary Elastic $E_s = 1$	Relatively Elastic $E_s > 1$	Relatively Inelastic $E_s < 1$
where change in price has no impact on supply	where change in price has equal impact on supply	where change in price has equal impact on supply	where change in price has more impact on supply	where change in price has less impact on supply



* Measuring elasticity:

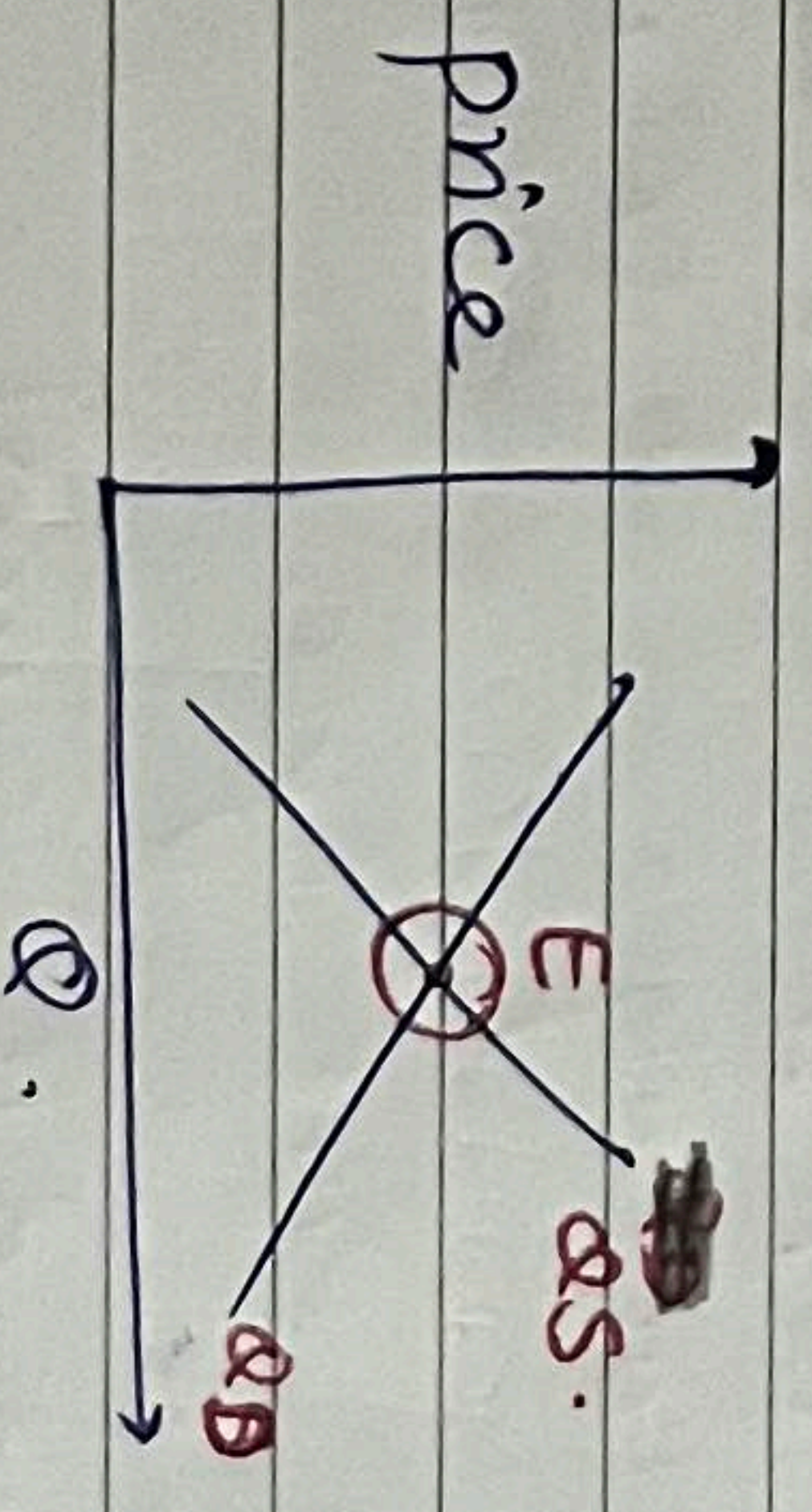
Percentage method

$$= \frac{\% \text{ change in } Q_s}{\% \text{ change in Price}} = \frac{Q_1 - Q_2}{Q_1 + Q_2} \times \frac{P_1 + P_2}{P_1 - P_2}$$

Arc method.

* Equilibrium Quantity and Price.

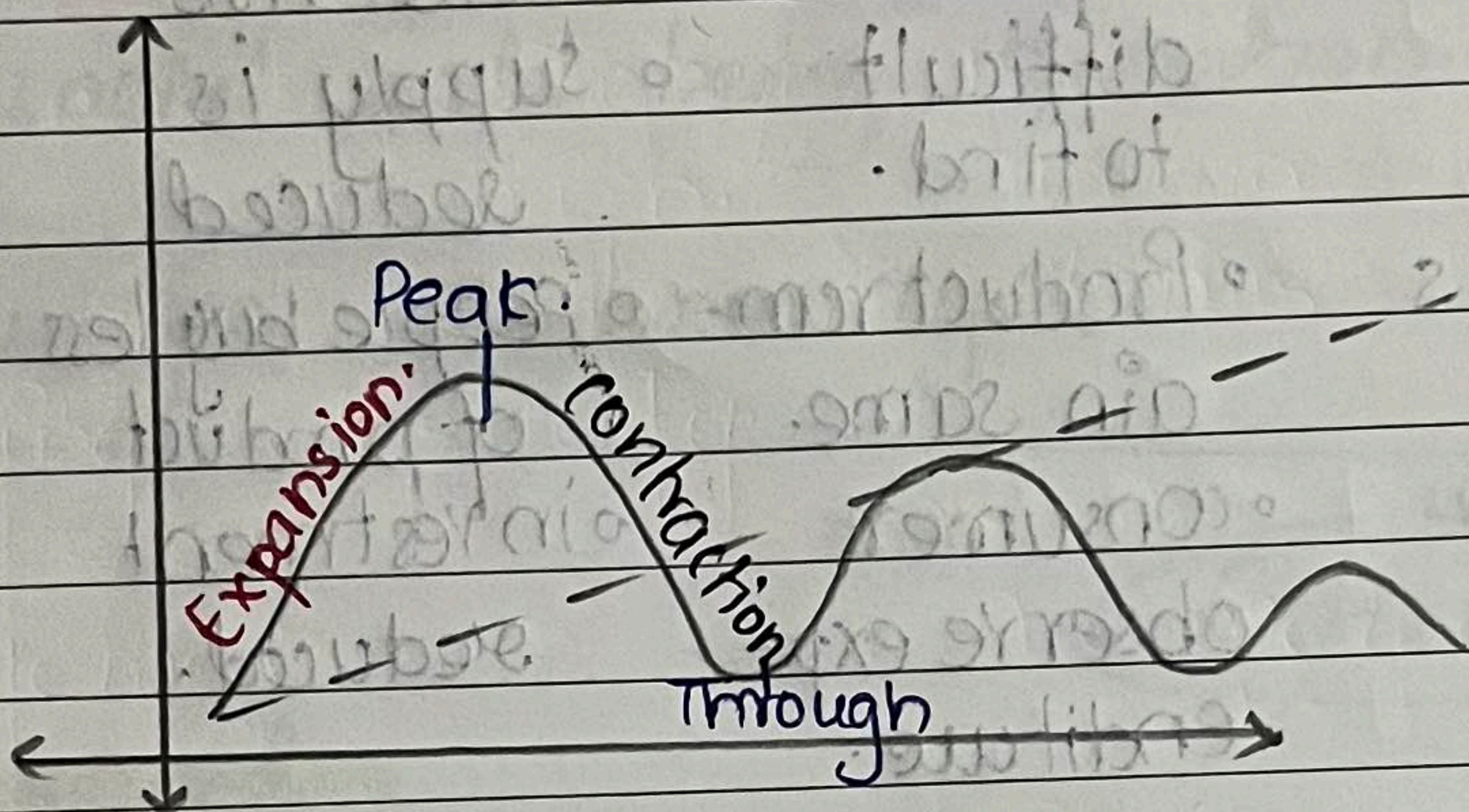
where $Q_D = Q_S \rightarrow$ we call it as Equilibrium quantity
 Price at E point, where $Q_D = Q_S$



02/11/24) BUSINESS CYCLE.

5. These are periodic fluctuations in Economic Activities, called as Business Cycle.

6. They are recurrent and occur periodically.



- 1.) Business cycle
- 2.) Trade Cycle
- 3.) Trade off
- 4.) Economics Booms and slumps.

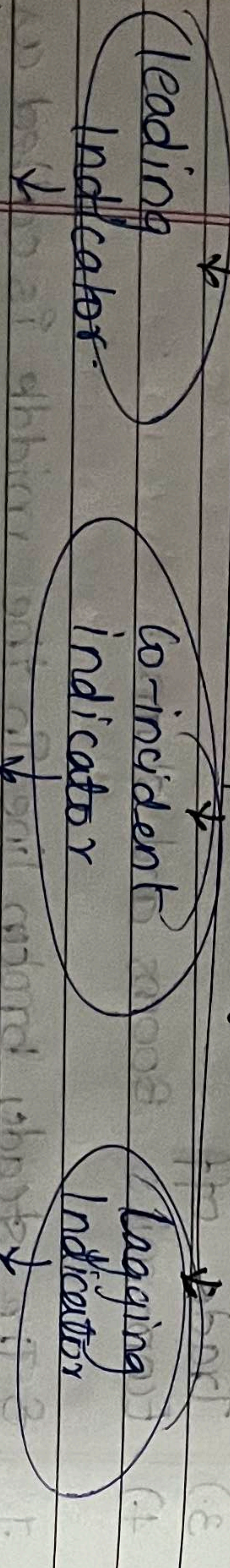
7. & The steady broken line in the middle is called as Steady Growth of the Economy.

8. Stages:
- 1.) Through
 - 2.) Expansion
 - 3.) Peak
 - 4.) Contraction:

STAGES OF ECONOMY.

- Expansion.
 • Demand Increase
 • Money Increase
 • Unemployment goes down
 • People enjoy high standards of living
- Peak
 • Highest level of exp.
 • Input are difficult to find.
 • Product rem- in same.
 • consumer observe exp- expenditure.
- Contraction
 • Unemployment rise
 • Price rise
 • supply is reduced.
 • investment reduced.
 • people buy less of product
 • in vestment starts expecting the worst.
- Through.
 • unemployment
 • Business shutdowns
 • Negative growth rate
 • Investor becoming pessimist.

Indicator of Business cycle



indicator that is moving simultaneously with the economic event

indicator that arises after an economic activity

indicator that arises before happening of an economic event

Features of Business cycle.

- 1) Has diff impact on diff segment
- 2) does not have a fixed price.
- 3) differ wv intensity

- 4) contagious from one nation to another.
 - 5) Pervasive in nature
 - 6) complex in nature
 - 7) Impact social well being of nation.
- * Reasons for Business cycle.

Internal

External

Fluctuation in demand

According to Keynes,

1. Demand → Expansion/Reck. Inc
2. Demand → contraction/Recession.

Fluctuation in investment

1. 100%
2. Natural factor
3. Post code consumption
4. Population growth
5. Technological shocks

Govt. spendings

- If Tax Rate cut } Exp/Reck
- If Tax Rate inc. } Rec.
- If Govt. spending inc. } Exp/Reck
- If Tax Rate inc. } Rec.
- If Govt. spending Dec } Rec.

4) Money Supply

As per Hawtrey

Money supply inc \rightarrow Exp/Peak

Money supply Dec \rightarrow Con/Rece

5) Psychological:-

Pigou Theory

optimist - E/Peak

Pessimist - C/Rece

6) Innovation theory:-

Schumpeter

New innovation \rightarrow E/P

No New innov \rightarrow C/R

7) Cobweb Theory:-

Nikolas Kaldor

Current Prices \rightarrow E/P

are low

Current prices \rightarrow C/R

are high

* Why we study Buis. cycle?

