Ch1 Nature And Scope Of Business Economics

1. INTRODUCTION

General definition of the study of Economics is individual and social choice in the face of scarcity. The law of scarcity implies that consumer's wants will never be completely satisfied. Economic problems arise due to two reasons:
a) Unlimited wants
b) Scarce resources

The term 'Economics' owes its origin to the Greek word 'Oikonomia' meaning 'household' Management.

- Economics is a science that studies those activities, which are, concerned with the efficient consumption, production, exchange and distribution of scarce means which have alternative uses.

- The purpose of economics is to achieve maximum satisfaction of wants and increasing of welfare as well as economic growth.

2. Meaning of Business Economics

- Business Economics is also referred to as Managerial Economics. It is application of economic theory and methodology.

- Every business involves decision-making as survival and success depends on sound decisions.

➢ Decision making means the process of:-
1. evaluating various course of action
2. making rational judgment on the basis of available information, and
3. selecting i.e making choice of a suitable alternative by decision maker.

• Decision making is not simple and straight forward. It has become very complex due to ever changing business environment, growth competition, large scale production, big size of business houses, complex laws, cost awarness, etc. in other words the economic environment in which the firm operates in very complex and dynamic.

• Business Economics provides a scientific base to the professional management of a business activity. It provides tools like budgeting, market analysis, cost-benefit analysis, etc. which can be scientifically applied to take sound business decision. Thus, Business Economics is a sub-branch of Economic which aims at the scientific application of economic knowledge, logic, theories and tools to take rational business decision. Thus it is an APPLIED ECONOMICS.

• Business Economics is closely connected with both viz, Micro Economic Theory as well as Macro Economic Theory. It is also useful to the manager of 'not-for-profit' organizations.

3. Definitions of Business Economics

- "Business Economics in terms of the use of economic analysis in the formulation of business policies. Business Economics is an essentially component of Applied Economics as it includes application of selected quantitative techniques such as linear programming regression analysis, capital budgeting, break-even analysis and cost analysis." (Joel Dean)

- "Business Economics is concerned with the application of economic laws, principles of methodologies to the managerial decision making process within a business firm under the condition of risk and uncertainties." (Evan Douglas)

4. Types of Economics

1. Microeconomics :- Microeconomics is the study of particular firm, particular household. Individual price, wages, income, industry and particular commodity. Thus, it is a study of a particular unit rather than all the units combined. Microeconomics theory deals with the problem of allocation of resources. Under microeconomics, we study:
   a) Theory of product pricing / price theory
   b) Theory of consumer behaviour
   c) Theory of factor pricing
   d) study of a firm.

2. Macroeconomics :- Macro economics theory is that part of of economics which studies the overall average and aggregates of the system, such as total production, total consumption, total saving and total investment. Thus, macroeconomics is the study of overall phenomena sas a whole rather than its individual parts. Macroeconomics deals with growth and development of resources. Under macroeconomics, we study:

a) Theory of national income, employment and money
b) Theory of general price level
c) Theory of economic growth and development
d) Theory of international trade

5. Difference Between Microeconomics and Macroeconomics

Basis	Microeconomics	Macroeconomics
Study of	It is study of individual economics units.	It is study of the ~~eg~~ economics as a whole and its aggregates.
Deal with	It deals with individual income, individual prices and individual output, etc.	It deals with national income, price level, national output, etc.
Tools	Its main tools are demand & supply of a particular commodity.	Its main tools are aggregate demand and aggregate supply of the economy as a whole
Central Problem	Its central is price determination of commodities of factor of production.	Its central problem is determination of level of income and employment.
Prices	Price determined under this are called 'relative prices.'	Price determined under this are called 'absolute price.'
Type of analysis	It is a partial equilibrium analysis.	It is a general equilibrium analysis.
Scope	Its scope is limited	It is wider in scope.
Example	(a) Lock out in TELCO. (b) Finding the causes of failure of X and Co.	(a) Per capita income (b) Corporate income tax (c) Economy growth

6. Nature of Business Economics

1. **Business Economics is a Science:-** Science is a systematized body of knowledge which trace the cause and effect relationships. Business Economics uses the tools of Mathematics, Statistics and Econometrics with economic theory to take decision and frame strategies. Thus, it make use of scientific methods.

2. **Based on Micro-Economics:-** As Business Economics is concerned more with the decision making problem of a particular business establishment. Micro level approach suits is more. Thus, Business Economics largely depends on the techniques of Micro-Economics.

3. **Incorporates elements of Marco Analysis:-** A business unit is affected by external environment of the economy in which it operates. A business is affected by general price level, level of employment, govt. policies related to taxes, interest rates, industries, exchange rates, etc. A business manager should consider such macro-economic variable which may affect present or future business environment.

4. **Business Economics is an Art:-** It is related with practical application of laws and principles to achieve the objectives.

5. **Use of Theory of Market & Private Enterprise:-** It uses the theory of market and resource allocation in a capitalist economy.

6. Pragmatic approach :- Micro-Economics is purely theoretical while, Business Economics is practical in its approach.

7. Inter-disciplinary in nature :- It incorporates tools from other disciplines like Mathematics, Statistic, Econometrics, Management Theory, Accounting, etc.

8. Normative in Nature :- Economic theory has been developed along two lines - POSITIVE and NORMATIVE

Positive science	Normative science
1. Robbins	Alfred Marshall
2. What it is	What should be or ought to be
3. Based on analysis, facts, realistic	Based on ethics
4. Will not pass value Judgement (not give solution)	Will pass value Judgement (gives solution)
5. E.g. India is an over populated country.	Family planning should be started to control population.

A positive science or pure science deal with the things as they are & their CAUSE and EFFECTS only. It states 'what is'? It is DESCRIPTIVE in nature. It does not pass any moral or value judgements.

A normative science deals with 'what ought to be' or 'what should be'. It passes value judgments and states what is right & what is wrong / it is PRESCRIPTIVE in nature as it offers suggestions to solve problems. Normative science is more practical, realistic and useful science.

9. Scope of Business Economics

• The scope of Business Economics is wide. Economics theories can be directly applied to two types of business issues namely -

➢ Micro-economics is applied to operational or internal issues of a firm.

➢ Macro-economics is applied to environment or external issues on which the firm has no control.

1: Micro-economics applied to operational or internal; issues.

Issues like choice of business size of business, plant layout, technology, product decision, pricing, sales promotion, etc. are dealt by Micro-economic theories. It covers -

• Demand analysis and forecasting
• Product and cost Analysis
• Inventory Management
• Market structure and Pricing Analysis
• Resource Allocation
• Theory of Capital and Investment Decisions
• Profitability Analysis
• Risk and Uncertainty Analysis.

2. Macro-economics applied to environment or external issues.

The major economic factors relate to---

- The type of economic system
- The stage of business cycles
- The general trends in national income, employment, price, saving and investment.
- Government's economic policies
- Working of financial sector and capital market
- Socio-economic organizations
- Social and political environment.

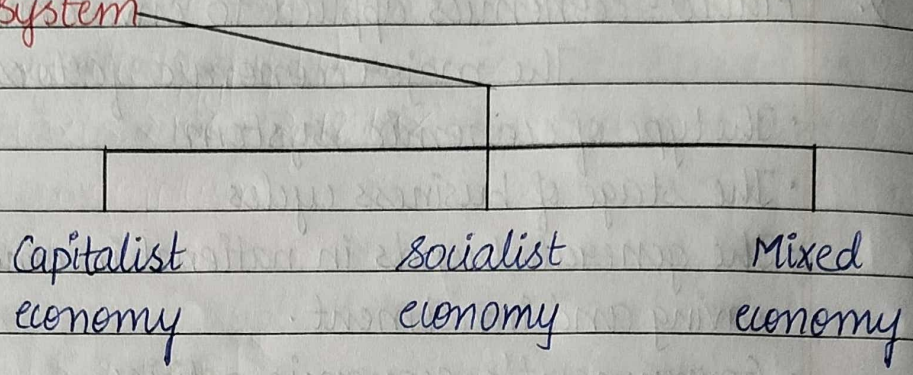
These external issues has to be considered by a firm in business decision and frame its policies accordingly to minimize their adverse effects.

10. Central Economic Problem (scarcity)

1. What to produce (capital goods, consumer goods)
2. How to produce (capital use capital, labour use labourer)
3. From whom to produce (poor or rich, in india it gives to poor for upliftment)
4. What provision should be made for economic growth.

When are goods produced & How much to produce } not an economic problem.

11. Economic System



1. Capitalist Economy

FEATURES

1. Means of production are privately owned
2. Freedom of enterprise & freedom of price choice
3. Allocation of resources is as per consumer preference
4. Entrepreneur are guided by profit motive.
5. Competition exist among producers
6. Capitalist economy use price mechanism as a principle motive

MERITS

1. Greater efficiency & incentive to work hard
2. Faster economic growth possible
3. Consumer are benefitted because of good quality product
4. Higher standard of living
5. Innovation & technological progress

DEMERITS

1. Uneven distribution of Income & wealth
2. Income inequality & social injustice
3. Exploitation of consumer and labourer
4. Economic instability which may lead to depression
5. Creation of monopoly power

Others name for capitalist economy

1. Market economy
2. Market system
3. Free markets
4. Market mechanism
5. Price mechanism

2. Socialist Economy

FEATURES

1. It is known as command economy, controlled economy, centrally planned economy
2. Collective ownership of means of production
3. Promote welfare of people
4. Lack of competition

MERITS

1. Balance economic development
2. No class conflict
3. Economic Fluctuation & unemployment are minimized
4. Right to minimum work
5. No exploitation of consumer & worker

DEMERITS

1. Corruption, Red tapism, results into inefficiency
2. No freedom of choice
3. Price are administered by state

3. Mixed Economy

FEATURES

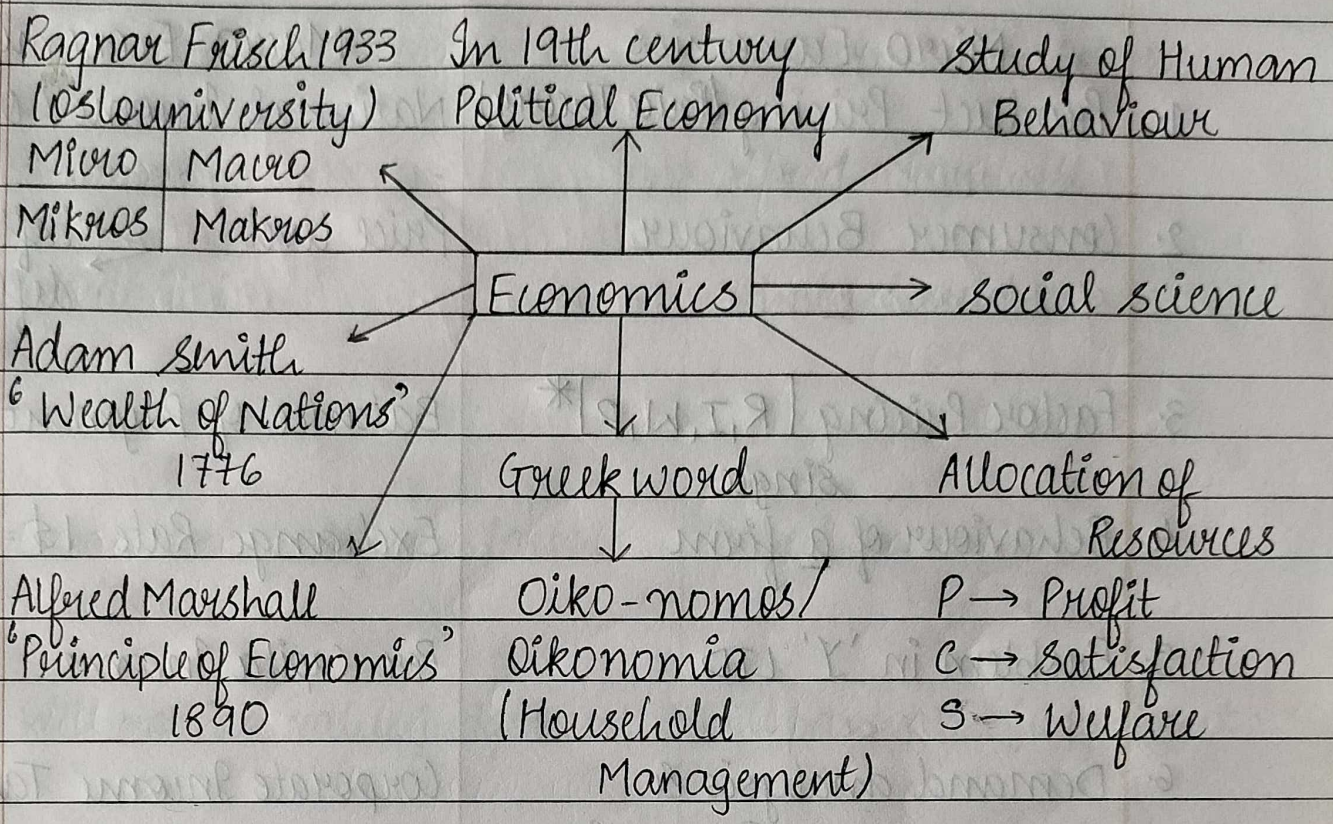
1. Combination of both capitalism & socialism
2. Freedom to join any occupation trade or business
3. People are free to consume goods of their choice

MERITS

Skill India
1. Freedom of occupation
Mudra loan upto 10 lac
2. Encourages enterprise & Risk taking
3. Development of technology through R&D
~~Inovation in India~~ vaccine & UPI
4. Economic & social equality possible

DEMERITS

1. Poor implementation of plans
2. High level of taxes Petrol ₹106 – ₹72 tax
3. Good level of corruption
4. Wastage of Resources



* The word Economics is associated with scarcity.
* Unlimited wants and limited resources is the subject matter of economics (Resources have alternative uses)
* Wants are also called as ends & Resources are also called as means
* As per economics wealth is stock and income is flow.
* According to Samuelson Economics is a Queen of social Science.
* Allocation of resources is a micro concept.
* Country without scarcity is not found in real world.
* Value of next best alternative is called as Opportunity cost.
* Alfred Marshall is an architect of Micro economics.