1.) It has impact on profit

2.) " " " " Decision making

3.) It helps in deciding Expansion/contraction of activity

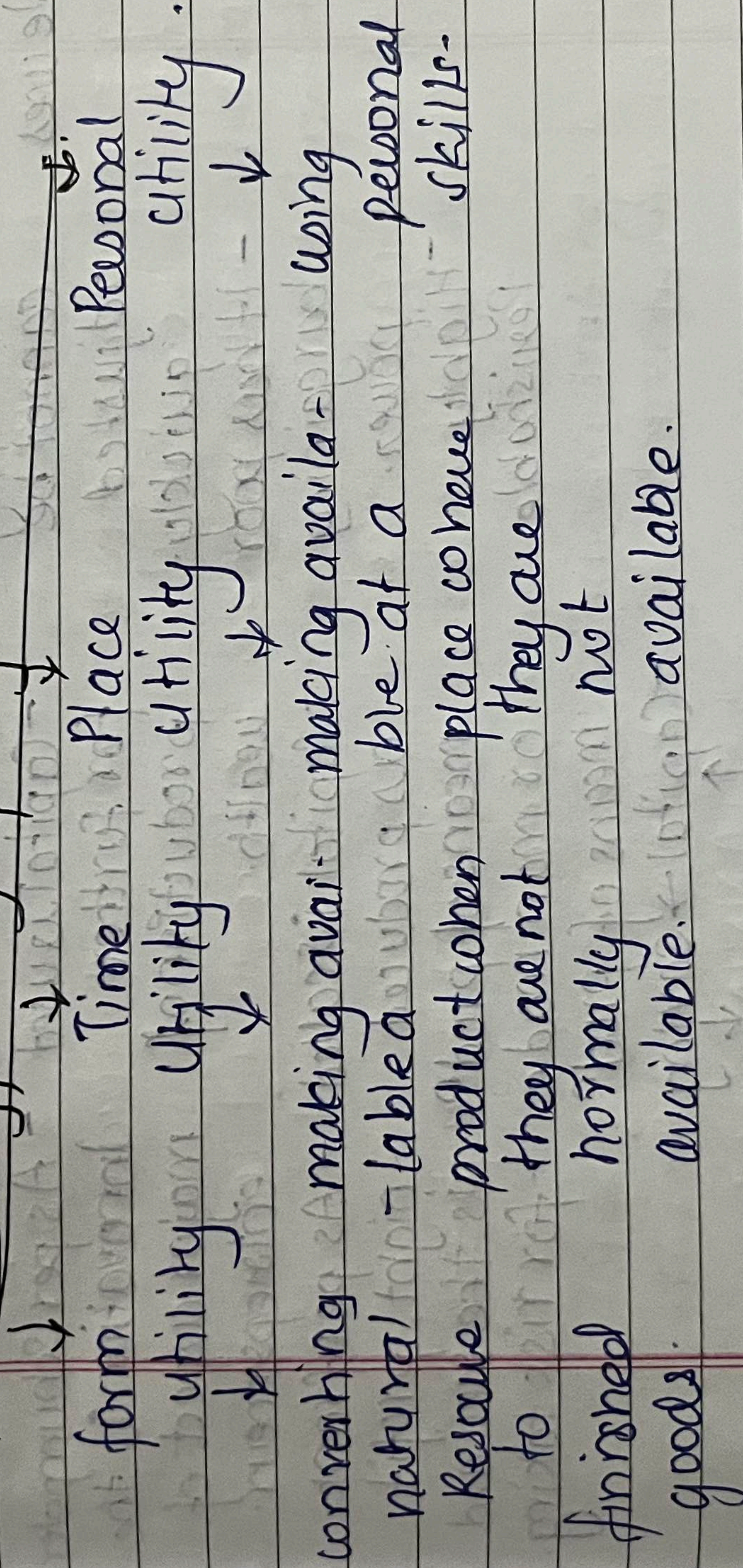
4.) It helps in policy making

THEORY OF PRODUCTION AND COST!

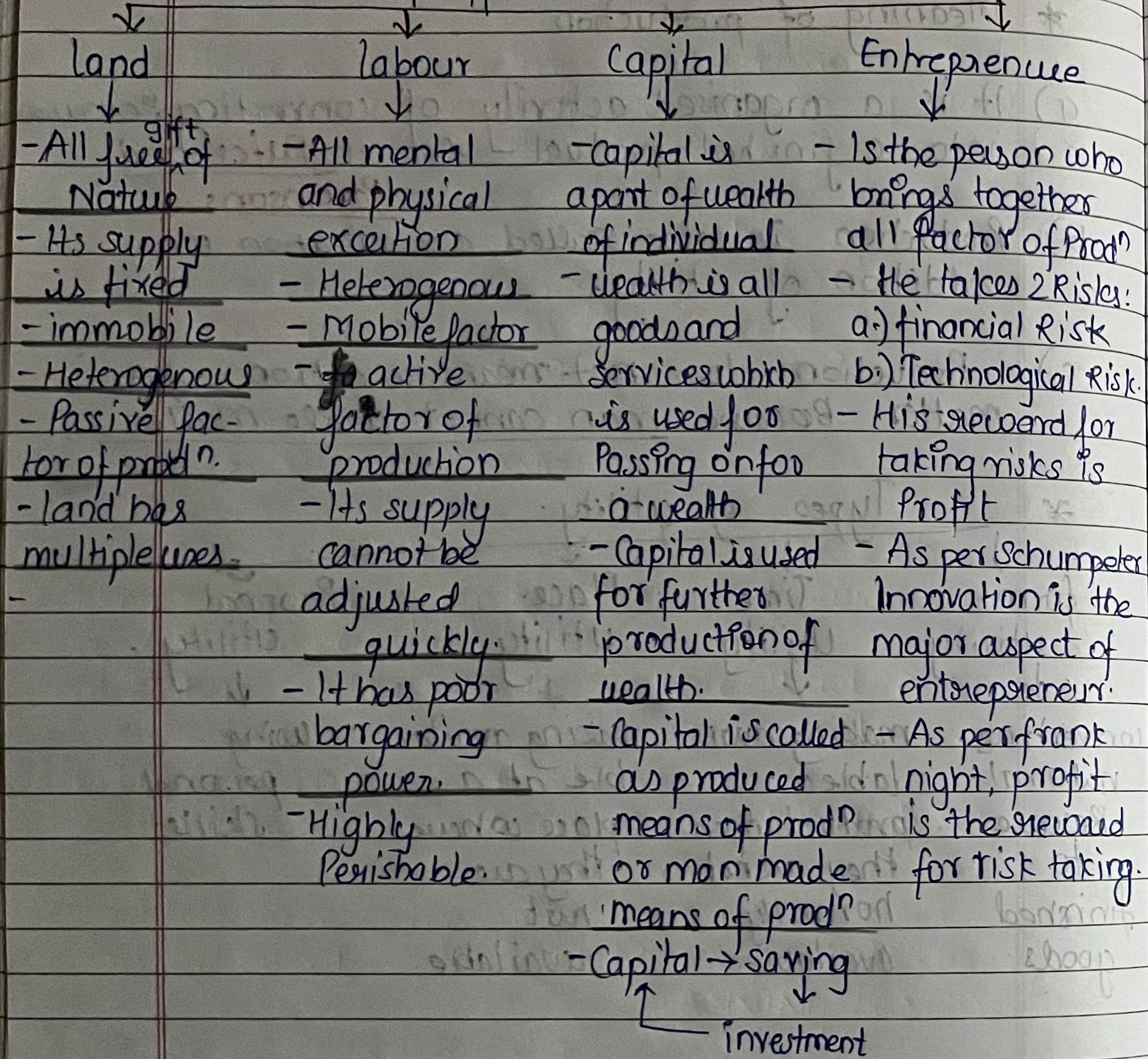
* Meaning of production.

- a) It is a organised activity of converting Resources into a finished product - Acc. to Bates and Parkinsons
- b) Production is also called as creation or addition of utility.
- c) Production does not means creation of a matter. Because man cannot create matter.

* Types of utility.



factor of production



Teacher's Signature:.....

Objective of enterprise:

- 1) Organic objective: -
 - To survive in business
 - To stay in Business.

- 2) Economic objective: -
 - To generate profit
 - ↳ In accounts we consider only Explicit cost
 - ↳ In economics we consider both Explicit and Implicit cost
 - ↳ Explicit cost is also called as out of pocket cost.
 - ↳ Implicit cost is also called as opportunity cost.
 - ↳ Accounting profit will always be higher than economic profit.

- 3) Human objective: -
 - fair deal to employee.
 - Right to participate in Decision making.
 - Right to good work environment.

- 4) Social objective: -
 - To provide good quality goods.
 - To provide unadulterated goods
 - To create opportunity for employment.

- 5) National objective: -
 - Make goods of national priority.
 - Help the country to become self reliant.

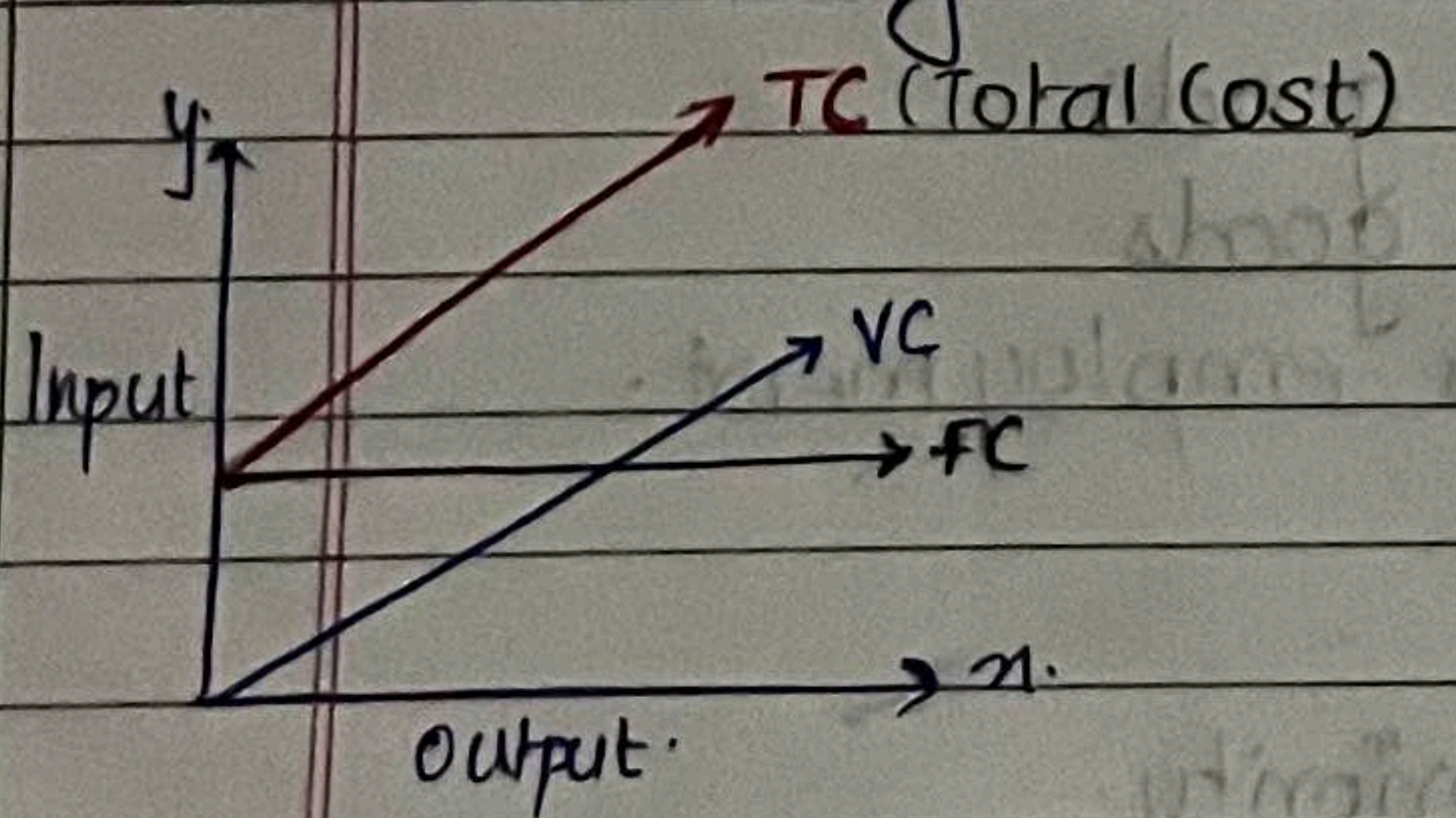
Teacher's Signature:.....

* Problems in achieving the objectives.

- 1) Problem in selecting the objective.
- 2) Problem in deciding size/location of plant.
- 3) Problem relating to finance
- 4) " " " marketing.
- 5) " " " availability of material
- 6) conflict in selecting objective.
- 7) Problem relating to Government policies.
- 8) Problem relating to legal issues.

* PRODUCTION FUNCTION:-

Short Run	Long Run.
1) Among two factors of production one will fixed i.e. Capital (K) and labour (L) will be variable.	1) All inputs are variable inputs.
2) Cost of fixed input → fixed cost Cost of variable input → Variable cost	2) Hence all cost in long run is variable cost
3) fixed cost do not change with level of output.	3) studied through Return to Scale.
4) Variable cost change with level of output.	4) It is also called as <u>PLANNING PERIOD.</u>
5) $TC = FC + VC$ $FC = TC - VC$ $VC = TC - FC$	5) In long run supply is <u>Relatively elastic.</u>
	6) In long run, price is more influenced by supply force than demand force because supply is relatively elastic.



- 6) At Output $TC \neq 0$ but $TC = FC$ but $VC = 0$.
- 7) Change in TC denote only Variable cost.
- 8) Hence TC curve is same as VC curve.
- 9) It is studied through law of variable proportion.
- 10) It is called as ACTUAL PRODUCTION PERIOD.
- 11) In short run supply is Relatively Pnelastic.
- 12) In short run, Price is more influenced by Demand force than Supply force because Supply is relatively inelastic.
- 13) In short run price is called SUB NORMAL PRICE.
- 14) Average cost curve is U-shaped.

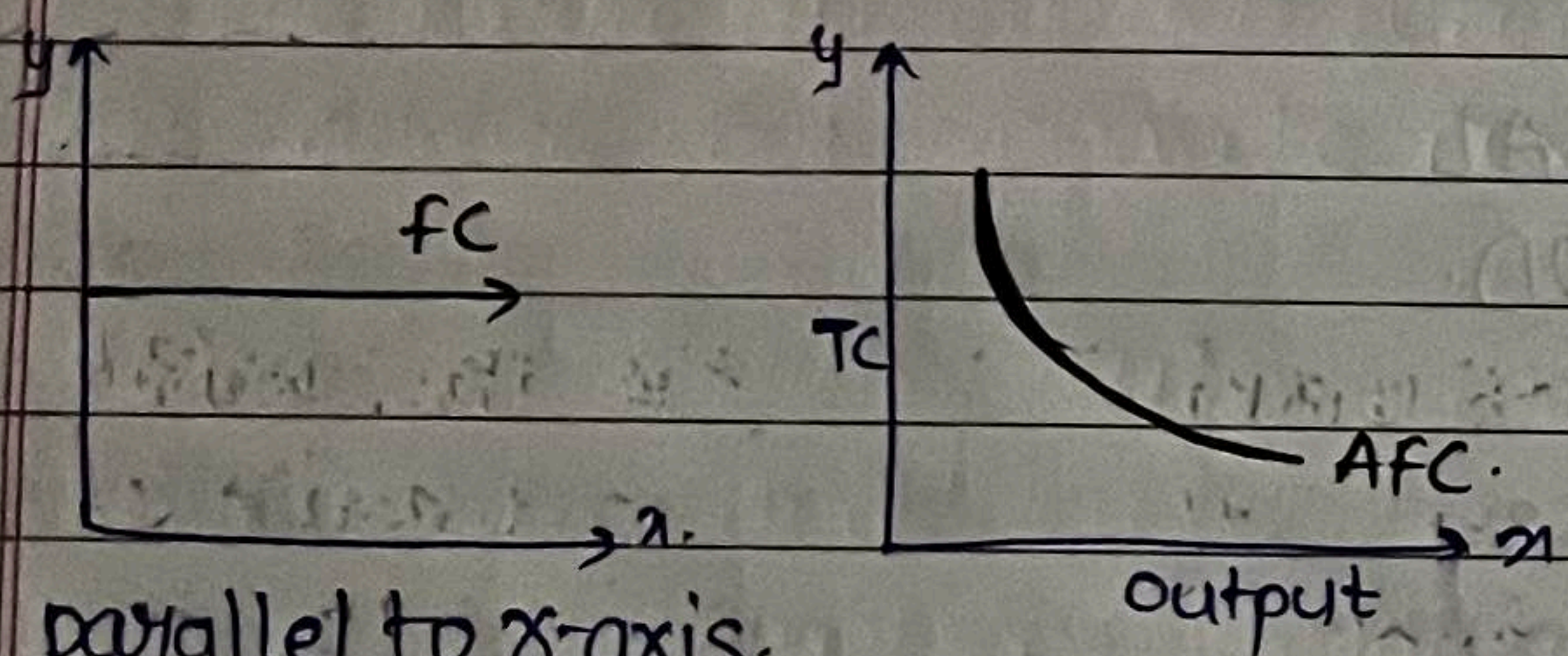
Teacher's Signature:

* CONCEPT OF AVERAGE FIXED COST.

Total cost = fixed Cost + Variable Cost.

OR $TC = FC + VC$

Units	FC	AFC	Total cost OR AFC = $\frac{FC}{\text{no. of units}}$
1.	10	10	(10/1)
2.	10	5	(10/2)
3.	10	3.33	(10/3)



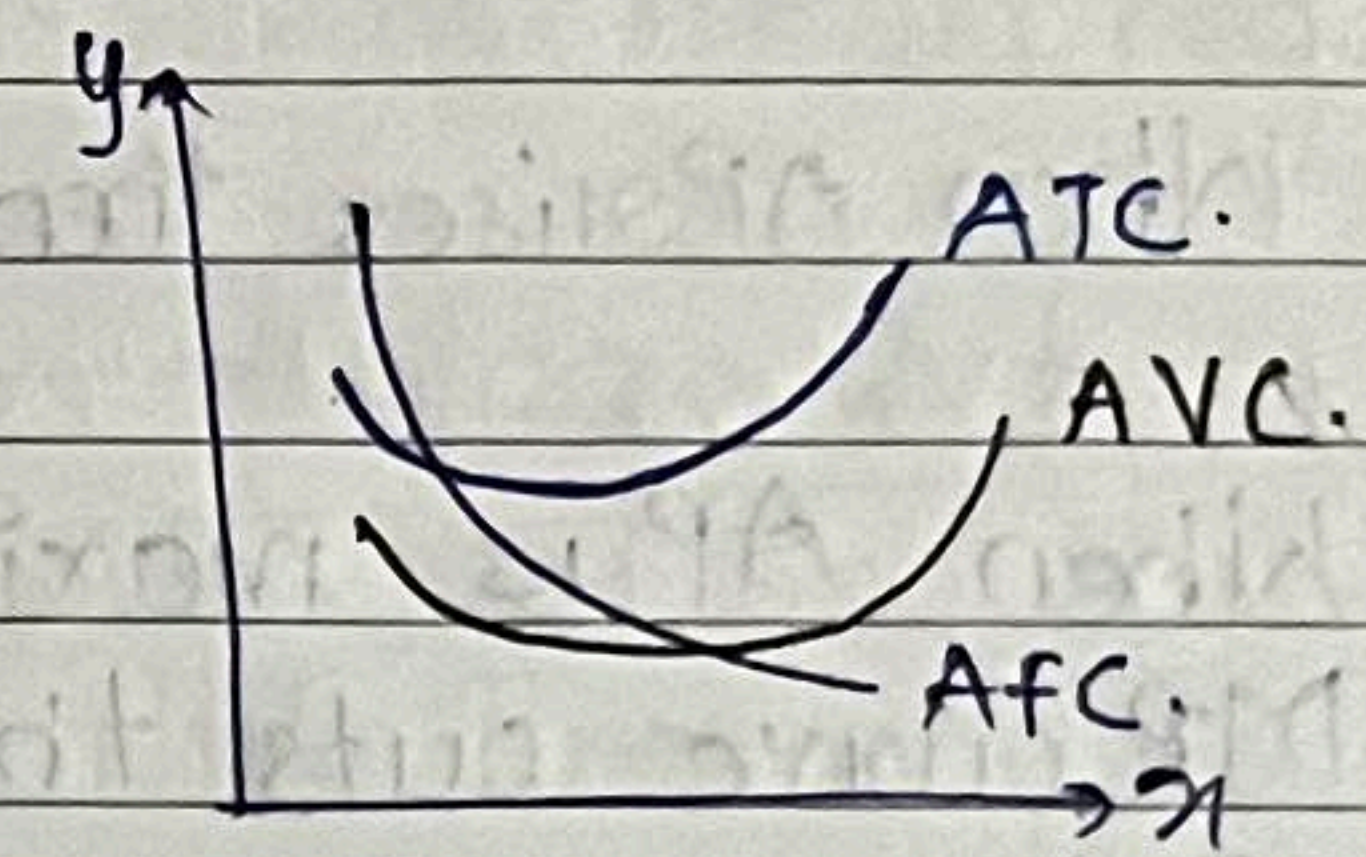
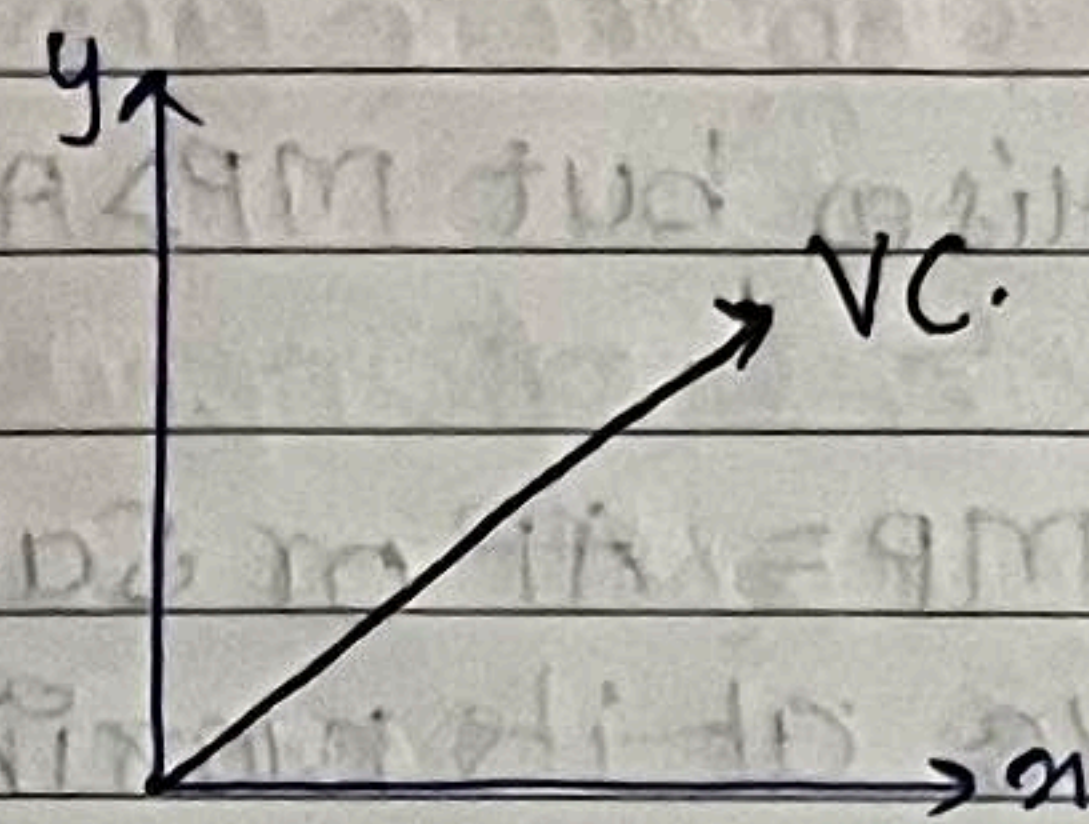
• parallel to x-axis.

- Downward sloping.
- It cannot touch n or y axis because:
 - Y-axis → Only FC cannot exist
 - X-axis → FC cannot be zero.

* CONCEPT OF VARIABLE COST.

$VC = TC - FC$

$AVC = \frac{VC}{\text{no. of units}}$



Units	VC	AVC
1	10	10 (10/1)
2	9	4.5 (9/2)
3	7	2.33 (7/3)
3	7	11.7 (33/3)

Cost has come down due to law of demand. Price ↓ Demand ↑.

At one point Price cannot go down.

At that point AVC again starts going up.

* LAW OF VARIABLE PROPORTION. →

To study short Run.

↳ Concept of MP/TP/AP.

MP → Marginal Product

→ output derived from one unit of input.

→ $TP_n - TP_{n-1}$

→ ΔTP . (Change in TP)

TP → Total Product

→ Total output derived.

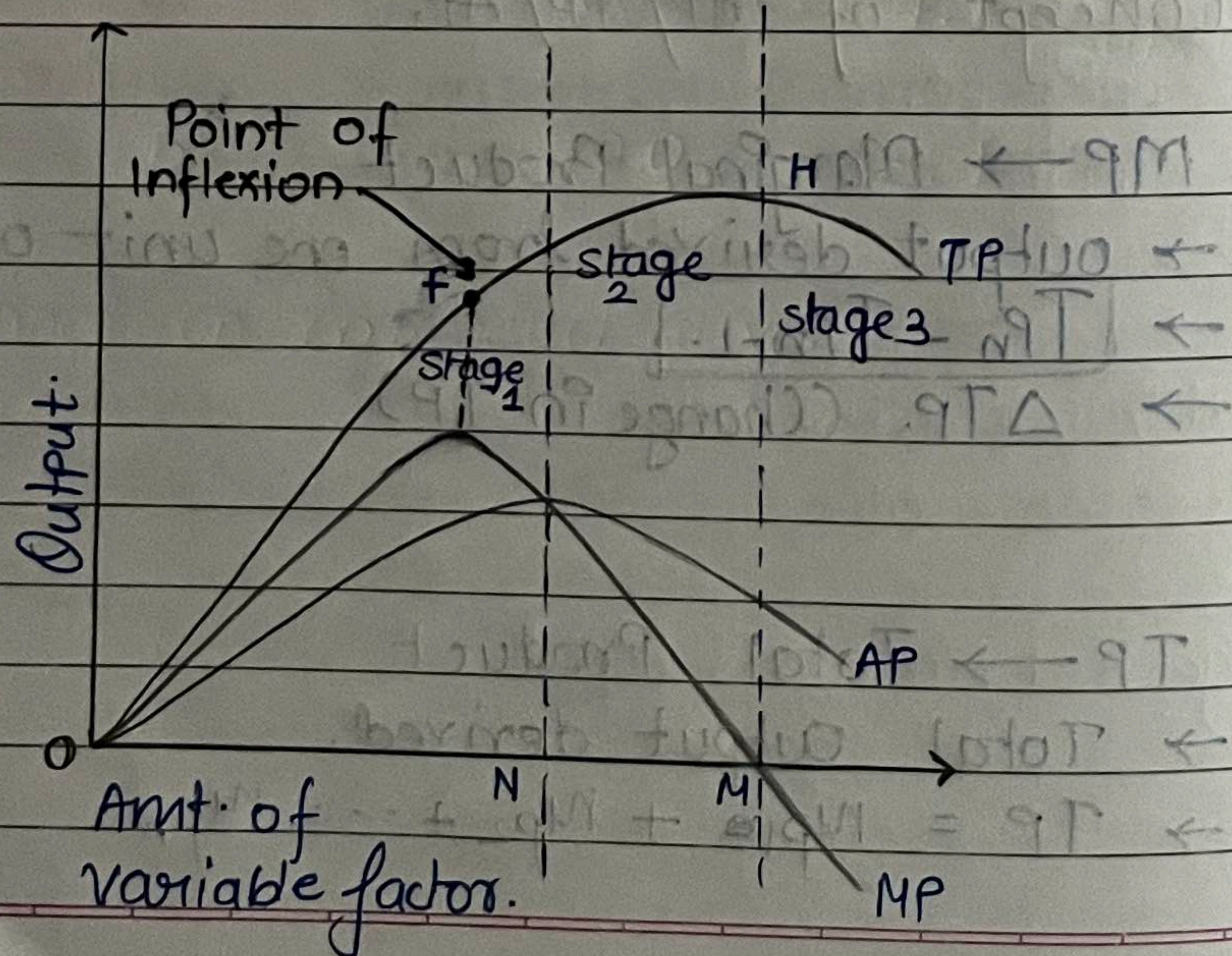
→ $TP = MP_1 + MP_2 + \dots + MP_n$

AP → Average Product
 → TP/No. of units. OR
 → $\frac{\sum MP}{\text{no. of units}}$

- * When AP rises then MP also rises but $MP > AP$
- * When AP is maximum then $MP = AP$ or say MP curve cuts the AP curve at its maximum point
- * When AP falls then MP also falls but $MP < AP$
- * There may be a situation when MP decreases and AP increases but opposite never happens.