* Rent, Interest, Wages, Profit

	Micro Economics	Macro Economics
1.	Product Pricing (Price Theory)	National Income / Output
2.	Consumer Behaviour	Price level → inflation, deflation
3.	Factor Pricing [R, I, W, P]* single	Balance of Payment
4.	Behaviour of a firm	Exchange Rate 1$ = 81
5.	Problem in 'Y' LTD	Per Capita Income
6.	Demand analysis & Forecasting	Corporate Income Tax
7.	Market structure	savings rate → savings and investment
8.	Location of industry (Industry ka location)	Social and Political environment
9.	Income from Railways	Interest rates
10.	Allocation of Resources	Capital Formation
11.	Particular industry eg: steel industry	

	Positive Science	Normative Science
1.	Robbins	Alfred Marshall
2.	What it is	What should be or ought to be
3.	Based on analysis, facts, realistic	Based on Ethics
4.	Will not Pass value judgement	Will pass value judgement
5.	Supports Neutrality	Does not suppor Neutrality
6.	Descriptive in Nature	Prescriptive in Nature

Central economic Problem ⟶ Scarcity

1. What to Produce
2. How to Produce
3. For whom to Produce (Distribution of national income)
4. An what Provisions should made for economic growth.

* When are goods Produced & How much to Produce } Not a central Problem

Deductive Method	Inductive Method
General to Particular	Particular to General

Definition of Economics

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

Points to Remember

1. Business Economics involves practical application of economic theory and has a multi disciplinary approach.

2. Macro economics is also called as aggregate economics.

3. Capital budgeting, risk analysis, business cycle are within the scope of business economics.
(accounting standards is not a part of it) (can be asked for odd man out)

4. Larger production of capital goods would lead to higher production in future.

5. Social securities benefits, sickness benefits are found under both socialism and mixed economy.

6. Science of wealth → Adam Smith

7. Science which deals with wealth of nation → Adam Smith

8. Science which deals with wealth → J.B. Say (classical economics)

9. Growth and development definition → Paul Samelouson

10. Welfare oriented definition → Alfred Marshall, Pigou

11. Study of mankind → Alfred Marshall

12. Scarcity oriented definition → Robins / Robinson

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Ch3 Theory Of Production And Cost

Production

- Goods
- Services
- Economic activity

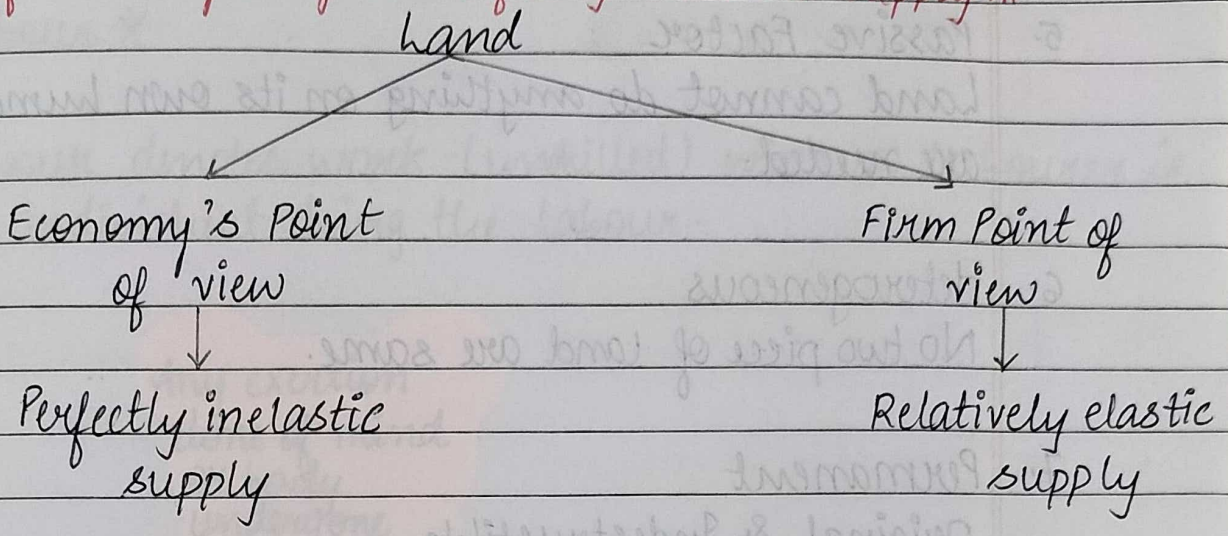
- Converting inputs → outputs (Exchange value)
- Transformation of Raw material → Final goods
- Creation Utility

* Man cannot create or destroy Matter *

Production

Land	Rent	Factor Payments
Labour	Wages	
Capital	Rate of Interest	
Entrepreneur	Profit	

* If nothing is given Perfectly inelastic supply *



* Factors of Production

* Land *

Land includes natural resources:-

1. on the surface of earth ; Eg: soil, forest, plots of land, etc.
2. Below the surface of earth, Eg: mineral deposits, etc, and
3. Above the surface of earth, Eg: climate, sunshine, rain, etc.

Land has the following characteristics:-

1. Primary Factor
   Original and primary or natural factor of production.
2. Free Gift of Nature
   Creation of nature and not man made.
3. Inelastic Supply
4. Lacks Geographical Mobility

Zero Mobile Factor
It has occupational mobility.

5. Passive Factor
Land cannot do anything on its own human efforts are needed.

6. Heterogeneous
No two piece of land are same.

7. Permanent
Original & Indestructible
DAVID RICARDO ⟶ Classical economist

8. Diminishing Marginal Returns
* Only applicable for agricultural.
* Output will increase at a diminishing rate.

1st year	↑	100 Q	↓
2nd year		150 Q) 50	
3rd year		180 Q) 30	
4th year		200 Q) 20	

Total output ↑ Marginal ↑
but at diminishing rate

* Labour *

Labour denotes work (unskilled) whereas Labourer is the individual doing the labour.

Any exertion done of mind or body undergone partly or wholy with a view of earning some in return in economics it is called LABOUR.

Labour has the following peculiarities which makes it different from other factors:

1. Labour is inseparable from labourer

* Imp 2. Human factors.
Surroundings, working conditions, motivation, leisure, recreation, working hours, etc all the things will matter.

3. Highly perishable
* A day lost without work means a day's work gone forever.
* * Labourer has weak bargaining power.

4. The labourer sells his services and not himself.

5. Heterogeneous
* Power depends upon physical strength, education, skill, training, efficiency, etc.
* labour can be classified as unskilled, semi-skilled and skilled labour.
* The skilled labour is called as human capital.

6. Restricted Mobility
* Labour is much less mobile than capital.

7. Active Factor

8. Labour has sociological characteristics
Eg:- Social security like provident fund, gratuity, medical benefits, pension, etc.

9. Supply curve of labour is backward sloping.

10. The supply of labour is relatively inelastic in short run

* Capital *

Anything which is used in the business is called as capital.

Capital has therefore, been rightly defined as "produced means of production" and as "man made instrument of production".

Following are the main characteristics of capital :-

1. Capital is man-made

2. Capital is productive

3. Supply of capital is elastic
   * savings and investments

4. All capital is wealth but all wealth is not capital

5. Capital is a passive factor

6. Capital is the most mobile factor
   * Capital has highest mobility

7. Capital is durable (can be used again and again)

8. Capital involves social cost (kind of oppourtunity cost)
   * Savific of present consumption and enjoyment of the people is treated as a social cost.

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* Types of Capital

1. Fixed Capital
* Used in production process repeatedly.

2. Circulating or working capital
* Used in production process only once.

3. Sunk Capital
* Used for one purpose

4. Floating capital
* Used for many/several uses.

5. Real capital

6. Human capital
* only skilled in human capital

7. Tangible capital

8. Intangible Capital
* Goodwill, patent, trademark & copyright INTANGIBLE

9. Money Capital
* Money capital is used to purchase Real Capital.
* Cash at Bank, cash in hand, shares, debentures, bonds.

10. Individual capital
* Owned by one firm
* Personal or private ownership

11. Social capital
* Owned by government used by all
* Non excludable in nature

* Capital Formation

* Creation of any physical asset
* Capital formation means a sustained increase in the stock of real capital in a country.
* It is thus, an addition of capital goods like machines, tools, factories, transport, facilities, power plant, etc in the country.
* Capital formation is also known as investment.
* These are mainly three stages of capital formation which are as follows:

a) Savings
b) Mobilization of savings
c) Investments

* Entrepreneurship

Functions of an entrepreneur

1. Initiating a business enterprise and coordination

2. Risk bearing and uncertainty
* F.H. Knight

*** 3. Innovation
* Schumpeter ⟶ Peter Peter = Schumpeter :)
* Electronic and automobiles

* Enterprise's objectives and constraints:

The objectives of an enterprise may be broadly categorised under the following heads:

1. Organic Objectives:
To survive or to stay alive.

2. Social Objectives

3. Human objectives

4. National objectives

* Enterprise's problems

An enterprise faces a number of problems from its inception, through its lifetime and till its closure, following are a few problems relating to:

1. Objectives
2. Location and size of the plant
3. Selecting and organising physical facilities
4. Finance
5. Organisation structure
6. Marketing
7. Legal formalities
8. Industrial relations

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* Production Function

* Technical / Physical / Functional relationship between inputs and outputs

* An amount of Output that can be produced with given level of inputs and technology.

* Types of Production Function

1. Short Run Production Function
It is that production function where atleast one factor is fixed and others are variable

$$Q = F(\bar{L}, L, \bar{K})$$

Bar indicates fixed

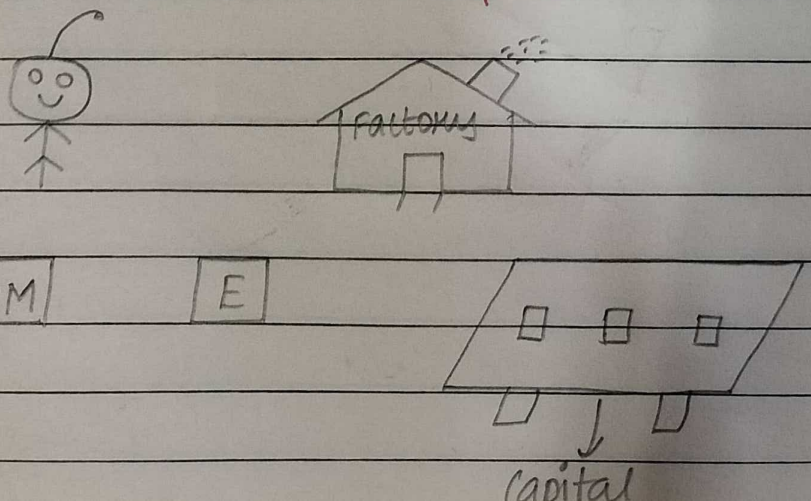
Q → Quantity

2. Long Run Production Function
It is that Production function where all the factors are variable.

$$Q = F(L, L, K)$$

Labour

L → Land, K → Capital



Example for short Run Production Function

If a gifts maker has to manufacture set units of goods for Halloween in six days, it needs to increase labourers and row materials but not the machinery. In this case, labourers and row materials become variable inputs while the machinery remains fixed.

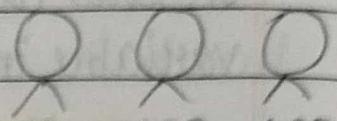
Example for long Run Production Function

A long run can be of the same company ABC, permanently looking to expand production capacity of cars instead of only during the seasons. It requires new land, labour, and equipment in addition to the existing infrastructure.

* Types of Production labourers = 100

1. Total Product [TP] 10,000 Units
Total Production / Total output produced

2. Average Product [AP]
Average Production / Average Output



(Andha takla)

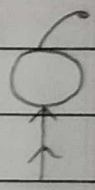
$$AP = \frac{TP}{Q}$$

Q → Labour (variable input)

$$= \frac{10,000}{100}$$

$$= 100 \text{ units}$$

3. Marginal Product [MP]
Marginal Production / Marginal Output


(Chotiwala takla)

Additional output produced by one additional labourer

$$MP = \frac{\Delta TP}{\Delta Q}$$

Law of Variable Proportion (17 Marks)

- Short run Production Function
- Law of Diminishing Returns
- Returns to factor cost

Stage 1: Law of increasing returns
Stage 2: Law of Diminishing returns
Stage 3: Law of Negative returns

} All 3 stages belong to one company only

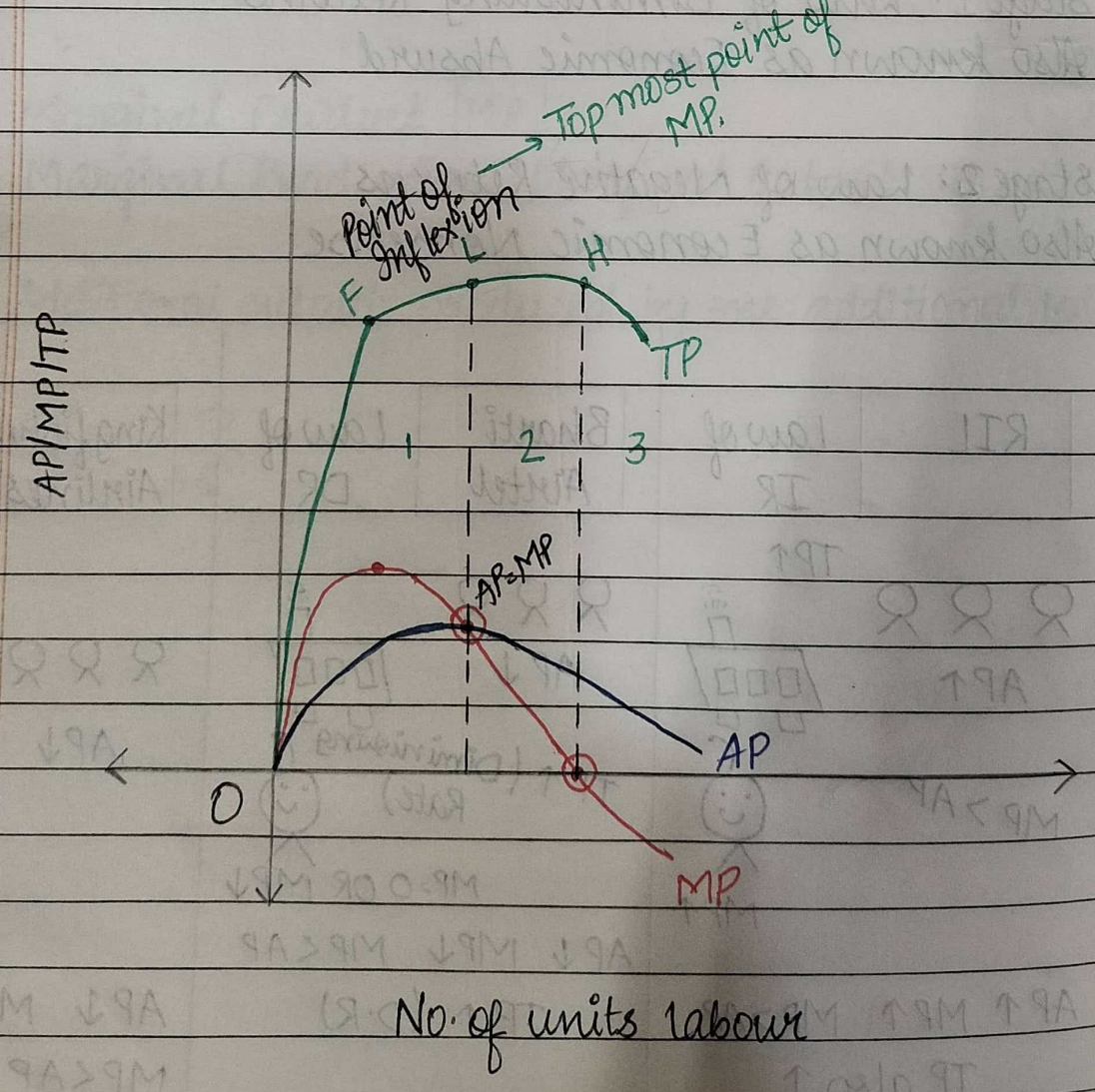
Stage 1: Law of Diminishing Returns
Also known as Economic Absurd