Point at which MP is maximum that point on Total product curve is called Point of Inflexion.

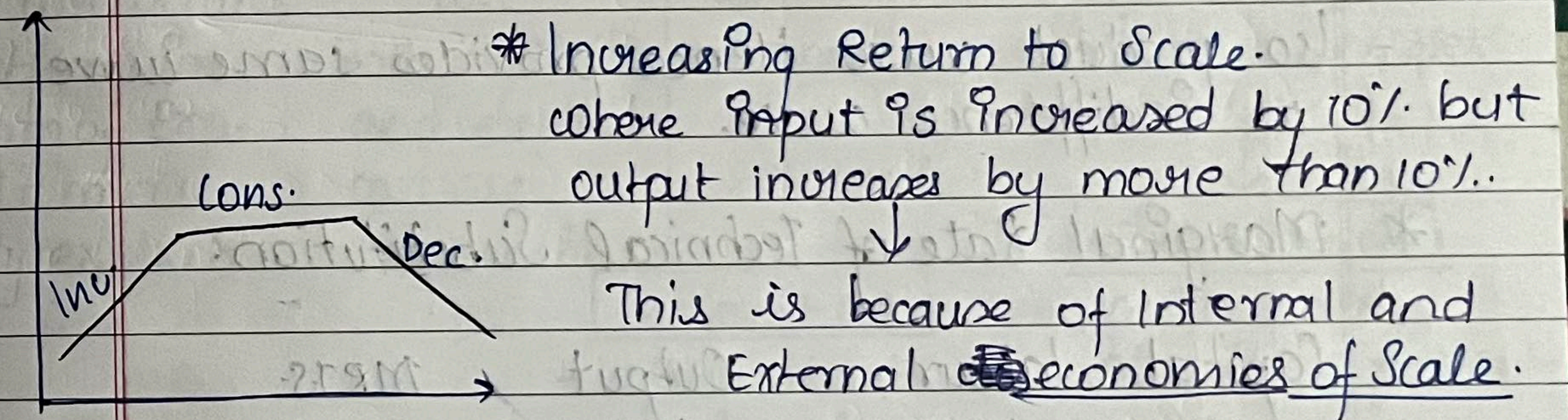
* LAW OF VARIABLE PROPORTIONS



- Stage 1/Increasing Returns. = MP cuts AP.
- Stage 2/Diminishing Returns = MP becomes zero.
- Stage 3/Negative Returns to Scale = MP is negative.

* Best stage to produce → Stage 2
 In stage 2, equilibrium will be achieved.

* LAW OF RETURN TO SCALE - To study long run.



* Constant Return to Scale.
 where input and output is equal proportion.
 Input inc by 10%.
 output inc by 10%.

Internal and External diseconomies are Neutralised.

* Diminishing Return to Scale.
 where ~~ex~~ input is increased but output is not increased in same proportion.
 Input inc by 10%.
 output inc by 5%.
 This is because of Internal and external diseconomies of production.

*** ISOQUANTS.**

- Also called as isoproduct curve
Equal product curve
Isoindifference curve
Production indifference curve

- It provides all the combinations of inputs which provide the same level of output.
- Hence producer is indifferent amongst the option.
- Iso product curve Hence provides same curve as indifference curve.

*** Marginal Rate of Technical Substitution.**

Capital	labour	Output	MRTS
1	12	100	-
2	8	100	4:1
3	5	100	3:1

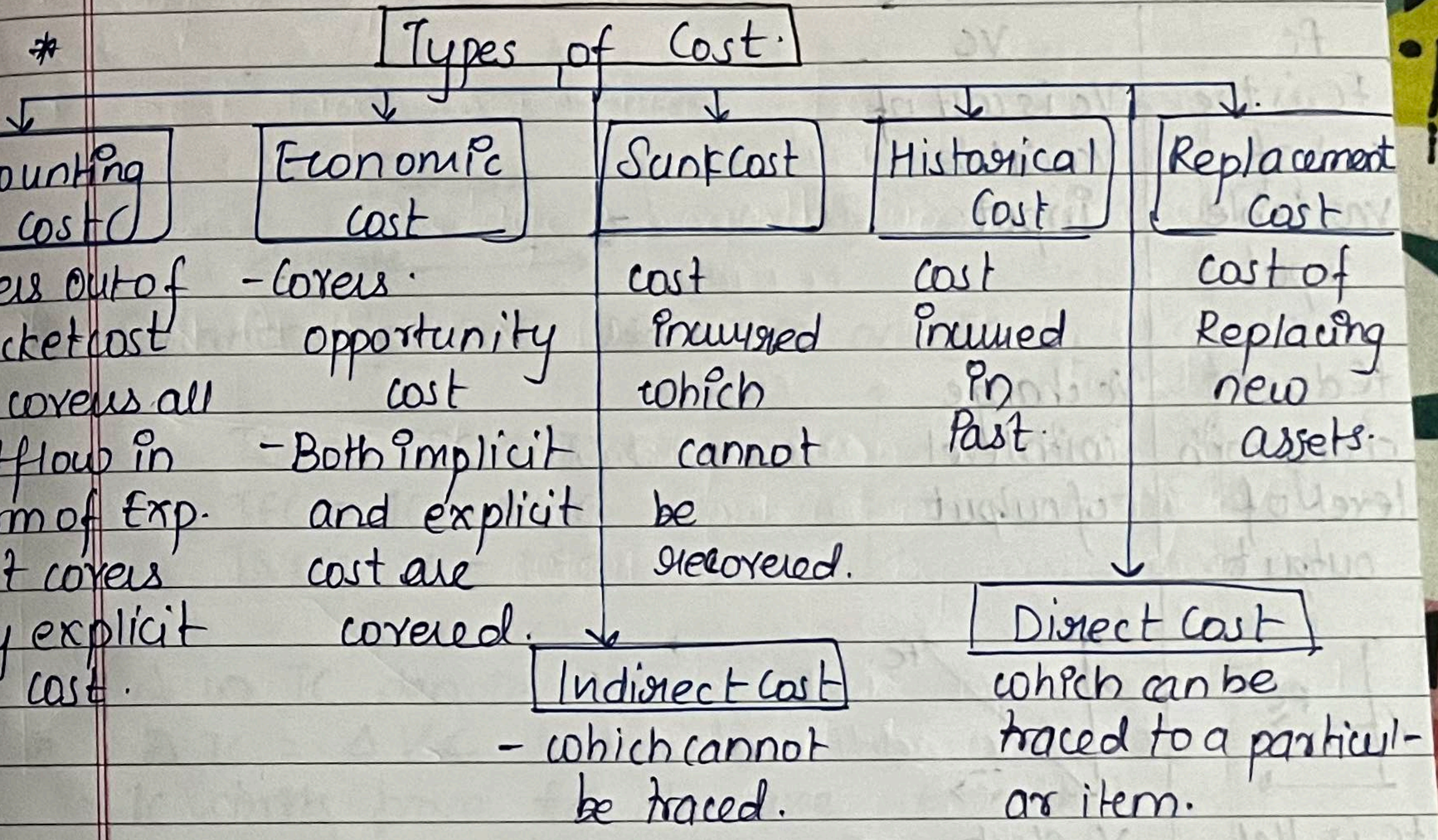
for 1 machine 4 labours are substituted.

- It is based on isoproduct curve.

UNIT-2.

THEORY OF COST

* In cost we are concerned with financial aspect of production.



*** Cost function**

- Cost is a function of input and output.
- $C = f(O, S, T, P)$
O - level of output
S - Size of firm
T_u - Time under consideration.
P - Price of factor of production.

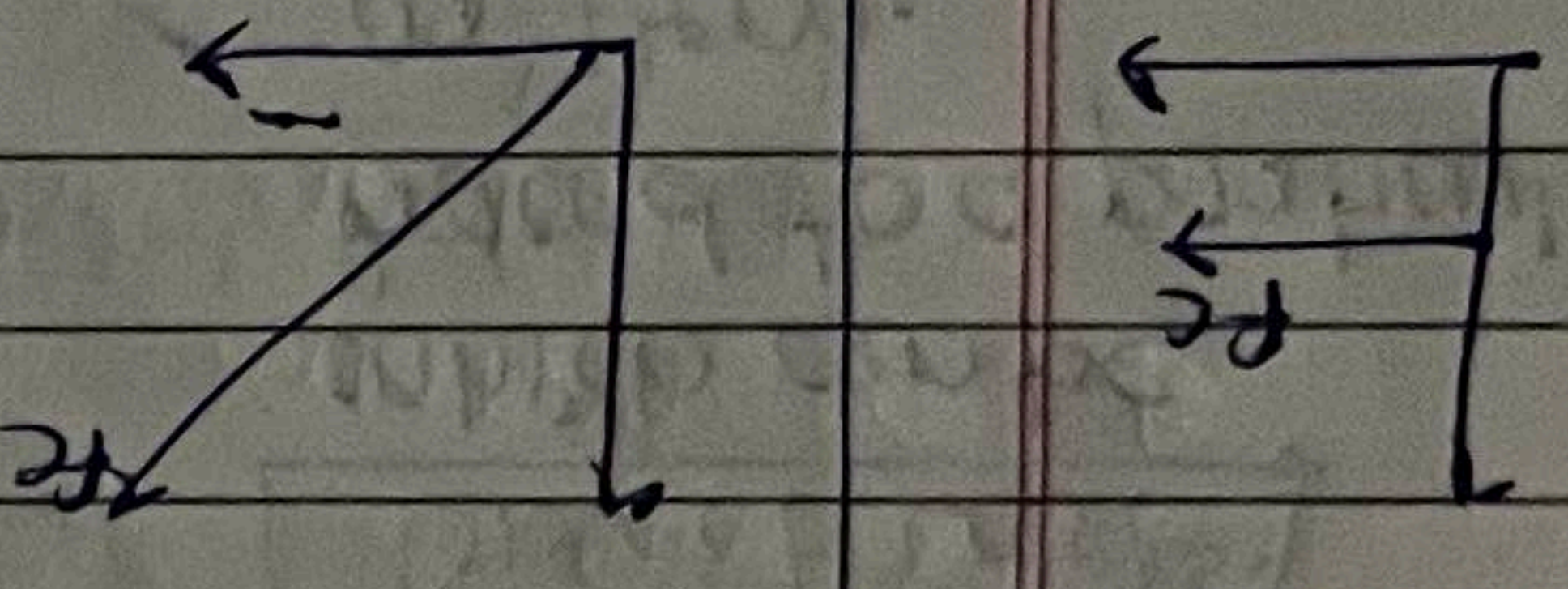
Cost
 In short Run
 In long Run.

Total cost = $TC = TFC + TVC$

FC is the cost of variable input.