Stage 3: Law of Negative Returns
Also known as Economic Nonsense

RIL	Law of IR	Bharti Airtel	Law of DR	Kingfisher Airlines	Law of NR
TP↑ AP↑ MP > AP MP↑ AP↑ MP↑ MP>AP TP also↑		AP↓ TP↑ (Diminishing Rate) MP=0 OR MP↓ AP↓ MP↓ MP<AP TP↑ (D·R)		AP↓ MP↓ MP↓ (-) MP<AP TP↓	

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	Labour	TP	AP	MP	Analysis
	1	2	2	2	AP↑ MP↑
I	2	5	$5/2 = 2.5$	3	MP>AP
	3	9	3	4	TP also↑
	4	12	3	3	AP=MP both↓
II	5	14	$14/5 = 2.8$	2	MP<AP
	6	15	$15/6 = 2.5$	1	TP↑(Diminishing Rate)
	7	15	$15/7 = 2.14$	0	MP=0 TP Max
	8	14	$14/8 = 1.75$	-1	AP↓ MP↓ (-)
III	9	12	$12/9 = 1.33$	-2	MP<AP TP↓



* Reasons for Law of Increasing Returns

1. Optimum utilization of fixed factor.
2. Division and specialization of labour.

* Reason for Law of Diminishing Returns

1. More variable factor compared to fixed factor.
2. Imperfect substitution and lack of co-ordination among variable factors.

* Reasons for Law of Negative Returns

1. Too excessive increase in variable factor.
2. Variable factor comes in each others way leading to wastages.
3. Over utilization of fixed factor.



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Points To Remember

In first stage TP increases at increasing rate till point F but from F to L it increases at diminishing rate.

Top most point of MP is called as Point of Inflexion.

Slope of TP when TP is max 0.

When MP declines in first stage TP increases at diminishing rate.

When AP > MP TP increases at diminishing rate and then falls.

When MP is zero TP is maximum and AP falls.

Second stage starts where AP is maximum.

Reduction per unit cost = Economies of scale

Internal economies of scale measures efficiency of production & occur bcs of factors controlled by its management team.

External economies of scale happen bcs of larger changes within the industry, so when the industry grows, the average costs of business drop.

→ internal Goes with size

→ external Goes with location

Internal diseconomies of scale can arise from technical issues of production or organizational issues within the structure of a firm or industry.

External diseconomies of scale can arise due to constraints imposed by the environment within which a firm or industry operates.

→ internal Goes with size

→ external Goes with location

Law of Returns to Scale (inputs)

↓ Long Run Production Function

↓ In long run there are no fixed factor & No negative returns (Na Nature return na loss hota hai in long run)

Stage 1: Increasing returns to scale

Stage 2: Constant returns to scale

Stage 3: Diminishing returns to scale

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Reduction in per unit cost = Economies of scale

Economies of scale
- internal — Goes with size
- external — Goes with location

Diseconomies of scale
- internal — Goes with size
- external — Goes with location

Law of Returns to Scale (inputs)

Long Run Production Function

In long run there are no fixed factor & No negative returns (Na Nature return na loss hota hai in long run)

Stage 1: Increasing returns to scale

Stage 2: Constant returns to scale

Stage 3: Diminishing returns to scale

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* Behaviour of output in response to change in scale.

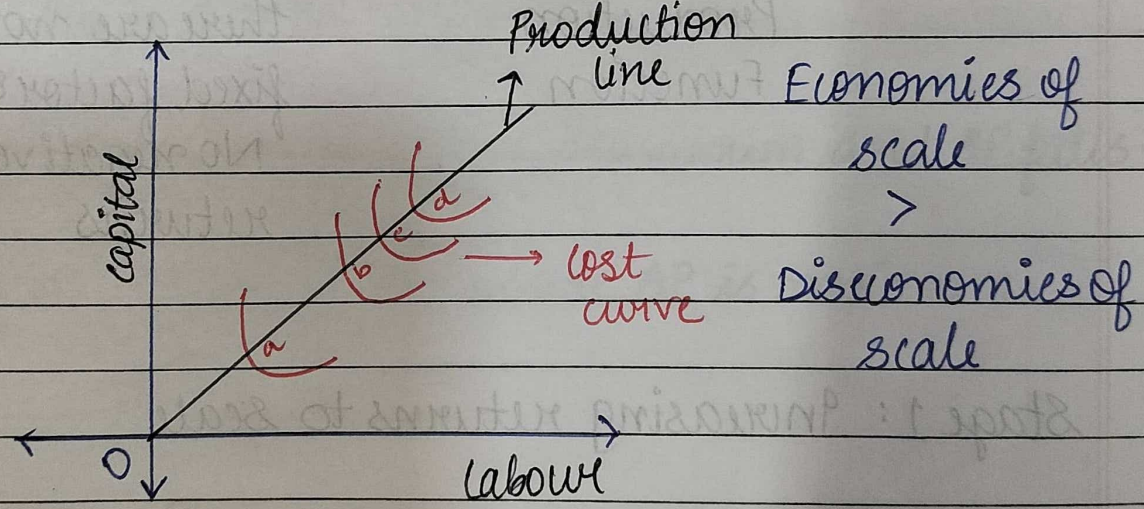
* Effect of scale on the level of output.

* All factor inputs are changed in same established proportion.
Eg:- If you are taking inputs as 10% then in all the three cases you should take it as 10%

* Increasing returns to scale

Inputs 10%
Outputs 50%

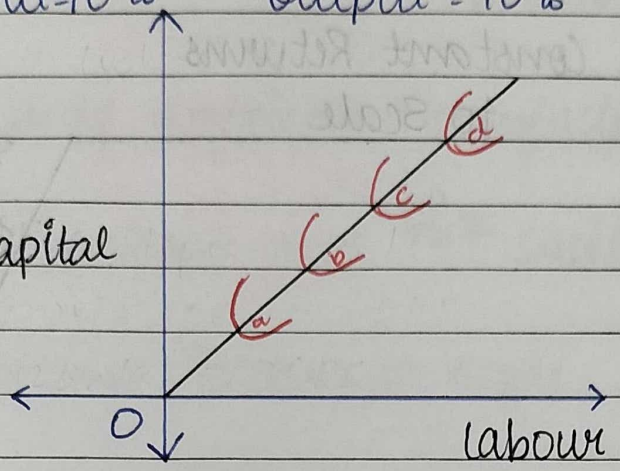
Cost ↓ Returns ↑



Increasing returns to scale occur when a simultaneous increase in all the inputs in the same given proportion result in a more than proportionate increase in the output.
For example:- If input is increased by 10% then the output increases by 50%.

* Constant Returns to Scale (Linear Homogenous Production Function)

Input=10% Output = 10%

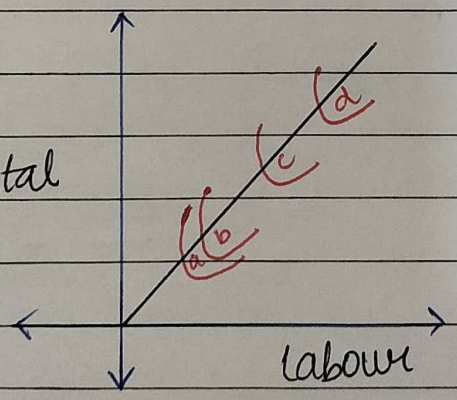


Economies of scale
=
Diseconomies of scale

Constant returns to scale are said to be constant when a proportionate increase in all the inputs results in proportionate increase in output.
For example:- If inputs is increased by 10% then the output also increases by 10%.

* Diminishing Returns to Scale

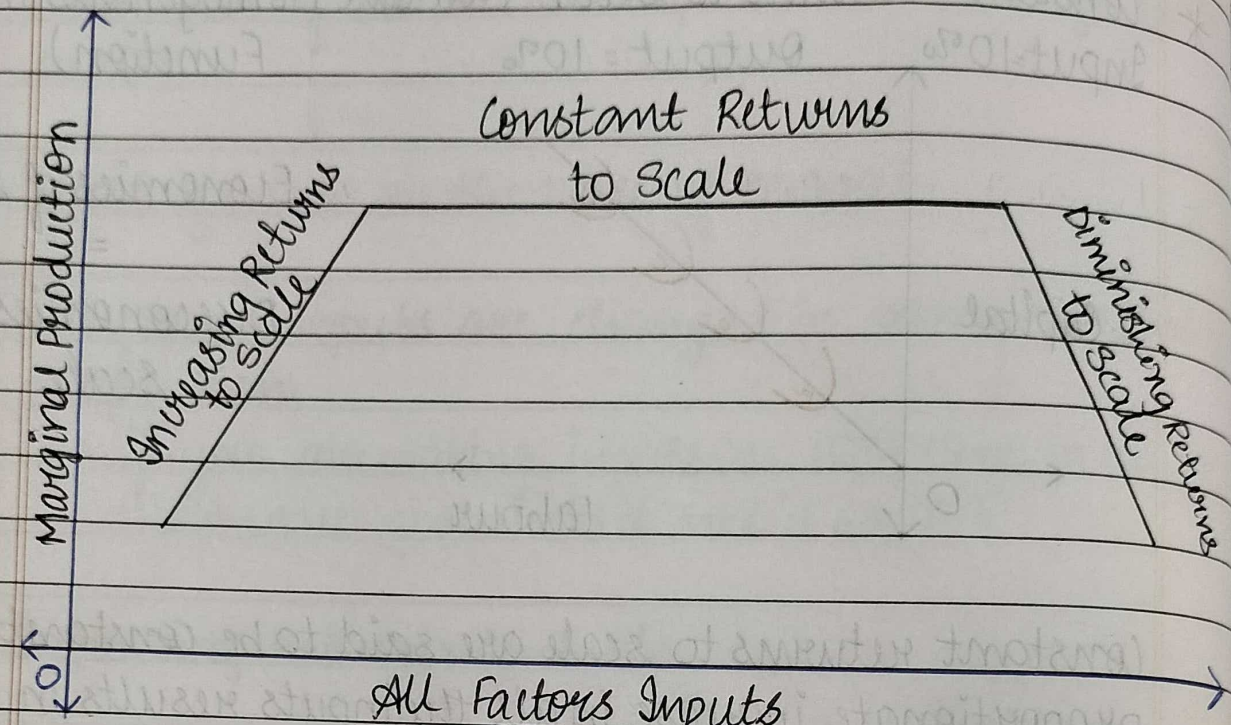
Inputs = 10% Output = 05% (Input increases by 10% output also increases by 5% but less than 10%)



Cost ↑ Returns ↓

Economies of scale
<
Diseconomies of scale

Diminishing returns to scale occur when simultaneous increase in all inputs in the same given proportion result in a less than proportionate increase in the output.
For example:- if inputs is increased by 10% then the output also increases by 5% but less than 10%.



Positive Slope ⟶ IRS
Horizontal Slope ⟶ CRS
Negative Slope ⟶ DRS

Cobb - Douglas Production Function

* Whole of American Manufacturing Unit
* 3/4th Labour and 1/4th Capital
* Constant Returns to scale
* $Q = KL^{a}C^{(1-a)}$

Q = Output C = Capital
L = Labour K & a = Positive Constants

Labour → Capital

* $a+b=1 \longrightarrow CRS$
  $a+b>1 \longrightarrow IRS$
  $a+b<1 \longrightarrow DRS$

Date :
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(Equal) (Quantity)

Iso-Quant (Producer Point of view)

- Equal Product Curve
- Iso-product Curve
- Production indifference Curve

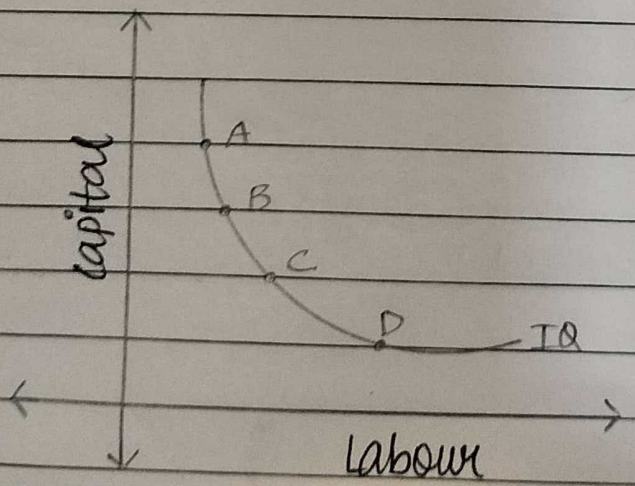
Statement :-

Various combinations of two inputs that gives same level of output.

Assumption :- MRTS → sacrific

- Only two inputs
- MRTS is diminishing (Marginal Rate of Technical Substitution)

Combinations	Labour	Capital	MRTS
A	1 ↑	12 ↓	-
B	2	6	6
C	3	4	2
D	4	3	1

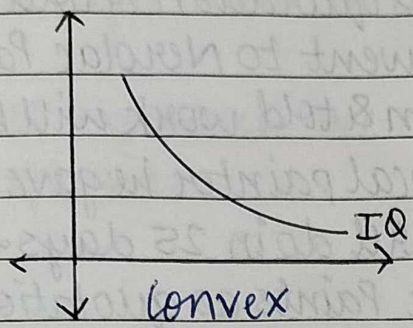


Slope of IQ → $-\frac{MPL}{MPK}$

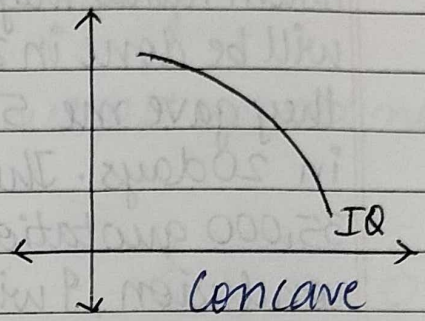
Points on the curve is called locus

Resources are scarce so the relation will be inverse.

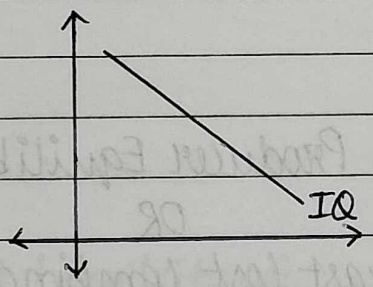
MRTS ↓



MRTS ↑



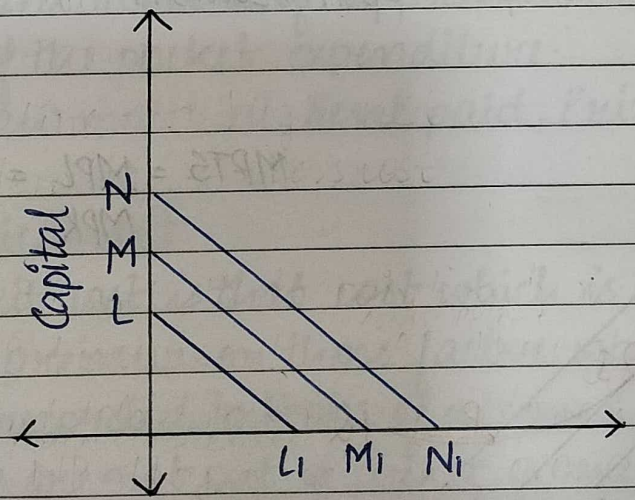
MRTS (constant)



straight line

ISO-cost lines

Various combinations of two inputs which a firm can buy with its money income.



Slope of iso-cost

$\frac{w}{r}$ → wages
r → rate of interest

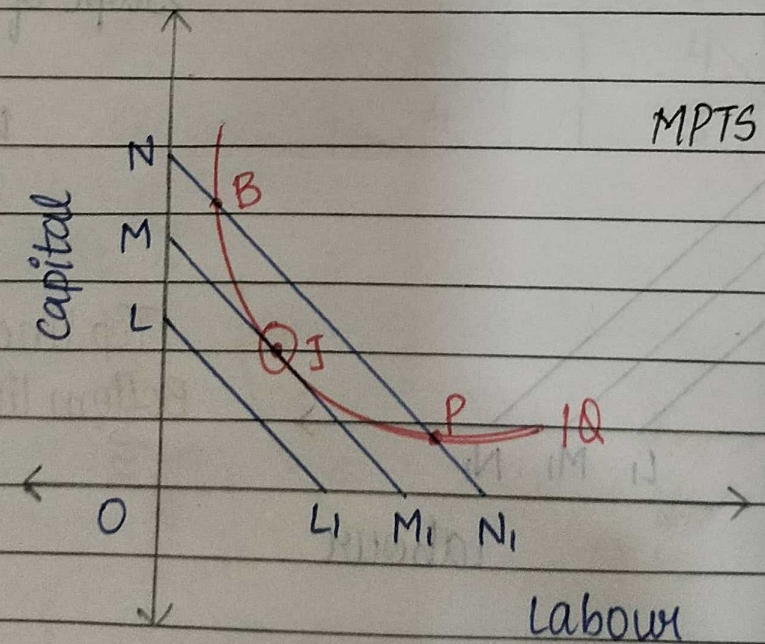
Top line → High cost
Bottom line → Low cost

* cost should be less output should be same.

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Page No.:

* For example
If I want to paint my house in 20 days. I first went to Asian Paints they gave me 70,000 quotation & told work will be done in 20days. Then I went to Nerolac Paints they gave me 50,000 quotation & told work will be done in 20days. Then I went to local painter he gave me 35,000 quotation but said he will do in 25 days. So conclusion, I will take Nerolac Paints as quotation is less and the output is same i.e 20 days.

Producer Equilibrium
OR
Least Cost Combination
OR
Cost Minimization
OR
Output Optimization



$$MPTS = \frac{MPL}{MPK} = \frac{W}{R}$$

When you're spending which is going to generate income is called as cost.

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Theory of cost

* Sacrific done in order to get something.
* All expenses are called as cost but all cost are not expenses.

Output = 0

TC = AFC + AVC

250 = 250 + 0

Types of costs

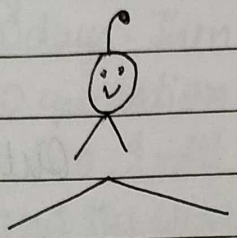
1. Accounting cost / explicit cost
   a. Accounting cost / explicit cost are that cost which is incurred on those factors that are not owned by an entrepreneur. He has to purchase from outside.
   b. Recorded in books of account.
   c. Out of the pocket expenditure.
   eg:- Raw material, Rent paid, Printing & stationary cost.

2. Implicit cost
   a. Implicit cost is that cost which is incurred by an entrepreneur on those factor which are owned by him.
   b. Not recorded in books of account.
   c. They are not out of pocket expenditure.
   d. Also known as opportunity cost.
   Eg: owned property, owned capital.

3. Economic cost

Explicit cost + Implicit cost = Economic cost

70,000 + 70,000 = 1,40,000



Job Business ✓

Explicit cost

Revenue = 1,00,000

Cost = 70,000

A. Profit → 30,000

40,000

Economic loss

70,000 for job X

Implicit cost

4. Outlay cost

It involves actual outlay of funds on wages material, rent known as "Financial expenditure."

5. Opportunity cost

a. Opportunity cost is a sacrific or loss of alternative

b. Value of next best alternative

c. known as Trade off, Forgone cost, Implicit cost.

sacrific

6. Direct cost

a. Direct cost is also known as "Traceable cost."

b. cost which can be easily identified called as direct cost.

Eg: In production of shoes cost of leather is a direct cost.

7. Indirect cost
a. Indirect cost is also known as non-traceable cost.
b. Cost which cannot be easily identified called non-traceable/ indirect cost.
Eg: Electricity, Power charges

8. Incremental cost
a. Incremental cost is related to concept of marginal cost.
b. It refers to the total additional cost incurred by the business.
Eg: purchase of new equipment, expansion of production capacity.

9. Sunk cost
Sunk cost refers to that cost which has been already incurred for one purpose in the past & cannot be recovered.
Eg: Expense on advertisement

10. Historical cost
~~Hori~~ Historical cost are those cost which are incurred on the purchase of an asset in the past, may or may not be recovered.
Eg: Machinery, Tools.

11. Replacement cost
Replacement cost refers to expenditure to be made for replacing an old asset.

Purana do naya lo → Difference → Replacement cost

12. Private cost

Private cost are those cost which are incurred or provided by the firm or organisation.

Eg: cost of manufacturing a product

MRF 1tyre ⟶ ₹5000

↓

Private cost

13. Social cost

Social cost refers to the total cost to the society due to business activities it includes both private & external cost.

Eg: Pollution of all types

Private cost + External cost = Social cost

14. Fixed cost

a. Fixed cost do not change with output

b. It is independent of output

c. It cannot become zero also known as supplementary cost or overhead cost.

Eg: Rent, Property tax, Interest on Capital, Depreciation

15. Variable cost

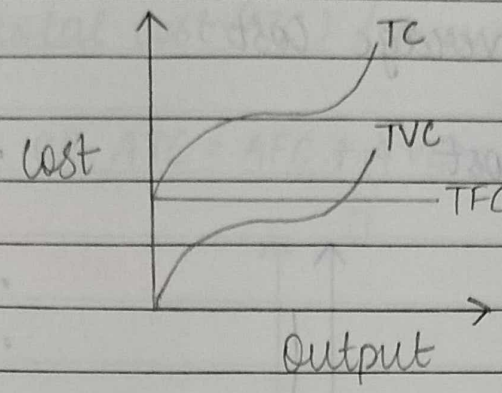
a. Variable cost changes with change in output

b. Dependent on output

c. It can become zero also known as prime cost. very imp.

Eg: Wages, Raw Material etc.

* If business will not be able to recover the variable cost the business will shut down.



16. Semi variable cost
It is a mixture of fixed cost & variable cost.
Eg: Electricity charges, Post paid mobile connection.

17. Stair step cost
A salary or Remuneration give to a foreman or extra helper represent stair step cost.

* Accounting profit = Revenue - Accounting cost

* Economic loss = Accounting profit is less than implicit cost.

AVC/ATC Shape → Technology remains constant
(main reason) → Law of variable Proportion
AFC → Output ↑ AFC ↓
Cannot touch ~~x~~-axis

Minimum point will only come in ~~AC~~ curve

Date :
Page No.:

Short Run Average Cost

1. Average Fixed Cost

- downward slope
- Convex
- Rectangular hyperbola

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

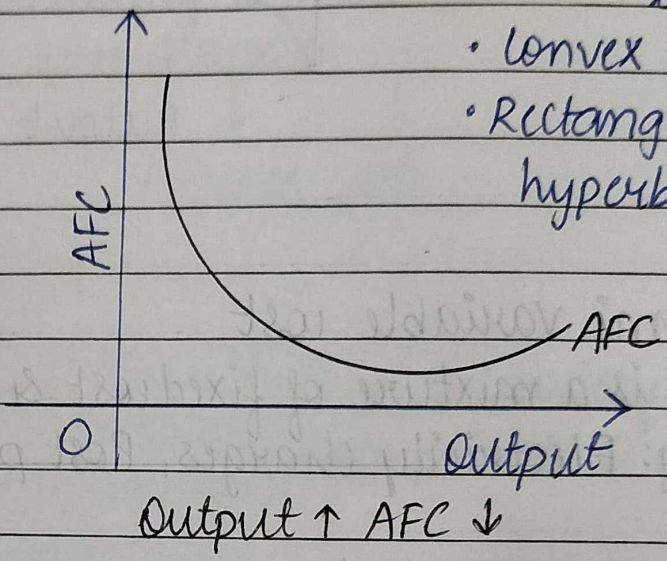
$$\downarrow$$

Output

Rent : 50,000

$$\frac{50,000}{100}$$

= 500 AFC

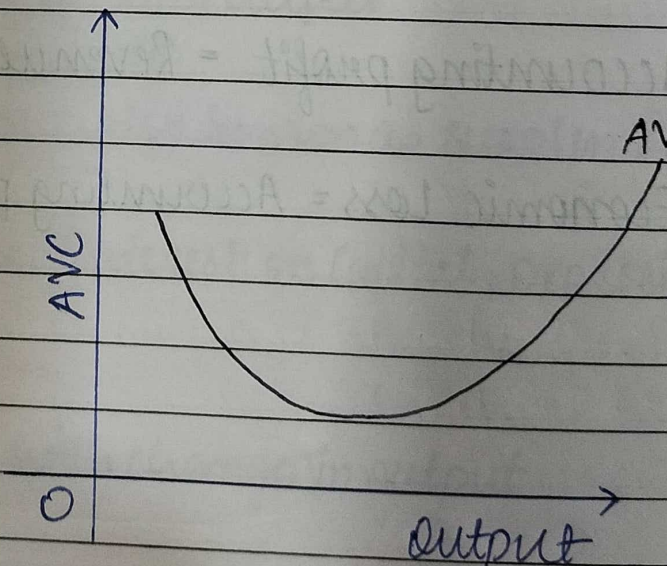


Output ↑ AFC ↓

(cannot touch the x-axis as fixed cost cannot be 0

2. Average Variable Cost

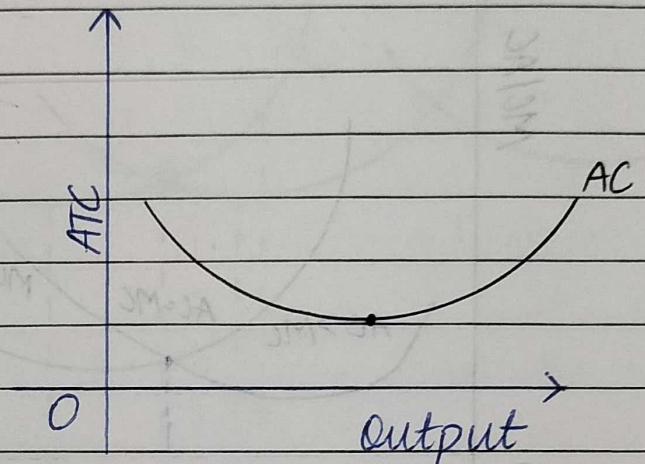
$$AVC = \frac{TVC}{Q}$$



U-Shape

3. Average total cost (ATC) / Average cost (AC)

$AC = \frac{TC}{Q}$ OR $ATC = AFC + AVC$



U-Shape

4. Marginal cost (MC)

Additional cost incurred for producing one additional unit of output.