FC do not change with level of output

FC is lie on x-axis from origin



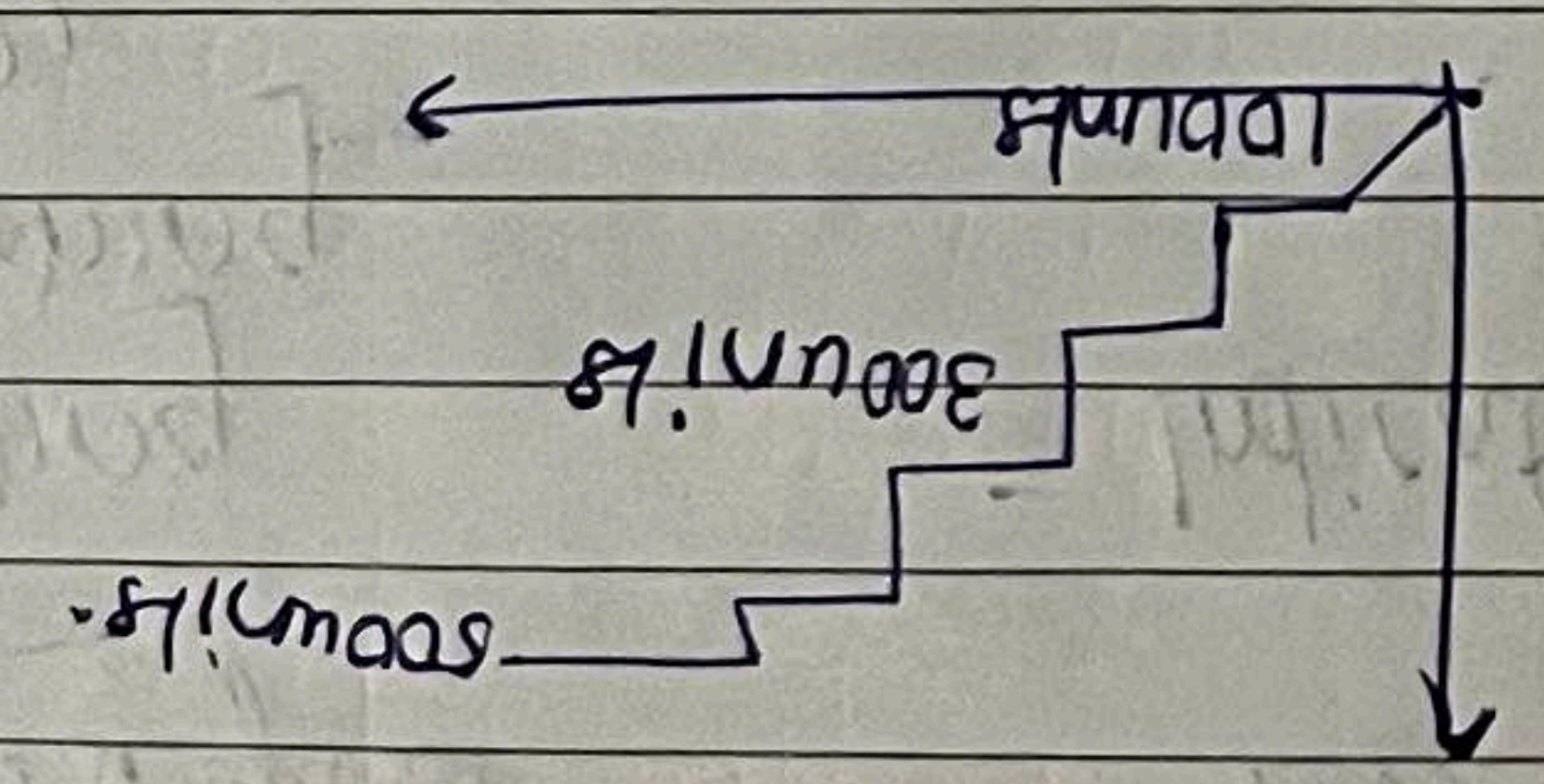
At 0 output $VC = 0$.

FC is independent of output

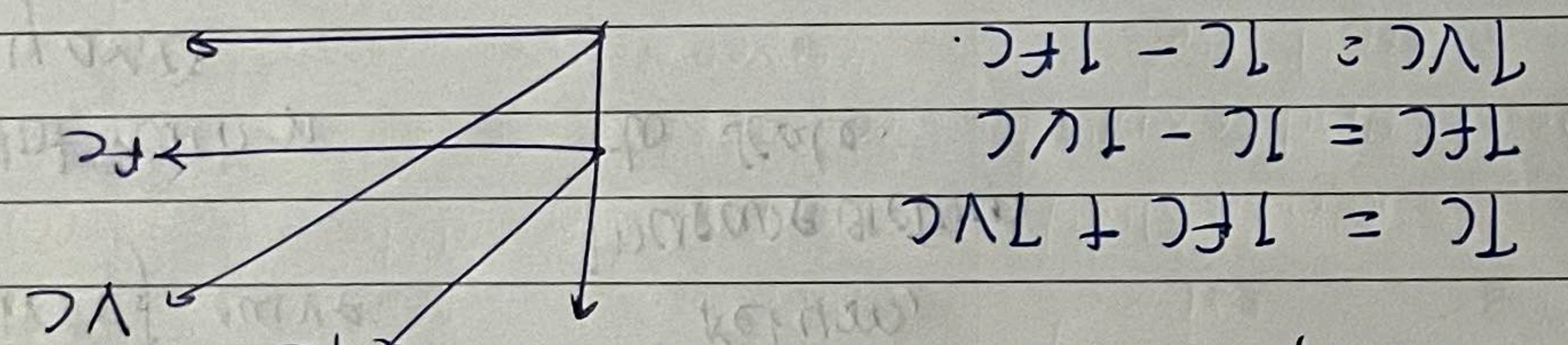
Ex-Rent, Interest, Taxes

Semi Variable cost.

- A variable cost which is not perfectly variable.
- Mixture of fixed and variable cost



Relationship betn TFC , TVC and TC .



Δ in TC denote VC

$\Delta TC = \Delta VC$

TC starts from FC because at output $VC \neq 0$, $TC = FC + VC$

* Average short curves.

Average fixed cost

Average Variable cost

Average total cost.

Total FC
 no. of units

Total VC
 no. of units

Total cost
 no. of units

$TFC = TC - TVC$
 OR
 no. of units

$TVC = TC - TFC$
 OR
 no. of units

$TC = TFC + TVC$
 OR
 no. of units

$AFC = ATC - AVC$

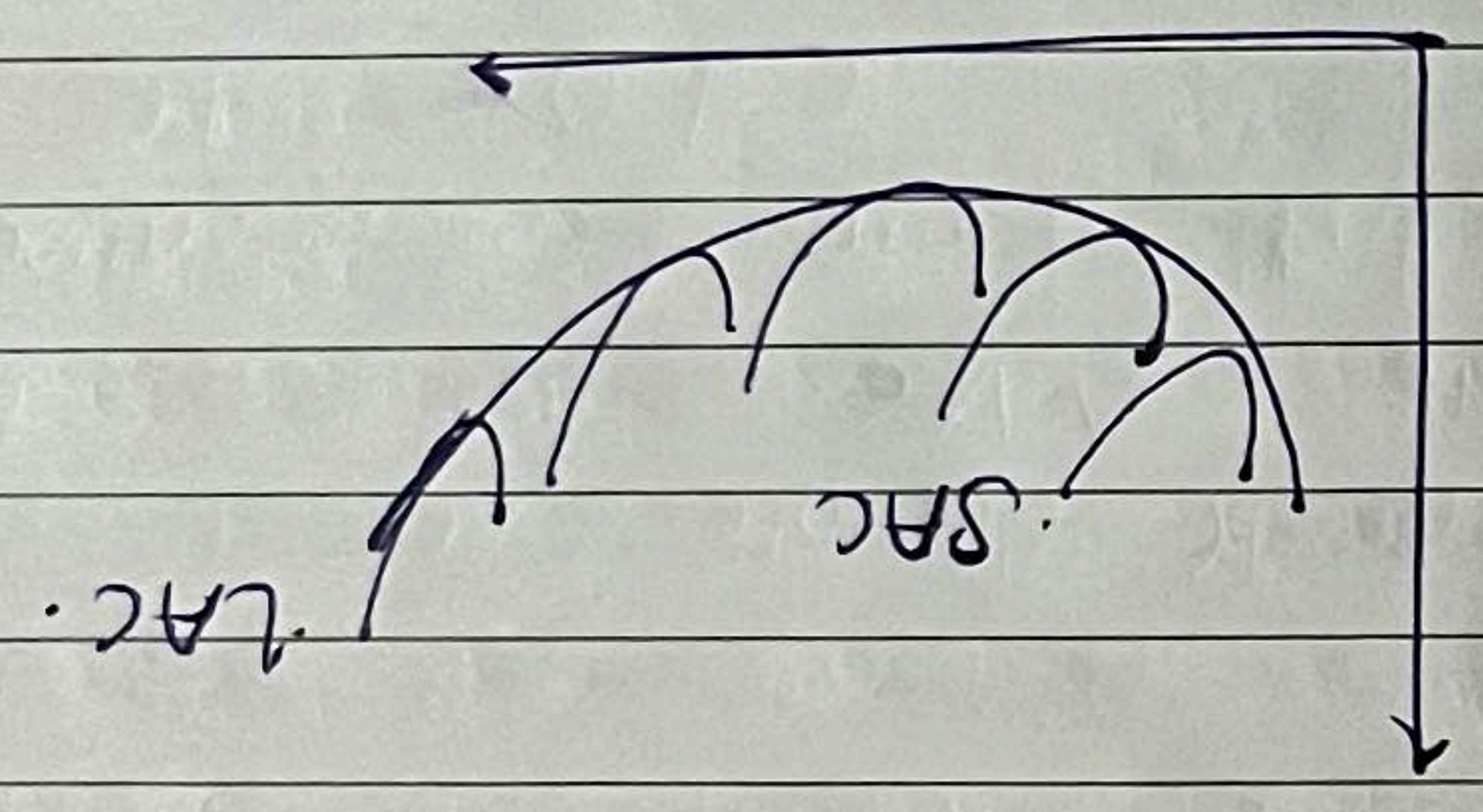
$AVC = ATC - AFC$

$ATC = AFC + AVC$

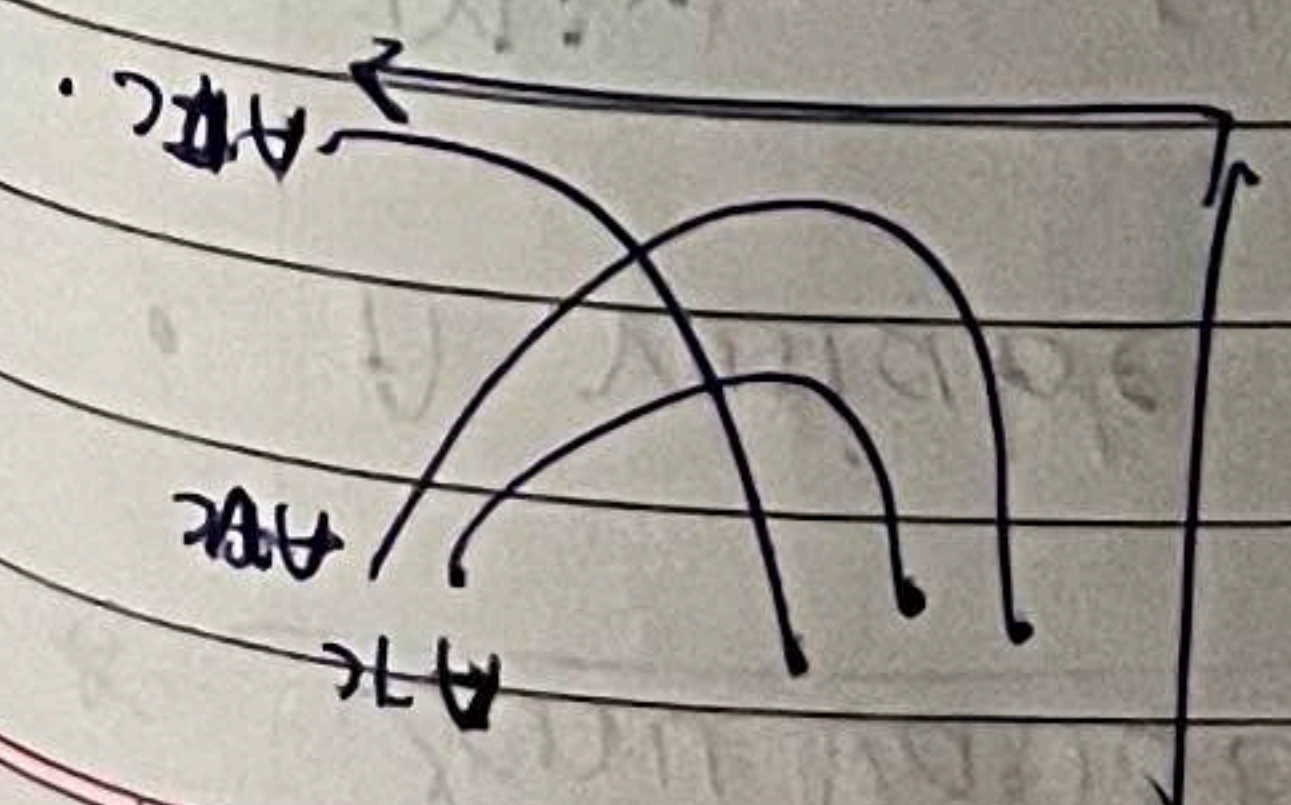
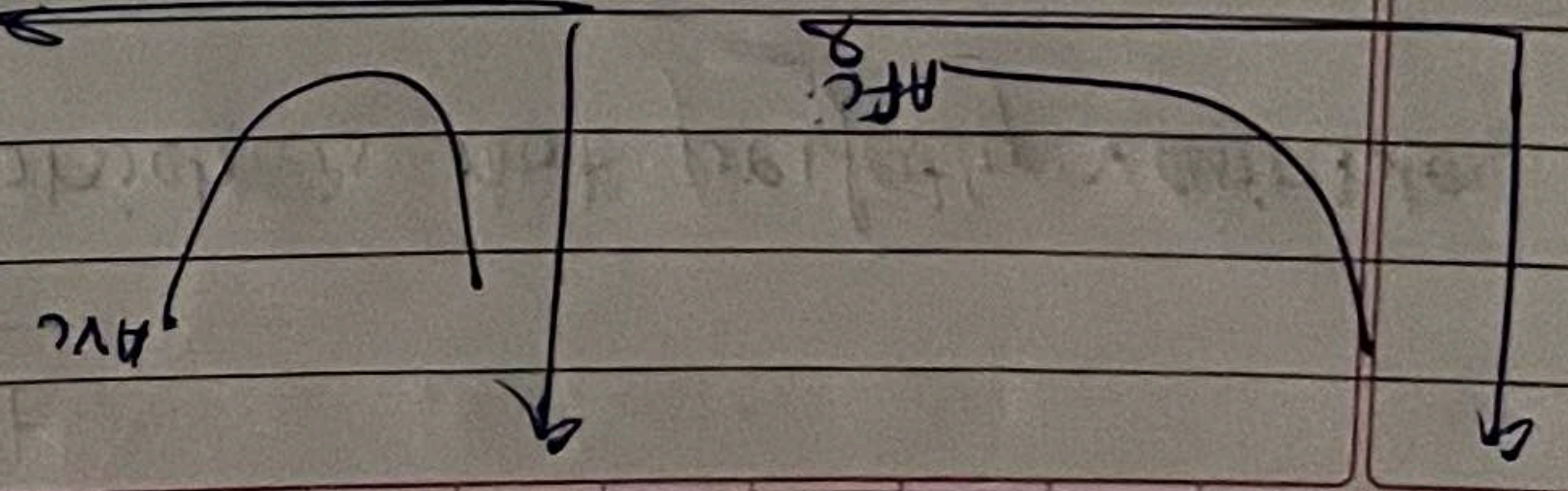
lec - 30 (MCQs)
 to be reviewed once done (MCQs)
 MCQs (chart)
 MCQs (chart)