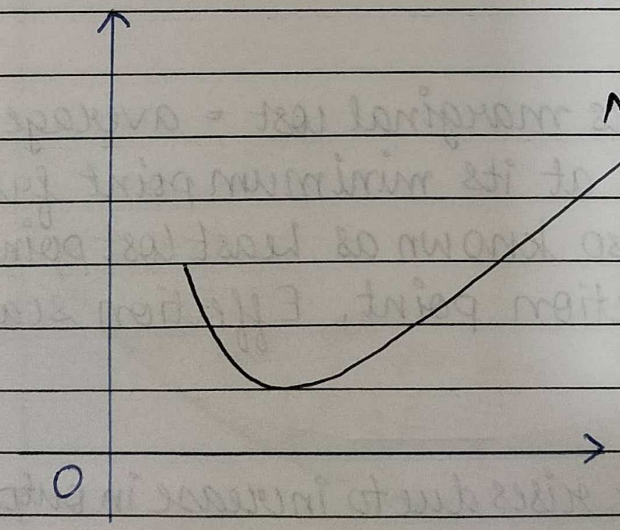
1 - 200
2 - 350

$MC_n = TC_n - TC_{n-1}$

OR

$MC = \frac{\Delta TC}{\Delta Q} = \frac{300-200}{2-1}$

$= 150$

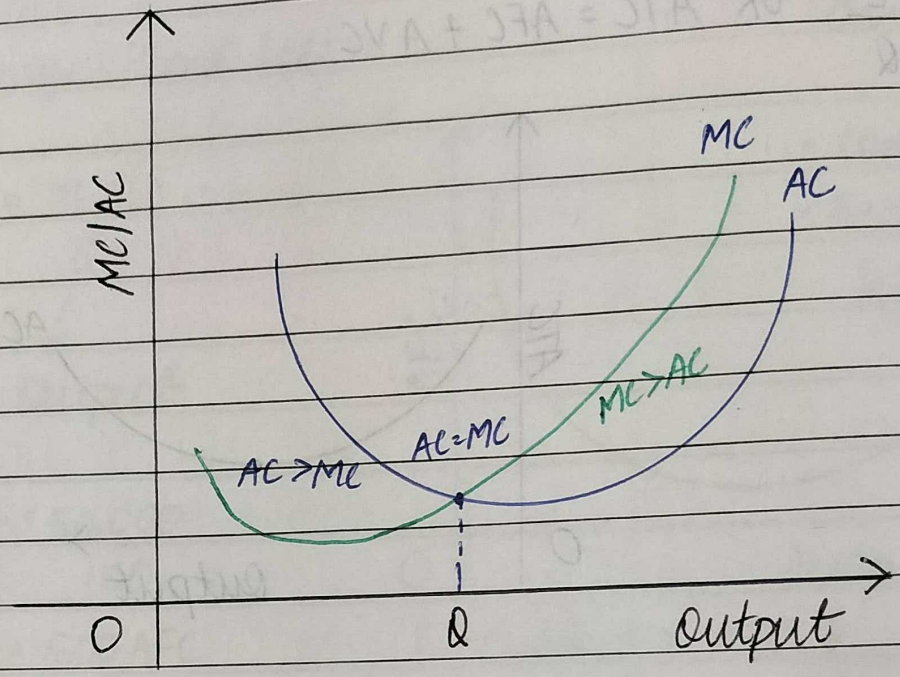


U-Shape

* Marginal cost is related to variable cost

* MC can be calculated either with 'TC' or 'TVC'.

* Relationship between AC & MC



Stage 1

AC > MC When Average cost declines due to increase in output marginal cost is below average cost. (When AC falls MC is falling as well as rising)

Stage 2

AC = MC As output increases marginal cost = average cost MC curve cuts AC at its minimum point from below. Minimum point also known as least cost point, Productively effection point, Effection scale.

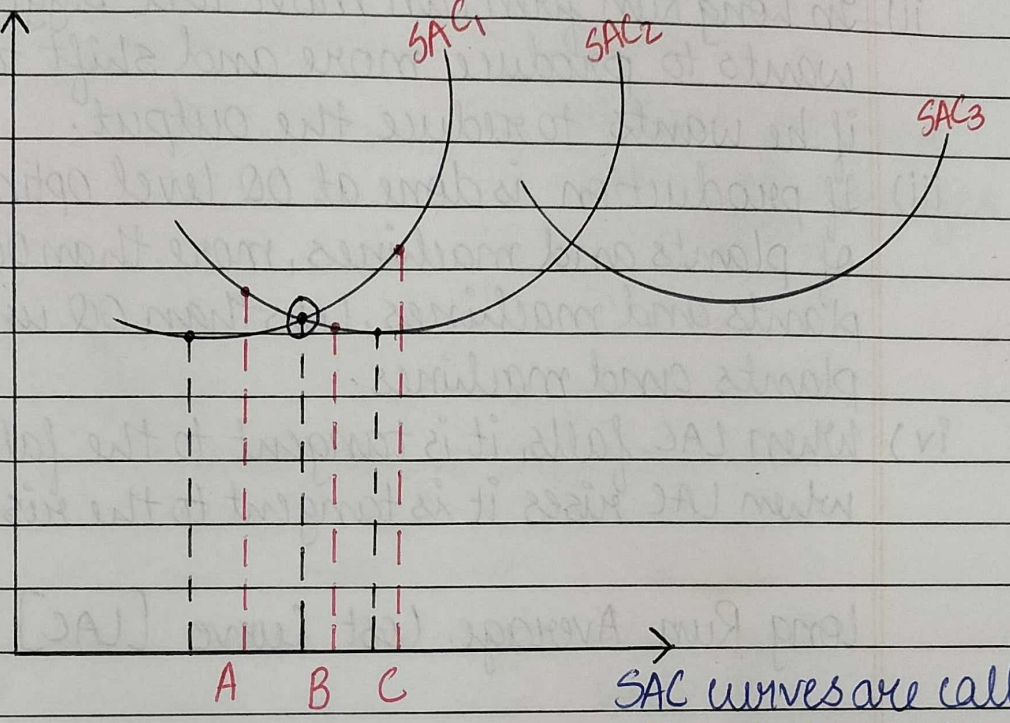
Stage 3

MC > AC When average cost rises due to increase in output marginal cost is greater then average cost. Both AC and MC are rising.

* Reason behind U-shape LAC → Returns to scale
Law of

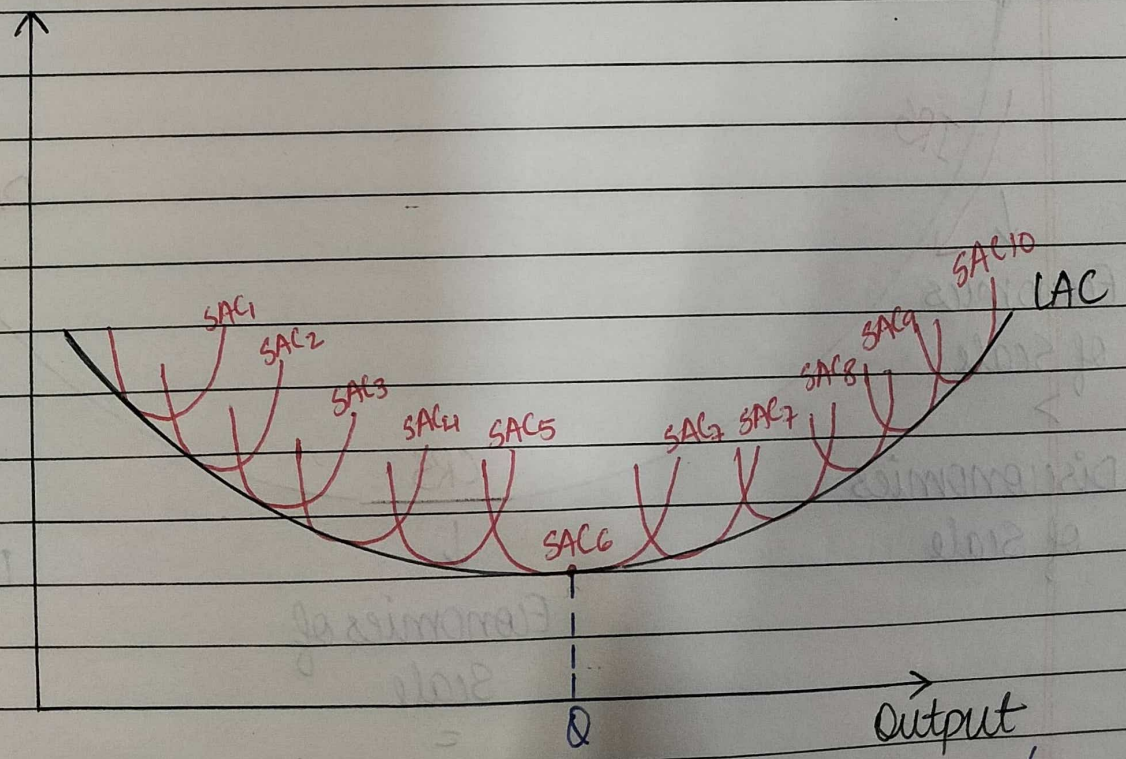
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Short Run Average cost Curve [SAC]



SAC curves are called as 'Plant Curves'

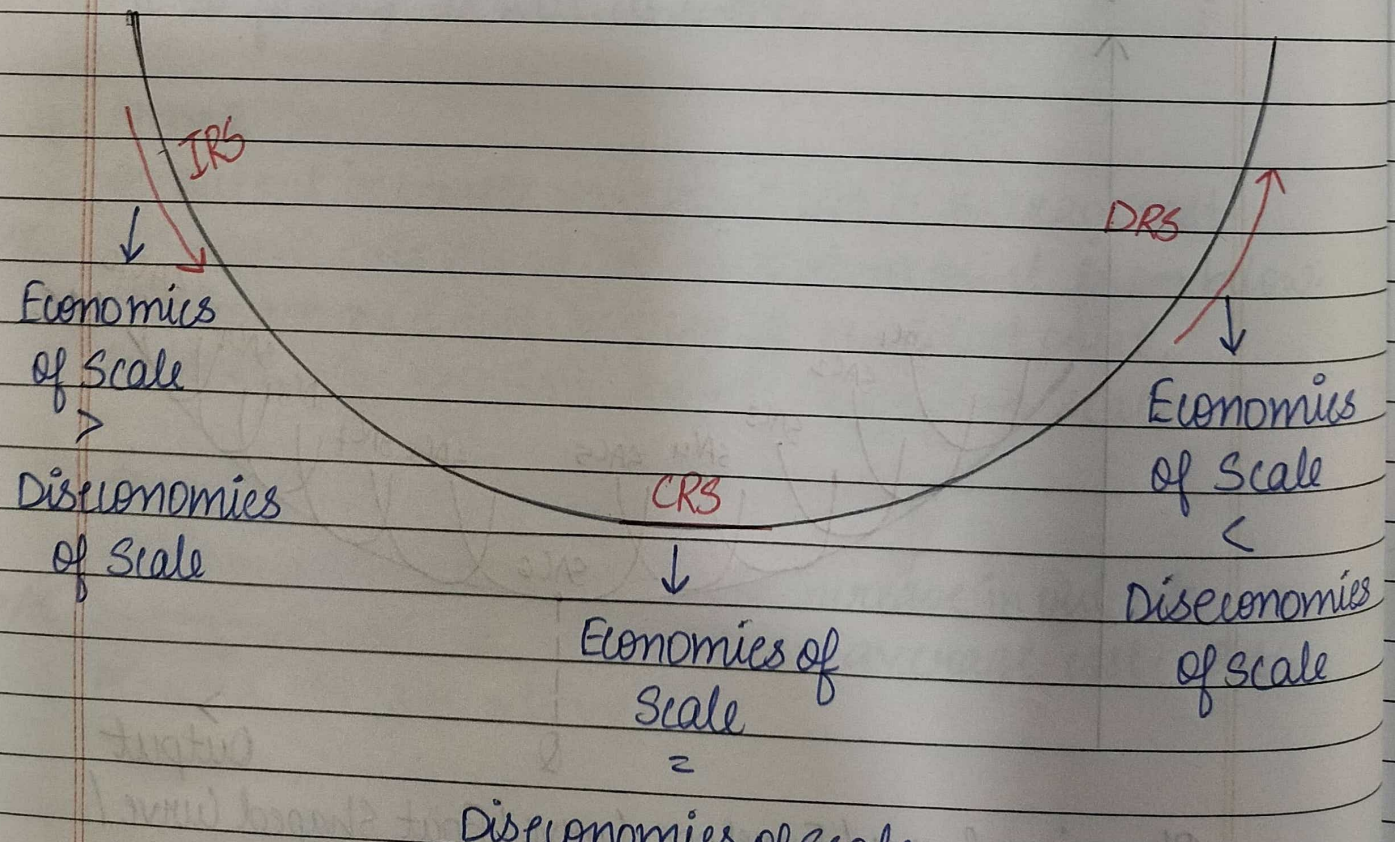
Long Run Average cost Curve [LAC]



- Planning Curve / Envelope Curve / Boat Shaped Curve / Saucer Shaped Curve

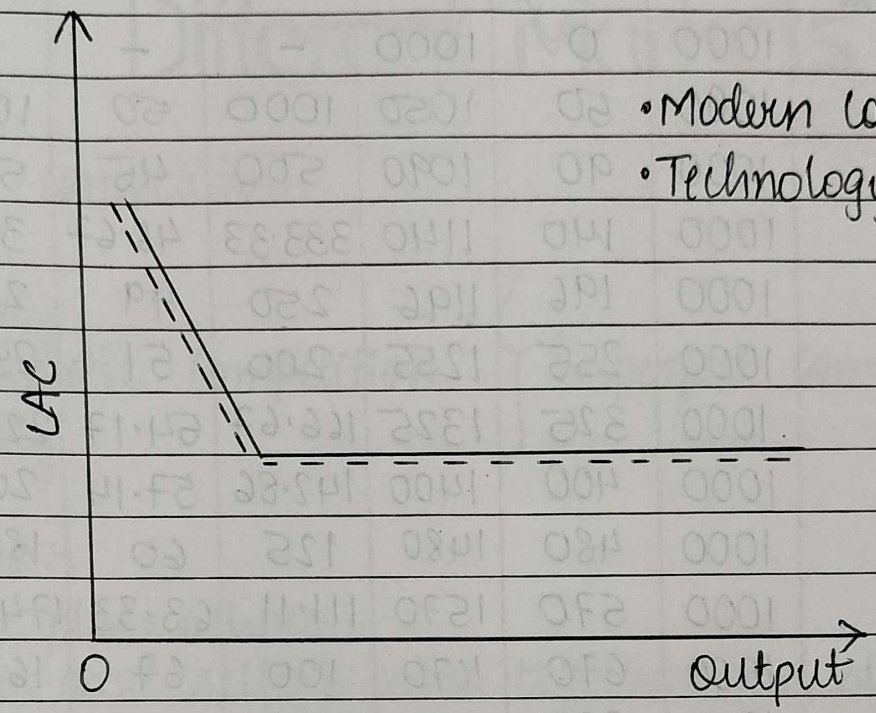
i) Short Run is that period where some factors are fixed whereas in long Run all factors are variable
ii) In long Run firm can move to a bigger plant if he wants to produce more and shift to a smaller plant if he wants to reduce the output.
iii) If production is done at OQ level optimum utilization of plants and machines, more than OQ over utilization plants and machines, less than OQ under utilization of plants and machines.
iv) When LAC falls, it is tangent to the falling SAC and when LAC rises it is tangent to the rising part of LAC

Long Run Average Cost Curve [LAC]



Negative slope falling part of LAC denotes IRS.
Positive slope rising part of LAC denotes DRS.