- MC curve is U-shaped. due to operation of law of returns.
 MC curve passes through the minimum of ATC & AVC

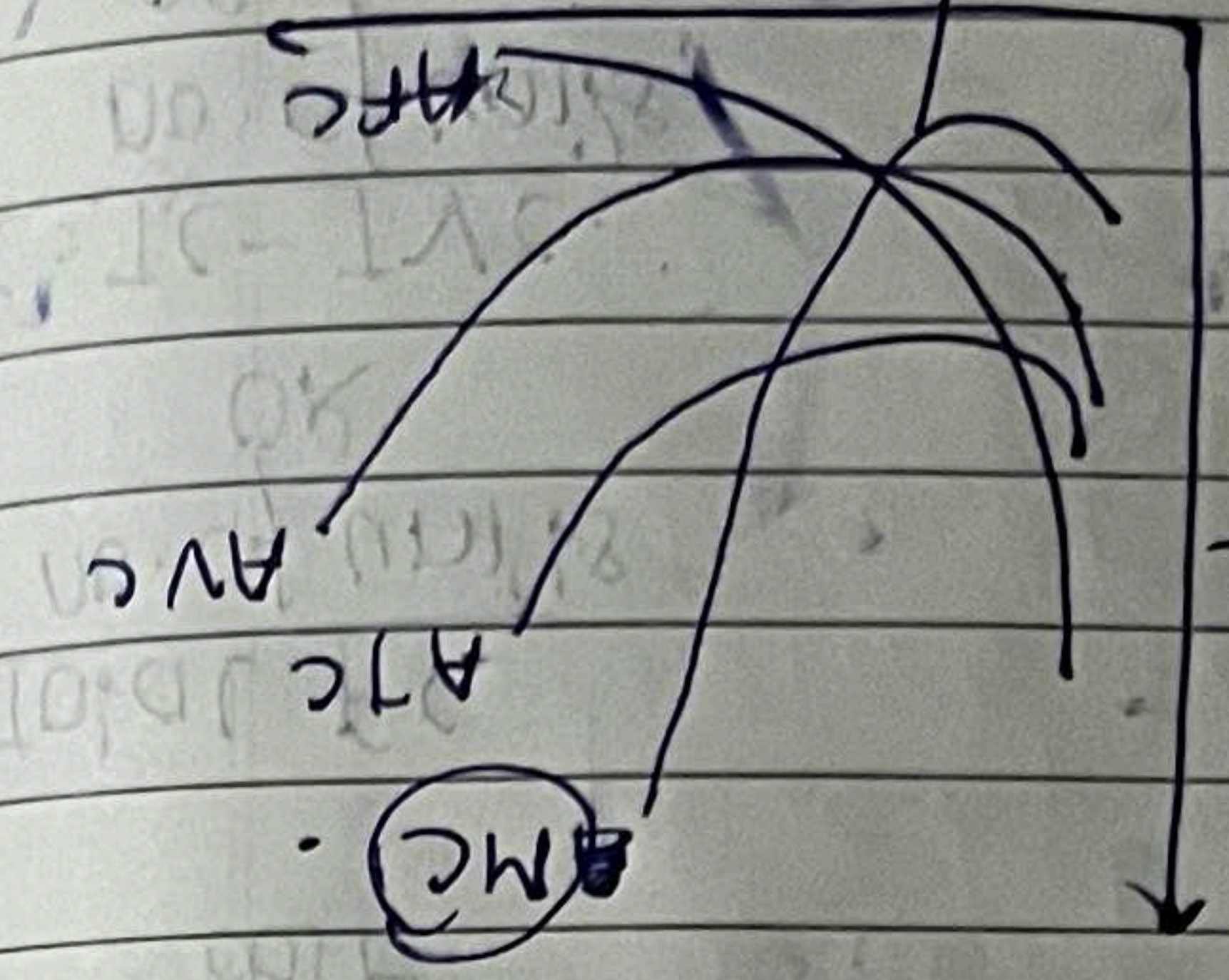
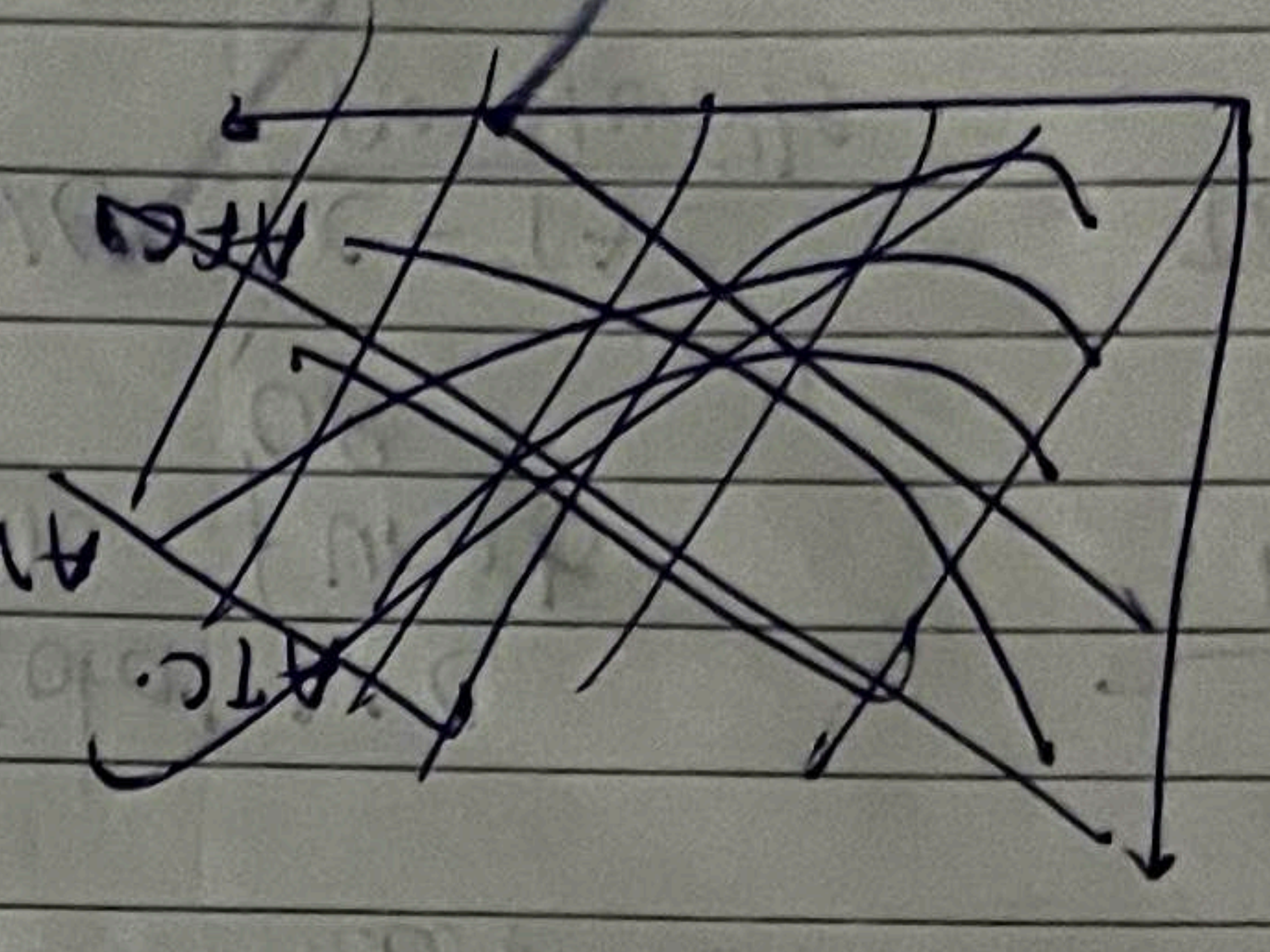
* Long Run Average cost curve.
 - In long run, all cost is variable cost
 - In long run, firm can change all the inputs and plants
 - It covers various short run curves
 - MC is tangent to all LACs



- It is also called as planning curve
 - It is also called as envelope curve.



- (Curve is showing Rectangular Hyperbola curve. - Indicating diminishing returns, towards right diagonals over the constant length of curve. - Not touch n or y axis because $FC \neq 0$ * MARGINAL COST. - cost of an additional unit $MC = \frac{\Delta TC}{\Delta Q}$ - MC denotes change in total cost - MC is of the nature of variable cost - Chart



Much more U-shaped curve.

MEANING AND TYPE OF MARKET.

(Avg marks) → (10-12)

3- Units :- 1) Market

2) Price

3) Diff price in diff market.

* UNIT 1:- MARKET

* Meaning of Market.

- A place where buyer and seller shice bargain

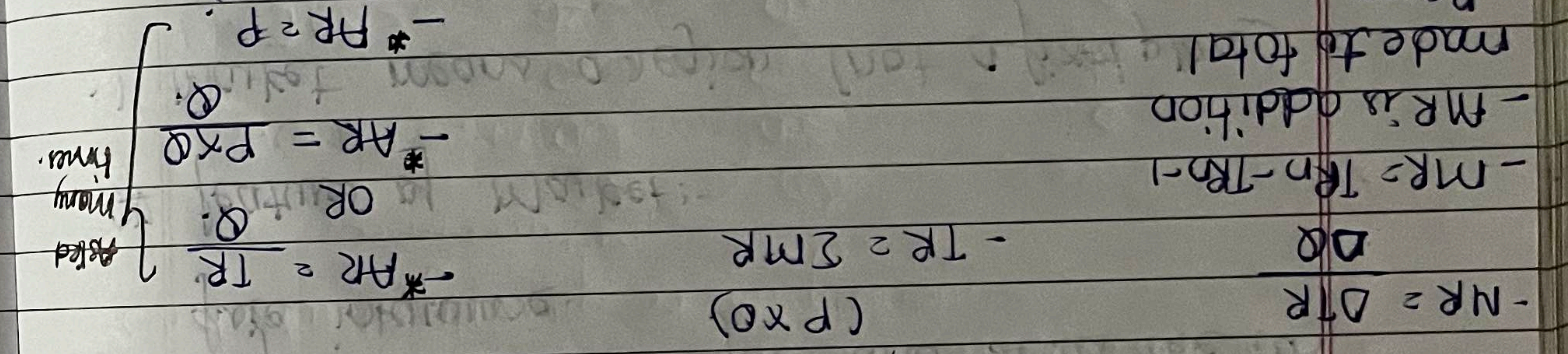
- In Eco, Market does not mean a fixed place it means market of a commodity → As per Chapman.

- As per Cournot :- Market is not any particular place in which things are bought or sold, but the whole region in which buyer and seller are in free intercourse.

* Features of Market :-

- 1 Market means a region (not a fixed place)
- 2 There must be Buyer and seller
- 3 " " Existence of commodity/ service
- 4 All must be know about market condition
- 5 There should be one price for a given commodity

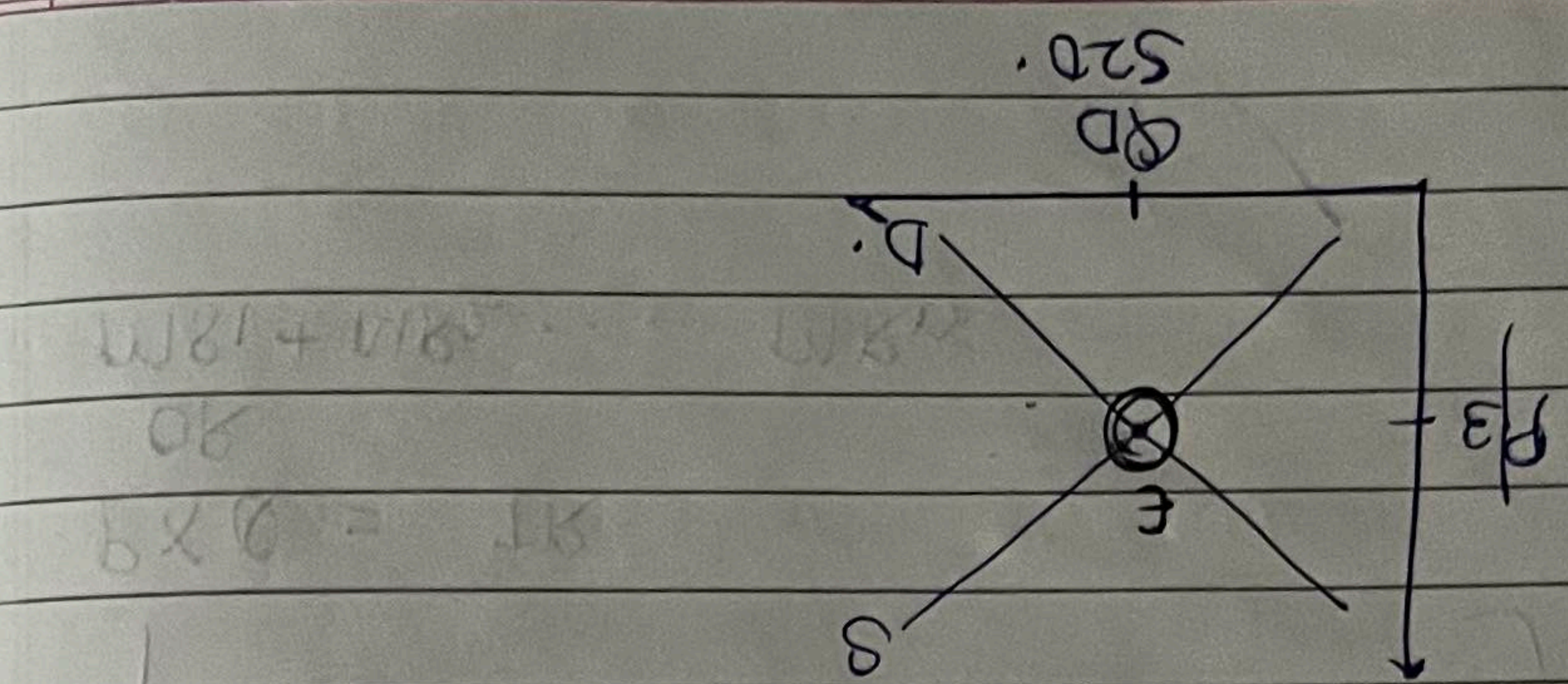
Product	MR	TR	AR
1	10	10	10
2	8	18	9
3	6	24	8
4	4	28	7
5	2	30	6
6	0	30	5
7	-2	28	4
8	-4	24	3



* MR decline, AR also declines but $AR > MR$.
 * MR line cut AR curve from below.
 * $MR = 0$ at maximum TR.
 * $MR < 0$ after maximum TR.

Classification of Market on the basis of:
 On the basis of geographical area:
 1. Very short
 2. Short
 3. Long
 4. Very long
 1. Local
 2. Regional
 3. National
 4. International
 *
 Marginal Revenue: Total Revenue.
 1. is change in total Revenue resulting from sale of an additional unit.
 $TR = Price \times Quant$
 $MR = TR_n - TR_{n-1}$
 $TR = MR + MR_2 + \dots + MR_n$
 per unit of output AR curves also firms demand curve.
 $AR = \frac{TR}{Q}$ OR $AR = \frac{P \times Q}{Q}$
 $AR = P$
 * $AR = P$
 * $AR = \frac{P}{2}$

* MR is negatively slope (can be (+) (0 or (-))
 If $MR = 0$ then $TR = \max$
 If $MR > 0$, AR is above MR
 If $MR < 0$, AR goes down faster than MR .
 (Chuki MR et quantity denote kanta, AR et se jiyada)
 $MR = \frac{TR_n - TR_{n-1}}{Q_n - Q_{n-1}}$
 * AR is negatively slope. AR can't be negative.
 " is always positive
 AR line cut MR line from above.
 If MR decline, AR also decline but AR is above MR .
 If MR is declining, MR is also declining but not at the same rate.
 $TR = AR \times Q$
 * TR is positively sloped
 TR is max when $MR = 0$
 If MR is -ve TR starts declining / falling.
 $P \times Q = TR$
 OR
 $MR_1 + MR_2 + \dots + MR_n$



eg: Price

3	520	520	EQ + EP
4	580	630	Q. Demand
5	700	700	At higher price, lower Q. Demand

At lower price, higher Q. Demand

* BEHAVIOURAL PRINCIPLE OF PRICE.

1) If TR is less than or equal to VC then firm should not produce

2) firm should produce only upto a level where $MR = MC$ or $MR > MC$.

1. Demand \uparrow Supply = Price \uparrow
2. Demand \downarrow Supply \uparrow = Price \downarrow
3. Demand constant, Supply constant = Price - no impact / less impact

Price is determined through interaction of Demand and Supply. The price at which $QD = QS$ and supply price is the quantity at which $QD = QS$.

* Equilibrium is the price at which $QD = QS$

* " quantity is the quantity at which $QD = QS$.

* Shift in Demand Curve

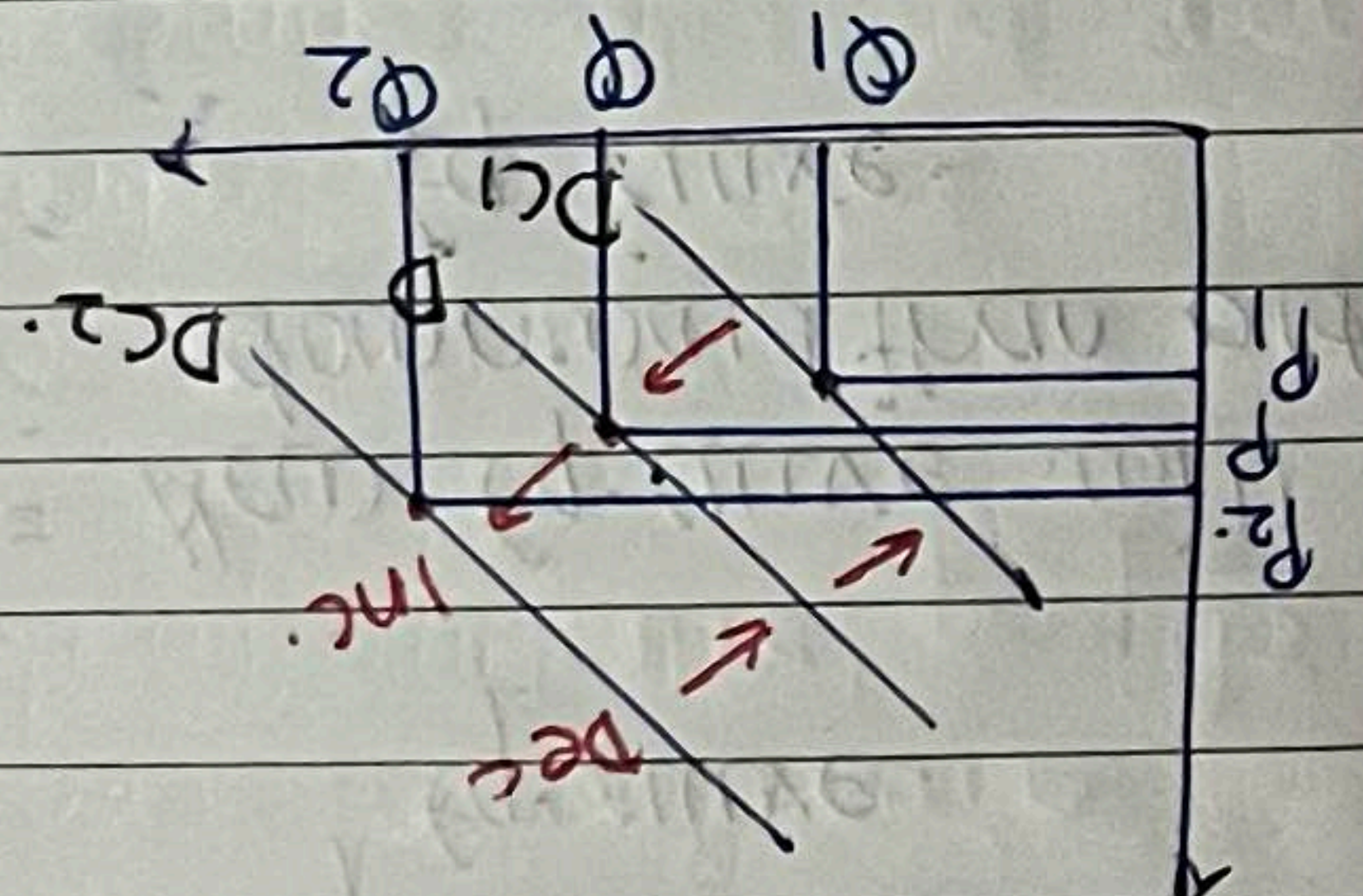
When any factor change other than price eg:- Technology, Raw material, more up or down.

Price \downarrow Supply \uparrow

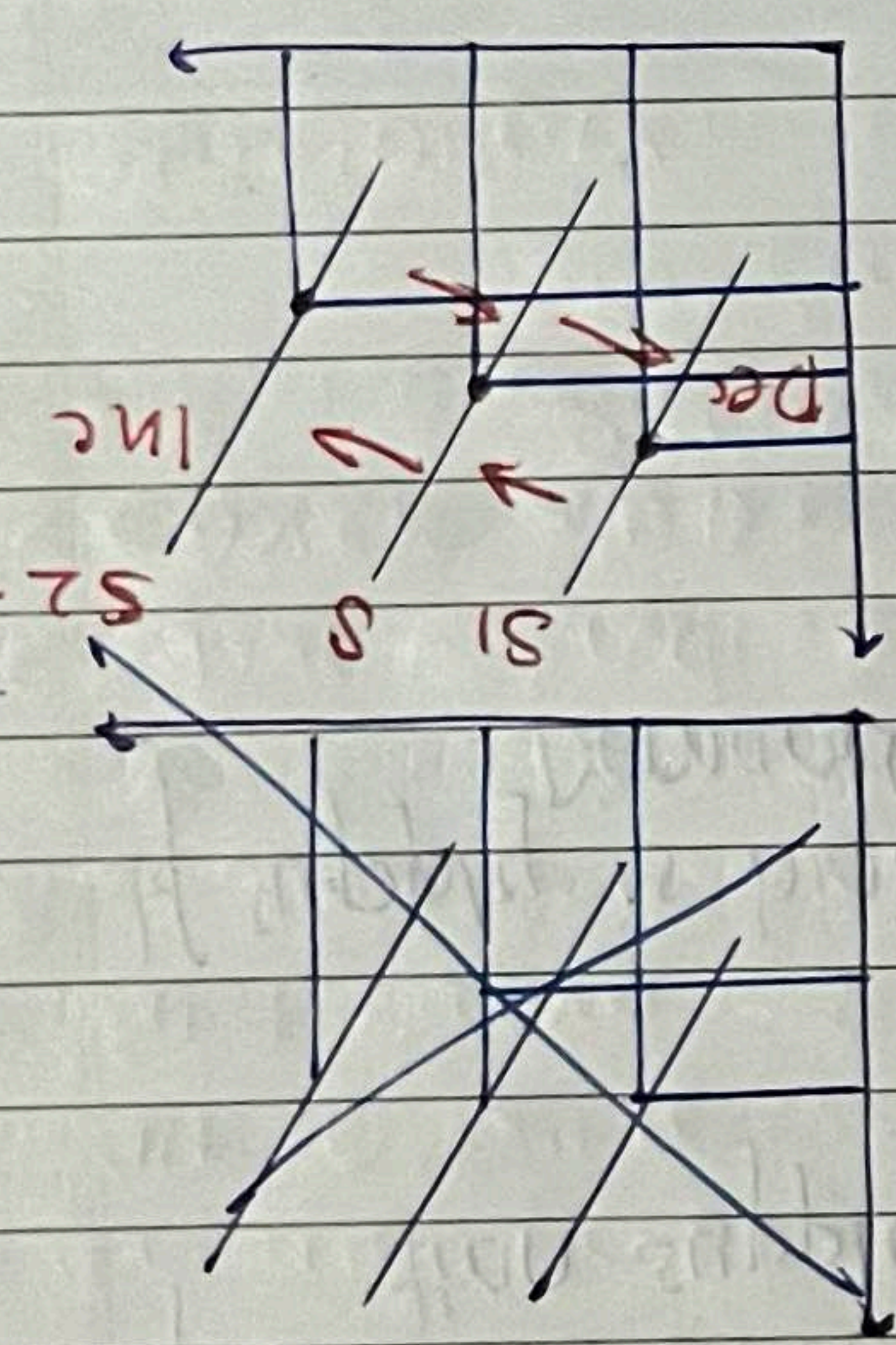
In both case, eq price and equilibrium quantity also change

If Demand \uparrow Inc $\rightarrow DC$ shift right

If Demand \downarrow Dec $\rightarrow DC$ shift left.



If there is a shift in Demand eg Price and quantity also shifts to right (inc) or left (dec) \therefore Equilibrium also shift



Supply curve will move and new equl will be formed.

Supply Inc \rightarrow new eq quantity will come down.

Supply Dec \rightarrow new eq quantity will go up.

* Effect on price in case of simultaneous change in Demand & supply.

In case of product whose demand and supply is changing continuously, the equilibrium is also changing continuously.

① If Demand and supply move = New eq. curve will form upwards

② If Demand curve is higher = New eq. curve will move upwards than earlier

③ If supply is higher than = New eq. curve will move downwards than old Demand

Eq. curve.

Teacher's Signature:

UNIT - 3

Price Determination in various markets.