'L' Shaped cost curve



- Modern cost curve
- Technology changes

Date :

Page No.:

Unit of output	TFC	TVC	TC	AFC	AVC	ATC	MC
0	1000	0	1000	-	-	-	-
1	1000	50	1050	1000	50	1050	50
2	1000	90	1090	500	45	545	40
3	1000	140	1140	333.33	46.67	380	50
4	1000	196	1196	250	49	299	56
5	1000	255	1255	200	51	251	59
6	1000	325	1325	166.67	54.17	220.84	70
7	1000	400	1400	142.86	57.14	200	75
8	1000	480	1480	125	60	185	80
9	1000	570	1570	111.11	63.33	174.44	90
10	1000	670	1670	100	67	167	100
11	1000	780	1780	90.91	70.91	161.82	110
12	1000	1080	2080	83.33	90	173.33	300

Ch2 Theory Of Demand And Supply

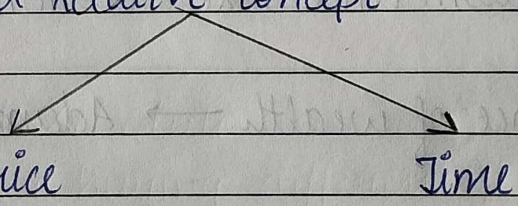
UNIT 1: LAW OF DEMAND AND ELASTICITY OF DEMAND

* Desire + Ability to Pay + Willingness to spend = Demand
(At a given price at a given period of time)

1. Desire
2. Ability
3. Willingness
4. Price
5. Time

} Demand

* Demand = Flow and Relative concept



* Price and Quantity Demanded has an inverse relationship and has a downward or negative slope.

Why Negative slope ?

→

↑ (+) ↓ (-)

(+)(-) = (-) so it is negative

Q. When Qty. Demand comes?
→ Only when it is Price of a commodity then only Qty demand should come.

* Factors / Determinants Affecting Demand

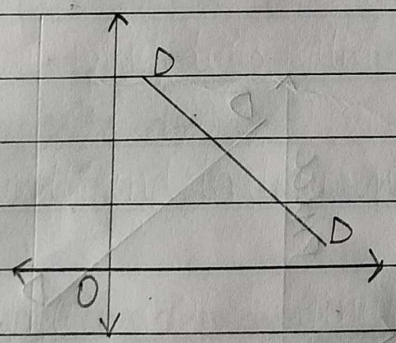
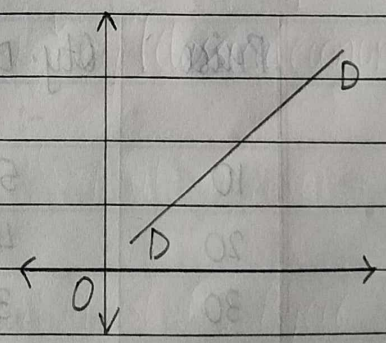
1. Price of a commodity (Most Imp. Factor)
   - ↑P ↓Qty Demand
   - ↓P ↑Qty Demand

2. Income
   - Normal Goods / Luxury Goods
   - Inferior Goods

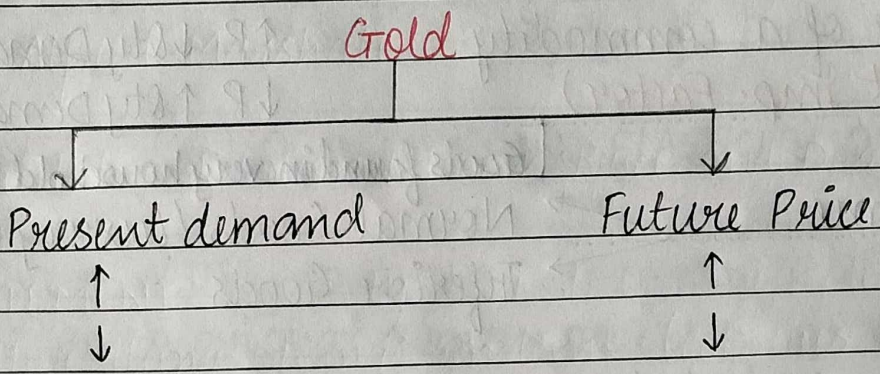
[Goods found in every household (between necessary goods & comfort goods)]

Normal Goods / Luxury Goods = ↑Income ↑Demand
Inferior Goods = ↑Income ↓Demand
↓Income ↑Demand

3. Price of Related goods

Complementary Goods		Substitutes Goods	
Car	Petrol	Pepsi	Coke
↑Price	↓Demand	↑Price	↑Demand
↓Price	↑Demand	↓Price	↓Demand
Inverse Relation		Direct Relation	
			
Downward Slope / Negative		Upward Slope / Positive	

4. Expectation about Future Price

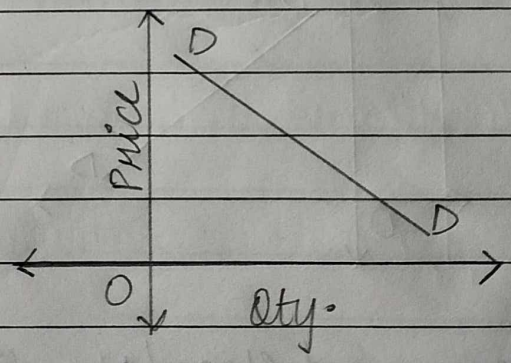


5. Advertisement
6. Distribution of Income
7. Population
8. Credit Facility (Loan)
9. Taste, habit and Fashion
10. Government Tax Policy

* DEMAND SCHEDULE

1. Individual Demand Schedule
When a single buyer buying different quantity of a commodity at a different prices at a point of time.

Price	Qty. Demand
10	50
20	40
30	30
40	20
50	10



2. Market Demand Schedule
Buying different quantity of a commodity at different price at a point of time.

Price	Mr. A	Mr. B	Mr. C	Market Demand (A+B+C)
1	50	60	70	180
2	40	50	60	150
3	30	40	50	120
4	20	30	40	90
5	10	20	30	60

* Horizontal submission of all Individual demand curve gives Market Demand Curve.

* TYPES OF DEMAND

1. Direct demand :- Consumer goods
Eg: Book, Pen, Umbrella, etc.

2. Indirect / Derived demand :- Producer goods or Factors of Production.

3. Composite demand (Multiple uses) :-
Electricity, Water, Wood, Milk

4. Competitive demand :- Substitute goods

5. Joint or Tied demand :- Complementary goods like car and petrol.

Gampati Bappa Morya
Mangal Murti Morya

Date :
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Price will never Remain constant

Higher the price lower the demand, lower the price higher the demand. (2) This called as law of demand (2). Ceterius Peribus higher the demand, Ceterius Peribus lower the demand. (2) This is called as law of demand. (2) Inverse relation downward slope, inverse relation negative slope. (2). This is called as law of demand. (2) Alfred Baba ki Jai!! :)

LAW OF DEMAND

- By Alfred Marshall
- Qualitative Relation between

STATEMENT

"Other things being constant (ceterius Paribus) More Quantity will be demanded at lower price and less quantity will be demanded at higher price.

* Why demand curve slopes downward ?

1. Law of DMU
2. Various uses of commodity
3. Income effect

Price ↓ (100 / 50) → save ↑ Qty

Law of substitution effect and Income effect both concepts are given by HICKS And ALLEN

Imp **

4. Substitution effect

Pepsi	Coke
50/-	50/-
80/-	50/-

Price ↑ Demand ↓

Income effect + Substitution effect = Price effect

LAW OF DEMAND

- By Alfred Marshall
- Qualitative Relation between Price and Demand

STATEMENT

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Imp ★★

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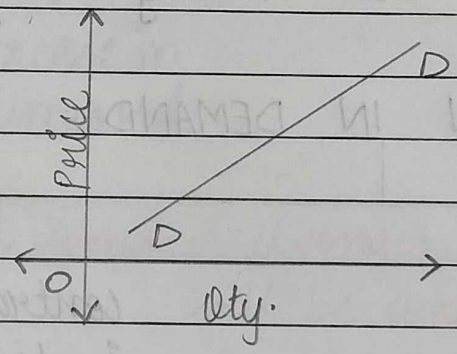
* If I am wearing a watch and then saw the same watch in other's hand then I don't want to wear that watch will buy new watch which is again a unique.
In short I want to be unique from others.

5. Number of consumers :- By giving offers, discount, etc

* EXCEPTIONS TO LAW OF DEMAND

Against the law

↑ Price ↑ Demand
↓ Price ↓ Demand



→ Exceptional demand curve

1. Giffen Goods :- Inferior goods
↑ Price ↑ Demand

Giffen Good → Robert Giffen
Prestige Goods → Veblen

*

2. Conspicious Goods / Prestige / snob / Veblen (T.) Goods :-
appeal / behaviour

3. Future Expectations About Price :-

↑ Demand ↑ Future
↓ Demand ↓ Future

4. Ignorance Effect :-

5. Consumer Price Illusion :-

Q. Difference between price illusion and speculative motive

→ Price illusion ⟶ to save money
Speculative motive ⟶ to earn profits

Date :
Page No.: 24

to copy others

6. Demonstration Effect / Bandwagon Effect / Conspicuous Necessity (copying others) :-

7. Impulsive purchase :-

8. Demand for Necessaries :-

9. Speculative motive :-
Eg: Price of shares

Eg: Tata steel → going to reach 135

₹105 × 100 qty
₹115 × 100 qty
₹129 × 1000 qty

direct / upward / positive

* VARIATION IN DEMAND

Expansion in demand

(Rise in demand due to fall in price)

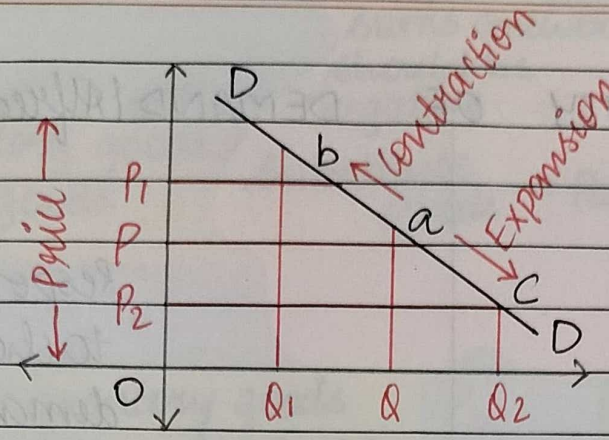
Contraction in demand

(Fall in demand due to rise in price)

{ When demand changes to Price only }
{ other factors will Remain constant. }

* Also known as change into Qty demand / Movement along the same demand curve.

Slope ek hi curve per hai so the movement is along the same demand curve.



Upward movement
Contraction

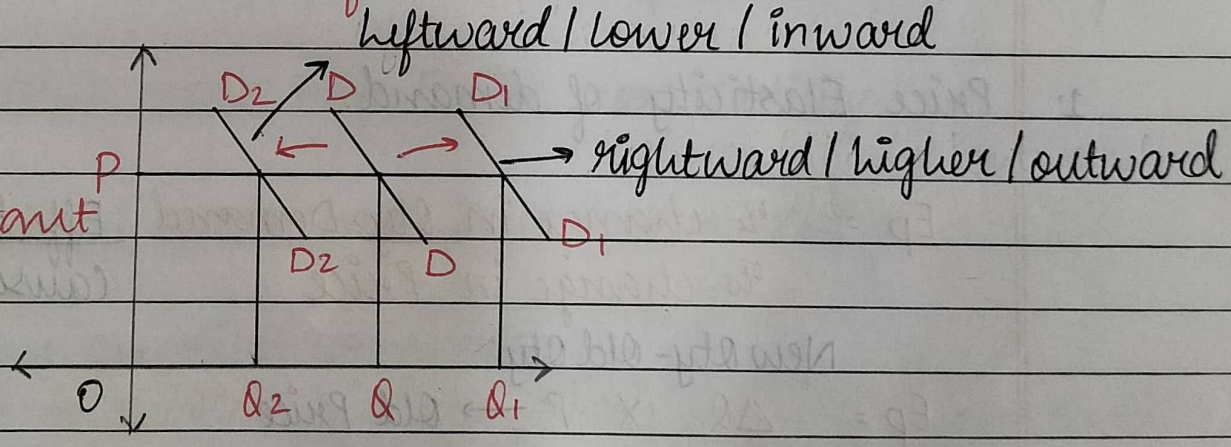
Downward movement
Expansion

* CHANGE IN DEMAND

- Increase in demand
- Decrease in demand

{When demand changes due to other factors price will be constant.}

Also known as Shift in Demand Curve



Short period / complementary goods → inelastic
long period / substitute goods → elastic

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ELASTICITY OF DEMAND (Alfred Marshall)

- Quantitative Relationship Between Price and Demand
  - P.Y Price - 15
    C.Y Price - 20 ↓ Change
    (Changes / fluctuates)
- Responsiveness to change in demand due to price and other factors
  - Eg: Basic necessecties Irrespective of the price
    (no change)

* TYPES OF ELASTICITY OF DEMAND

1. Price Elasticity of demand

$$Ep = \frac{\%\ \text{change in Qty. Demand}}{\%\ \text{change in Price}}$$ Effect / Cause

New Qty - Old Qty

$$Ep = \frac{\Delta Q}{Q} \times \frac{P}{\Delta P}$$

Old Qty ← Q; P → Old Price; ΔP: New price - Old price

2. Income Elasticity of demand

$$Ey = \frac{\%\ \text{change in Qty. Demand}}{\%\ \text{change in Income}}$$

$$Ey = \frac{\Delta Q}{Q} \times \frac{Y}{\Delta Y}$$

Short period / complementary goods → inelastic
long period / substitute goods → elastic

Date :
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ELASTICITY OF DEMAND (Alfred Marshall)

- Quantitative Relationship Between Price and Demand
- Responsiveness to change in demand due to price and other factors

P.Y → 100 ↓
C.Y → 85
decrease

- Elastic Demand (changes / fluctuates)
- Inelastic Demand (no change)

* TYPES OF ELASTICITY OF DEMAND

1. Price Elasticity of demand

$$E_p = \frac{\%\text{ change in Qty. Demand}}{\%\text{ change in Price}}$$ Effect / cause

$$E_p = \frac{\Delta Q}{Q} \times \frac{P}{\Delta P}$$

ΔQ = New Qty − Old Qty; Q ← Old Qty; P → Old Price; ΔP = New price − Old price

2. Income Elasticity of demand

$$E_y = \frac{\%\text{ change in Qty. Demand}}{\%\text{ change in Income}}$$

$$E_y = \frac{\Delta Q}{Q} \times \frac{Y}{\Delta Y}$$

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Numerical sums if complementary sums answer should be negative

Substitute goods → Positive

3. Cross Elasticit

Complementory goods

substitute goods

% ch

oduct A

oduct B

For complementory goods
Price Car ↓ Demand Petrol ↑

P_b

ΔP_b

For substitute goods
Coke price ↑ Demand for pepsi ↑

4. Advertisement Elasticity of demand

$$Ea = \frac{\%\text{ change in Qty D}}{\%\text{ change in Adv. exp.}}$$

When elasticity is given without any qualification then it is always Price Elasticity demand.

* Complementary goods have negative cross elasticity

* Substitute goods have Positive cross elasticity.

* Unrelated goods have Zero cross elasticity.

** When a question comes as →

1. What is elasticity of demand? (It has asked only for elasticity)
→ Explain price elasticity, its formula and the formula in numerical.
2. Types of elasticity of demand? (It has asked only for elasticity)
→ Explain types of price elasticity.

Cross Elasticity of demand

$$EC = \frac{\%\text{ change in Qty D of Product A}}{\%\text{ change in Price of Product B}}$$

$$EC = \frac{\Delta Qa}{Qa} \times \frac{P_b}{\Delta P_b}$$

For substitute goods
Coke price ↑ Demand for Pepsi ↑

Advertisement Elasticity of demand

$$Ea = \frac{\%\text{ change in Qty D}}{\%\text{ change in Adv. exp.}}$$

When elasticity is given without any qualification then it is always Price Elasticity demand.

Complementary goods have negative cross elasticity

Substitute goods have Positive cross elasticity.

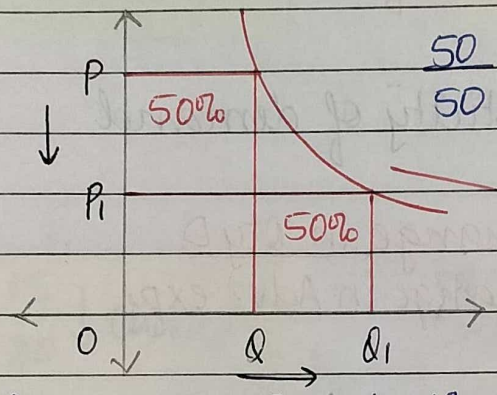
Unrelated goods have Zero cross elasticity.

When a question comes as →
What is elasticity of demand? (It has asked only for elasticity)
Explain price elasticity, its formula and the formula in numerical.
Types of elasticity of demand? (It has asked only for elasticity)
Explain types of price elasticity.

* Types of Price Elasticity of Demand

1. Unitary Elastic Demand ($e = 1$) Also known as uniform elastic

% change in Qty. demand is equal to % change in Price.

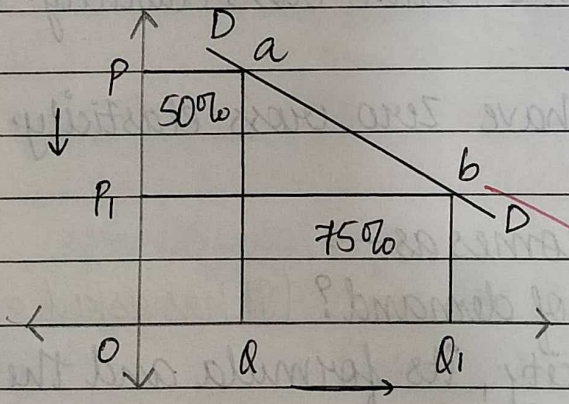


$\frac{50}{50} = 1$

(Normal goods)
Rectangular Hyperbola (represents equality)

2. Relatively Elastic Demand Curve (more elastic) ($e > 1$)
→ Also known as High elastic demand

% change in Qty. demand is greater than % change in Price.



$\frac{75}{50} = >1$

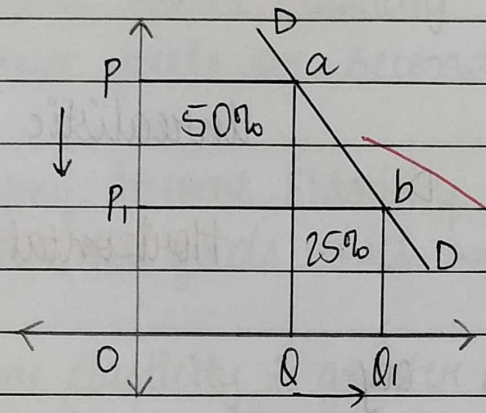
(Superior goods / Branded / luxury goods)
Flatter Slope

** When a question comes as →
1. Explain elastic demand
→ Explain relatively / more / high elastic demand.

→ Also known as low elastic demand

3. Relatively Inelastic demand / less elastic demand ($e < 1$)

% change in Qty. Demand will be lesser than % change in price



$\frac{25}{50} = < 1$

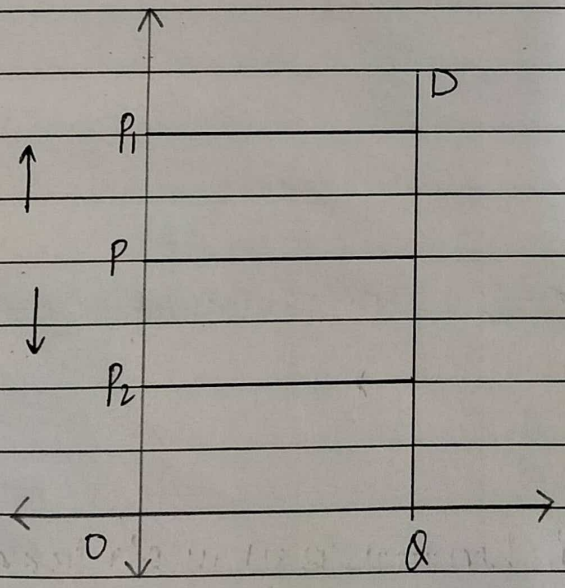
(Necessories or Perishable goods)

Steeper slope

is imaginary always

4. Perfectly Inelastic demand ($e = 0$) (No change)

Slight change in a price of a commodity leads to no change in Qty. demand.

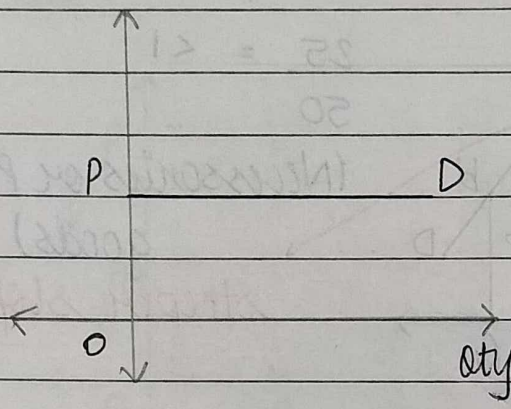


Life savings drugs match box, salt

Vertical straight line

5. Perfectly Elastic Demand ($e = \infty$)
(Imaginery, doesn't exists in R.W)

Slight change in a price leads to infinite change in Qty. demand



Unrealistic concept

Horizontal line

* Types of Income Elasticity of Demand

1. Zero Elasticity $e_y = 0$
eg:- salt, newspaper, life saving drugs, matchbox.

2. Negative Income Elasticity $e_y < 0$
Inferior goods or second hand products

3. Unitary Income Elasticity $e_y = 1$
Eg:- Normal goods which we use on regular basis.

4. Income elasticity is greater than 1 $e_y > 1$
Eg:- Superior goods / luxurious goods.

5. Income elasticity less than 1 $e_y < 1$
Eg:- Necessaries or Perishable goods

* Methods for measuring elasticity of demand

1. Ratio or percentage Method
(same as Price Elasticity of Demand)

2. Total Outlay Method

One men's expenditure is other men's revenue

- Expenditure Method
  - Pocket se kitna paisa gaya. [TO]
- Revenue Method
  - Alfred Marshall

Price ↑ or ↓ Total outlay remains same	Case	Price	Qty	TO (Total Outlay)	Elasticity
₹10 X 12 = 120 } Jab price low hua 8 X 15 = 120 } tabhi bhi same demand hua			12	120	e = 1
			15	120	Unitary elastic
↑P ↓TO ↓P ↑TO Inverse Relation Price kam to → zyda			12	120 ↑	e > 1
			20	160 ↑	Elastic Demand
↑P ↑TO ↓P ↓TO Direct Relation Price kam to kam			12	120	e < 1
			14	112	Inelastic Demand

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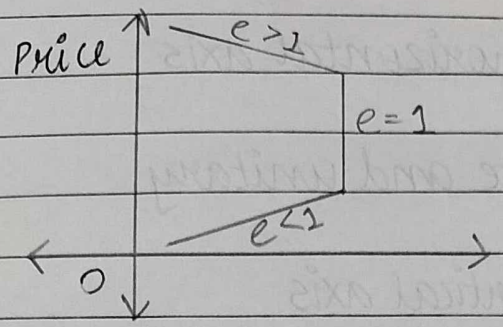
Methods for measuring elasticity of demand

Ratio or percentage Method
(same as Price Elasticity of Demand)

Total Outlay Method

- Expenditure Method
  - Pocket se kitna paisa gaya. TO
- Revenue Method
  - Alfred Marshall

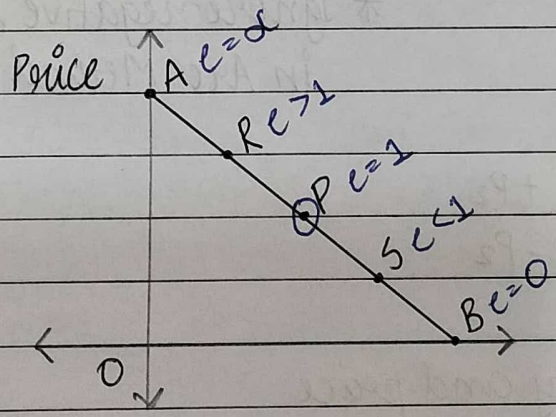
Case	Price	Qty	TO (Total Outlay)	Elasticity
1	10	12	120	e = 1
	8 ↓	15	120	Unitary elastic
↑TO				
2	10	12	120 ↑	e > 1
	8 ↓	20	160	Elastic Demand
3	10	12	120	e < 1
	8 ↓	14	112	Inelastic Demand



* Vertical straight line parallel to Y-axis in total exp. method indicates unitary elastic demand.

3. Point or Geometric Method

$$E^d = \frac{\text{Lower segment}}{\text{Upper segment}} = \frac{L}{U}$$



$Ed\left[\frac{dq}{dp} \times \frac{P}{q}\right]$ Demand in (−) Supply in (+)

When change in the price is very small, neglible then this method will be used

Eg: computer price changed from 50,000 to 50,100

negative

* Downward sloping straight line linear demand curve touching both the axis.

e = 1

e>1	PB = 2 / 2	SB = 1 / SA 3	RB = 3 / RA 1	O / BO	AB / O
e<1					
e=0	e=1	e=<1	e=>1	e=0	e=∞

e=∞

X-axis / horizontal / output axis → X-axis

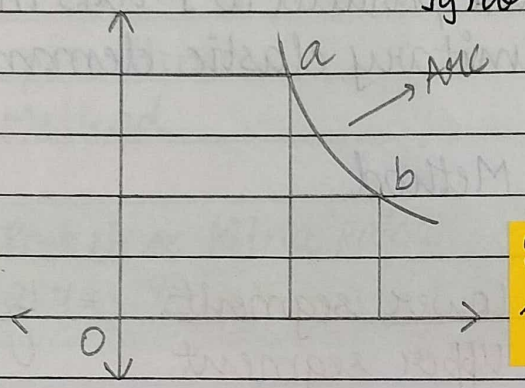
Y-axis / Vertical / Price axis → Y-axis

Point which lies on horizontal axis

Point which lies infinite and unitary

Point which lies on vertical axis

4. Arc Elasticity Method (Answer should always be in plus Ignore negative sign)



When change in the price is very large and substantial?

In this method, the answer should always be positive.

* Ignore negative sign in Arc Method

$$Ed = \frac{Q_1 - Q_2}{Q_1 + Q_2} \times \frac{P_1 + P_2}{P_1 - P_2}$$

Q_1, P_1 → Old quantity and price
Q_2, P_2 → new quantity and price

* Factors Affecting Elasticity of Demand

1. Availibility of substitutes

Substitutes ⟶ elastic
No substitutes ⟶ Inelastic

2. Position of commodity in consumer's budget

Occupys small part of our Budget - Inelastic
eg:- matchbox
Occupies large part of our Budget - Elastic
eg:- Transportation charges.

3. Nature of a commodity

Necessities - Inelastic
Luxuries goods - Elastic

4. Number of uses

Multiple use ⟶ Elastic
Single use ⟶ Inelastic

5. Time period

Short Time - Inelastic
Long Time - Elastic

Date :
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6. Consumer Habits

Addicted / Habits → Inelastic
No such habbits → Elastic

7. Joint demand

Complementary goods → Inelastic
They have low elasticity

*Imp. 8. Price Range

Very high price product and a very low price product — Inelastic demand
eg:- Car, milk

Medium Price Product → Elastic demand
Shoes, Clothes, Accessories

UNIT 2: Consumer Behaviour

Consumer Behaviour
↓
Wants

"All desires, tastes, motive, need of human beings are called as wants."

* Wants are unlimited
* Wants are recurring
* Wants are competitive
* Wants are complementary
* Wants are changing with time, place, person.

CLASSIFICATION OF WANTS

1. Necessaries → (Basic wants)
2. Comforts → A.C, Two-wheeler, Chair.
3. Luxuries → Lavish Birthday, Rolex Watch.

* Utility → Abstract term

1. Want satisfying power of a commodity
2. Capacity of a commodity to satisfy a human want.

Want means wish to have something

Desire means movement you put efforts it becomes desire.