Perfect competition, Monopoly, Oligopoly

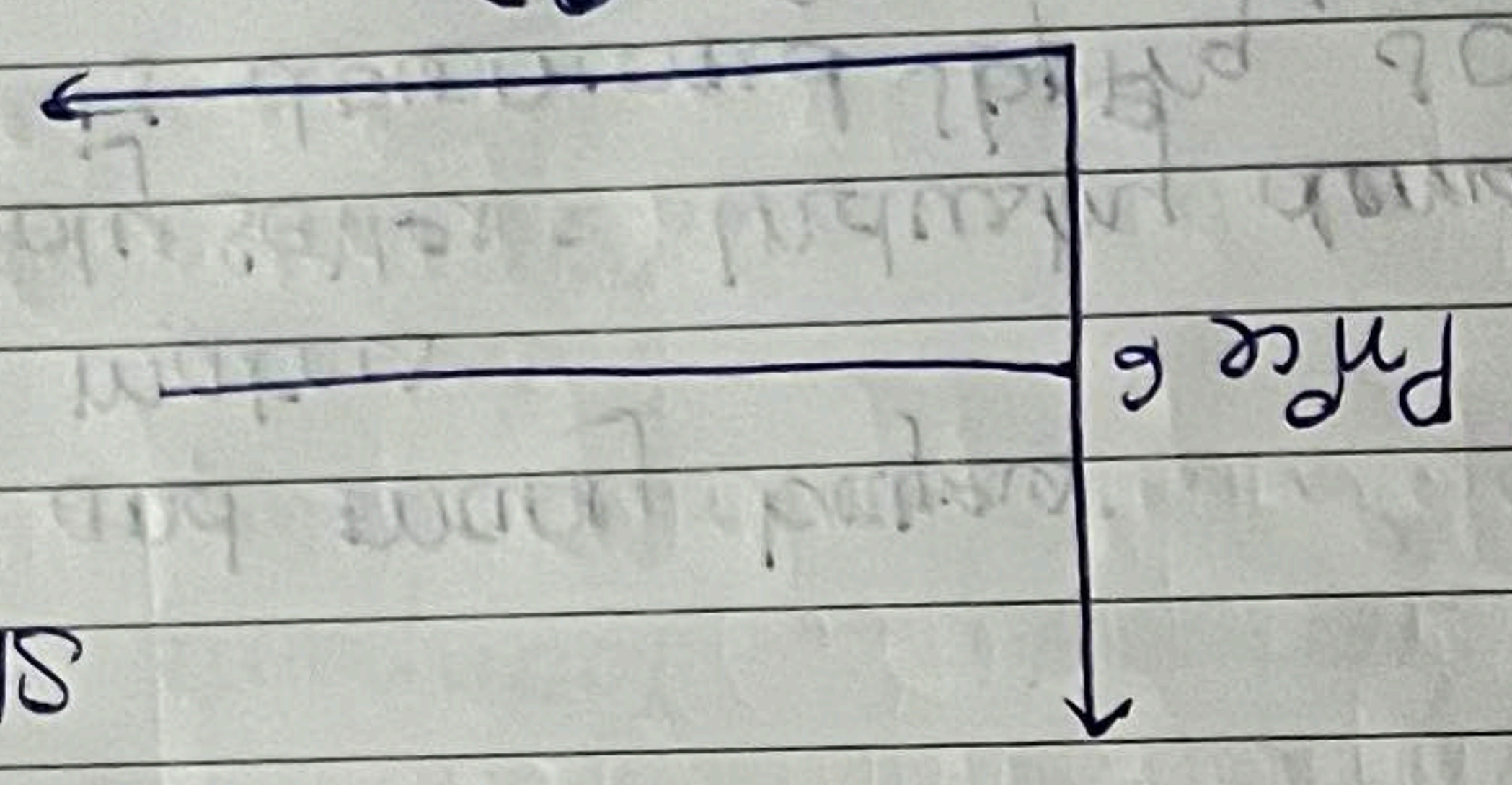
* PERFECT COMPETITION.

1) Under perfect competition, the firm is price taker and industry is price maker

2) Price is determined by interaction of Demand and Supply

3) Eq. price is price at which $QD = QS$. Eq. quantity is quantity at which $QD = QS$.

4) Since price cannot be increased or decreased the Demand curve should be parallel straight line to X-axis



Showing AR at any product sold.

5) here $MR = AR$ on any additional unit sold

6) 2 conditions for Equilibrium.

- 1st order condition - $MR = MC$

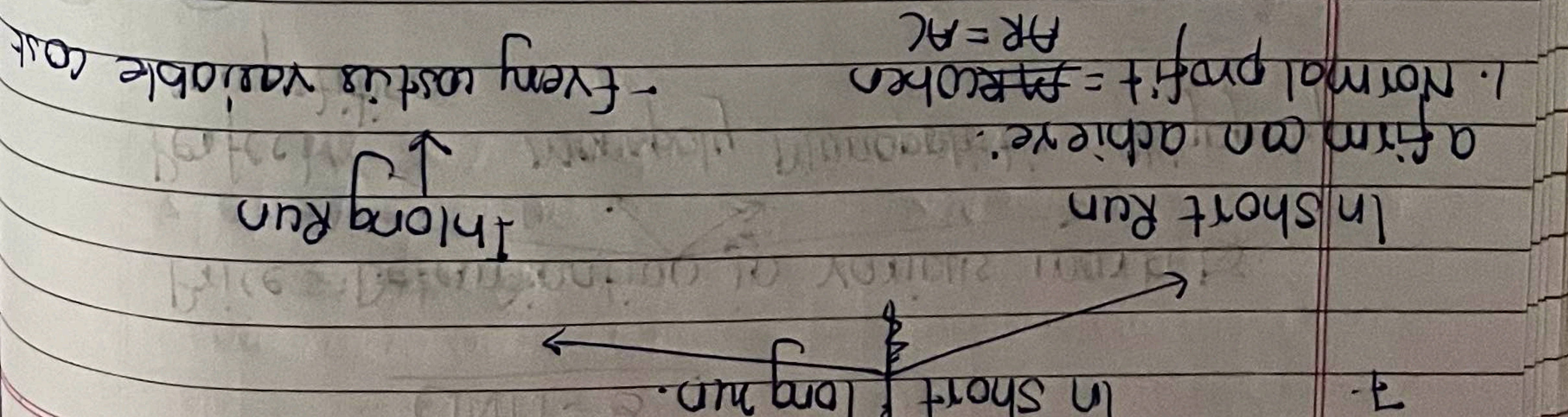
- 2nd order - MC line should cut the MR line from below.

Teacher's Signature:

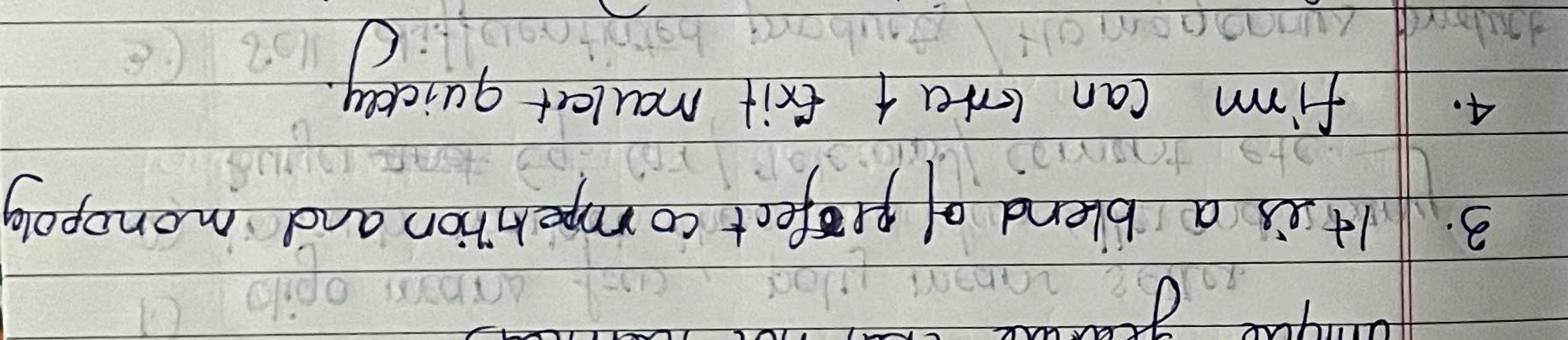
- 1) Only one seller and many buyers. They are price makers.
- 2) DC of monopoly is downward sloping, so order to increase sales, price must go down.
- 3) Price, DC is downward Both AR and MR is also downward, but AR is higher than MR and AR will be positive, but not touch x axis. * AR can be positive / Negative

* MONOPOLY
 AR > AVC - Produce
 AR < AVC - stop production / shut down.

So to continue the product or stay in business, firm must cover its variable cost.
 ↓
 3. Loss = when $AR < AVC$
 2. Super profit = when $AR > AC$
 1. Normal profit = when $AR = AC$
 - Every cost is variable cost
 - Sincerity and exit from market is easy than many people will come and increase the supply.
 ∴ firm in long run can only earn normal profits

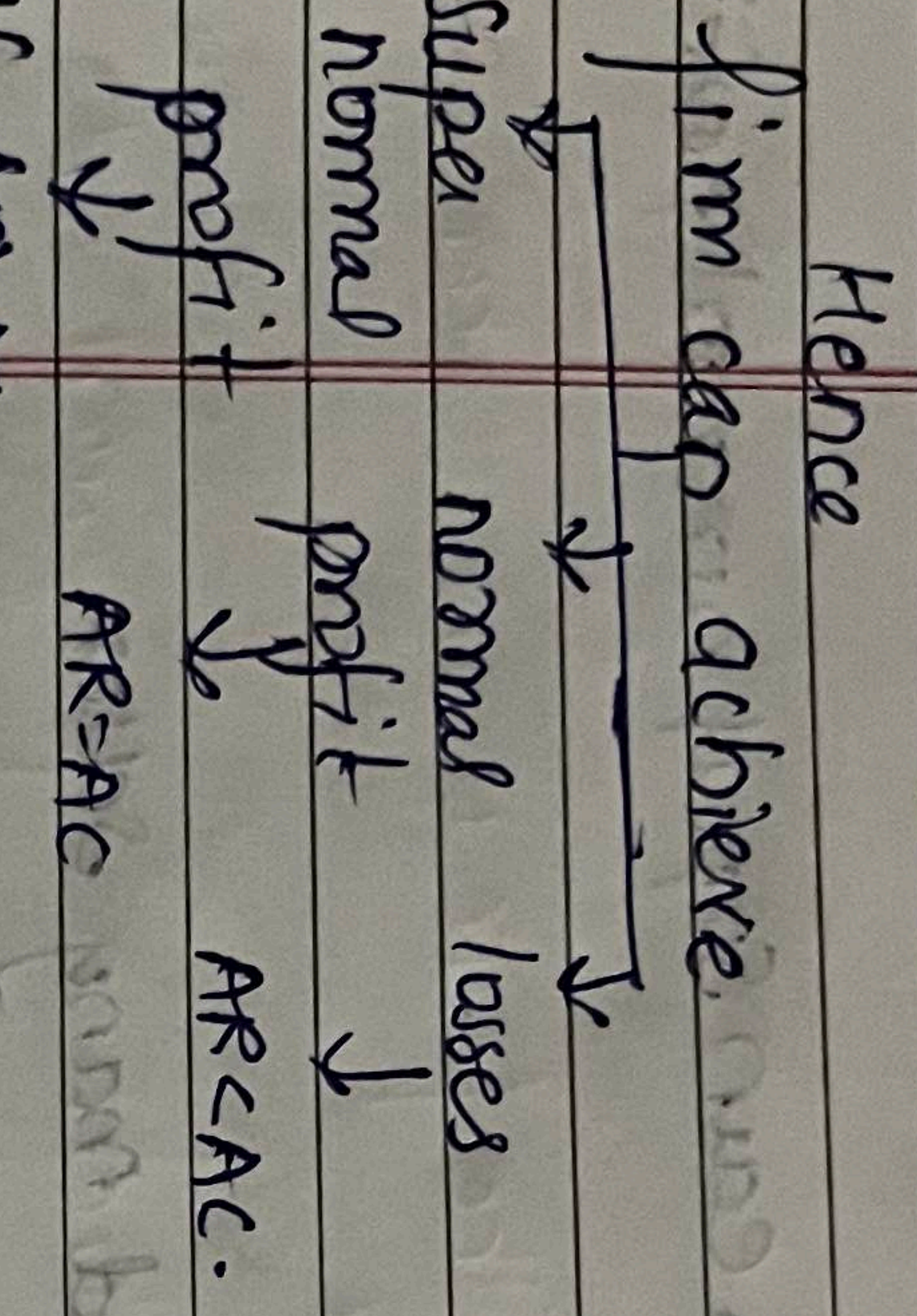


- 1) In short run - they can earn a normal profit = $AR = AC$
- 2) Super normal profit = $AR > AC$
- 3) Loss = $AR < AC$
- 4) In long run - firm can continue to earn super normal profit OR Normal profit.
- * MONOPOLISTIC. There are many buyers and many sellers.
- 2) Selling similar or differentiated product having unique feature (But not identical)
- 3) It is a blend of perfect competition and monopoly. Firm can enter & exit market quickly.
- 5) Generally - Todhpate works in these markets:
 - Garments
 - Mineral water
 - Shampoo
- 6. Equilibrium



Since many firm will enter into the market.

↓
i.e. 2 conditions
↓
MC = MR
↓
firms can only earn normal profits
↓
line from below. where $AR = AC$.



If $AR > AC$
* Kind Oligopoly

- 1) oligo means few; poly means seller.
- 2) In such market there are few seller and many buyers. Eg: car / Telecom / cement etc.
- 3) Sell differentiated products / Homogeneous product
- 4) There are many types of oligopoly → Refer notes
- 5) The firm are independent / therefore demand curve cannot be determined.
- 6) Theory of oligopoly is also theory of group behaviour.

f) Price leadership : 3 options

- a) live and let live
- b) Set the price and people will follow.
- c) Barometric price leadership
 * old firm decide the price rest follows.

Self study.

Chap.	Time	Questions
5	2 hours	2 times → Notes → QB.