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* FEATURES OF UTILITY

1. Subjective concept :-
   Differs from person to person

2. Differs from usefulness :-
   Commodity may be given utility but not useful for health.
   Eg:- Alcohol

3. Relative concept
   Related to place and time.

4. Depends on intensity of want

5. Differs from satisfaction

6. May not always give you Pleasure.
   Injections, Medicine.

* TYPES OF UTILITY

1. Place Utility :- Transport

2. Time Utility :- Warehouse

3. Form Utility :- Manufacturing process

4. Service Utility :- Professional services

5. Knowledge Utility :- Internet, Mobile

6. Possession Utility :- Transfer of ownership

* LAW OF DIMINISHING MARGINAL UTILITY (1 commodity)

MR. GOSSEN'S 1st LAW | ALFRED MARSHALL (POE 1890) | CARDINAL APPROACH

2nd law → Equi marginal utility → 3 commodity

* STATEMENT

"Other things being constant
Additional benefit which a person derives from increase in a stock of thing diminishes with every increase in a stock that he already has."

Utils

Total utility, TU = ΣMU

Utility derived by a consumer after consuming all units of a commodity.

Marginal utility MUn = TUn − TUn−1

OR

Utility derived by a consumer after consuming an additional unit of a commodity OR Addition made to total

Use second formula for sums

MU = ΔTU → Change in total utility
ΔQ → Change in total quantity

No. of units	TU	MU	
1	10	10	→ Highest satisfaction
2	18	8	
3	22	4	
4	22	0	→ Full satisfaction
5	20	−2	→ Disutility / dissatisfaction

* Shape of Total Utility → Inverted U shape of TU
* Marginal utility is also known as → Demand curve

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* ASSUMPTIONS

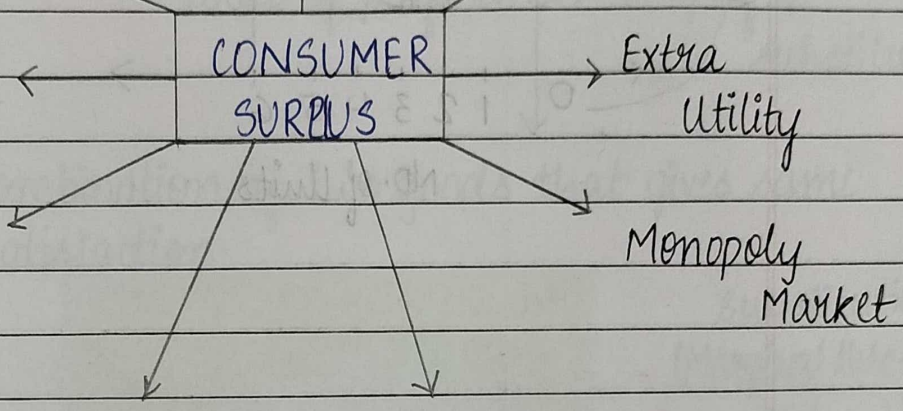
1. Homogenity
2. Single Use
3. Rationality
4. Continuity - It should be consumed back to back without any time gap
5. Reasonability → Shape, size

** 6. M.U. of money constant
M.U. for rich people is less

* CONSUMER SURPLUS (Not completely Realistic) (5 Marks)

Demand curve/Also known as MU/ Market Price /MRP/

Based on law of DMU — CS = Price Ready to Pay − Price actually paid



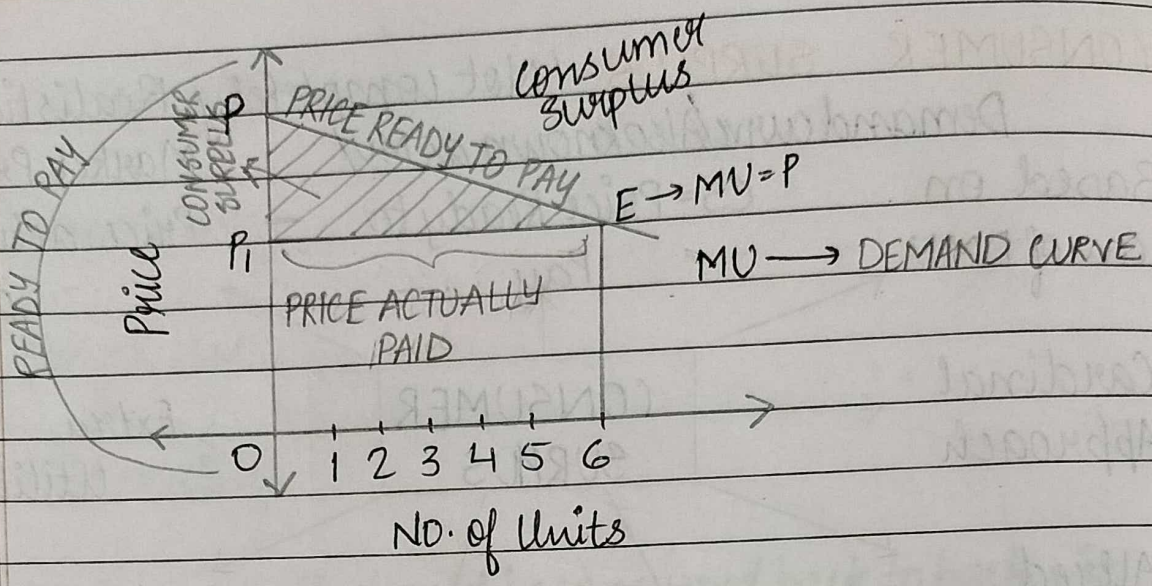
* 2 mcq's may come

No. of units	Ready to Pay	Price actually Paid	Consumer surplus	
1	30	20	10	MU > P
2	28	20	8	
3 ↑	26 ↓	20	6	
4	24	20	4	
5	22 ↓	20	2	
6	20	20	0	MU = P
7	18	20	-2	MU < P

Also called as M.U. as it gives additional utility.

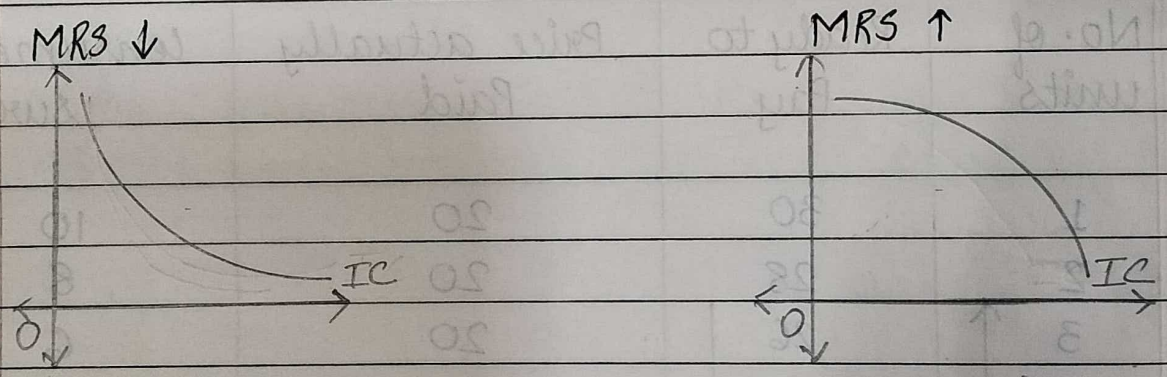
Also known as Money

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The Relation is inverse
∴ There's a downward sloping curve.

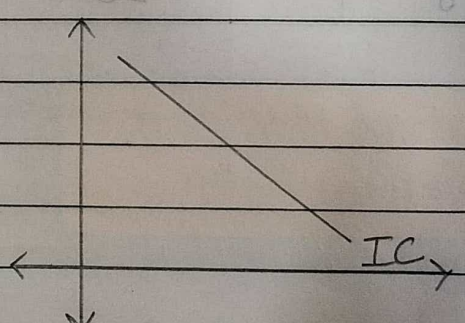
Area above the price line and below the demand curve is known as Consumer Surplus.



Convex Curve

Concave Curve

MRS [constant]



Straight line

मुझे फ़रक नहीं पड़ता

A person/consumer is neutral

INDIFFERENCE CURVE ANALYSIS

- Hicks and Allens
- Ordinal Approach (scale of preferance)
- Normal Goods (imperfect substitution) — Also called as close substitutes

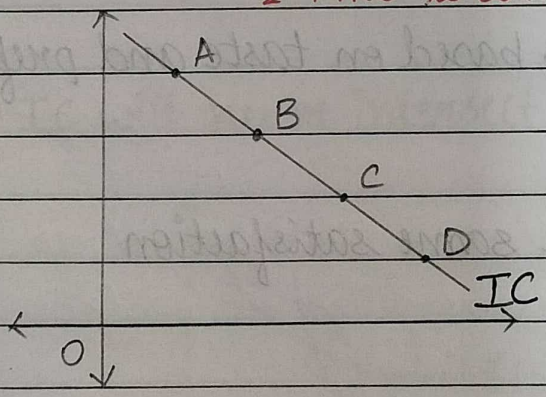
STATEMENT

Various combination of two goods that gives same level of satisfaction.

Ice-cream Chocolate (Marginal Rate of substitution)

Combination	Product X	Product Y	MRS (xy)
A	1	12	-
B	2	6	6
C	3	4	2
D	4	3	1

Assumptions:- 1. Only two goods
2. MRS is diminishing



Inverse Relation → Downward slope (convex) (MRS is decreasing)

3 names:- 1) Transivity (movement) *1
2) Trade off (sacrifice)
3) Substitution

Point on the curve → Locus

* Slope of I.C

MRS = MUx / MUy

* Indifference curve:-
Downward, convex, MRS fall

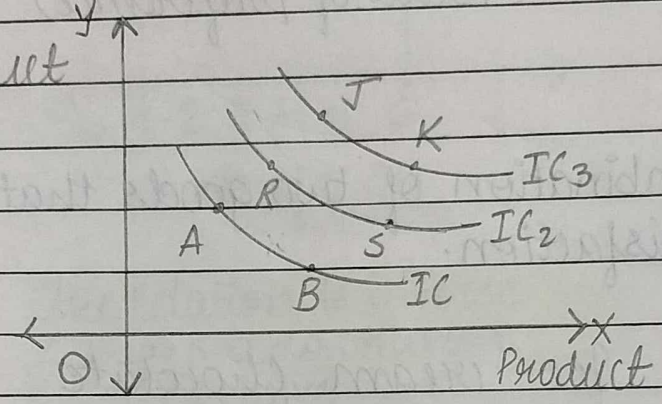
*1 Movement from A to B, B to C, C to A has 3 names

Q. Reason behind falling MRS → It is an assumption

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* INDIFFERENCE MAP

A set or family of indifference curve gives indifference map.



* The curve which is far from the origin = Higher satisfaction

* The curve which is near from the origin = Lower satisfaction

* Indifference map is based on taste and preference of consumer.

* Point on same curve same satisfaction

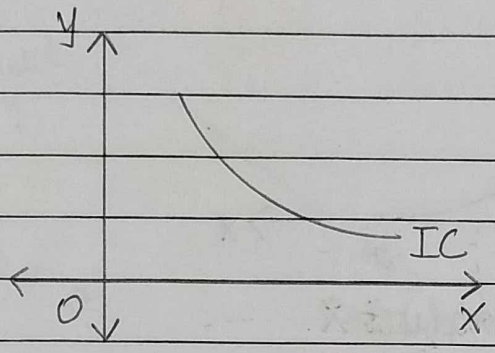
eg: A = B
R = S
J = K

* Point on the different curve different satisfaction

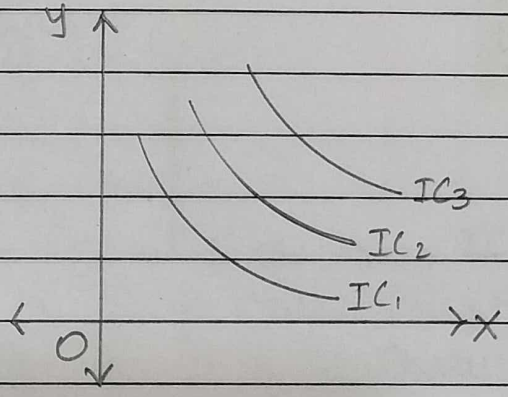
eg: A ≠ R ≠ J
B ≠ S ≠ K

* Properties of IC

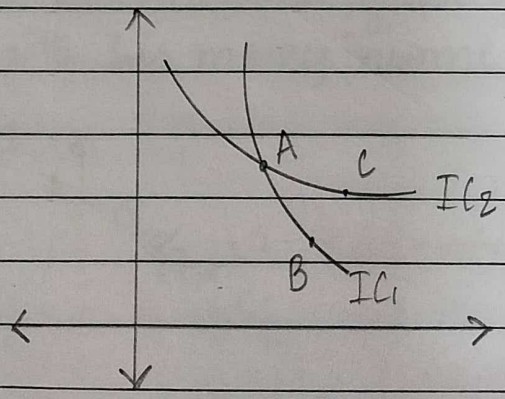
1. IC is downward sloping and convex



2. Higher IC gives higher satisfaction



3. Two IC will never intersect each other

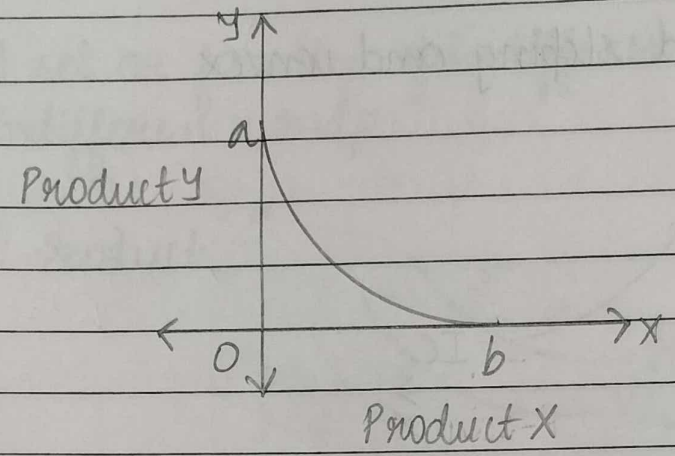


A = B
A = C
B ≠ C

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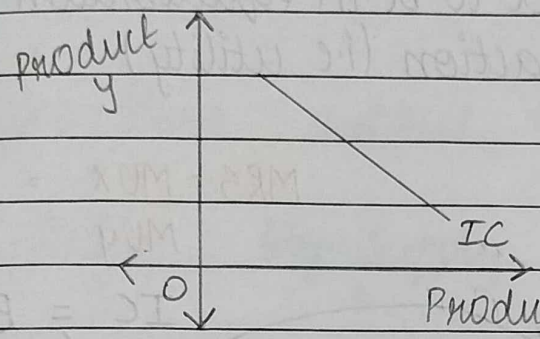
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4. IC will never touch the axis



* EXCEPTIONS TO IC (Unrealistic)

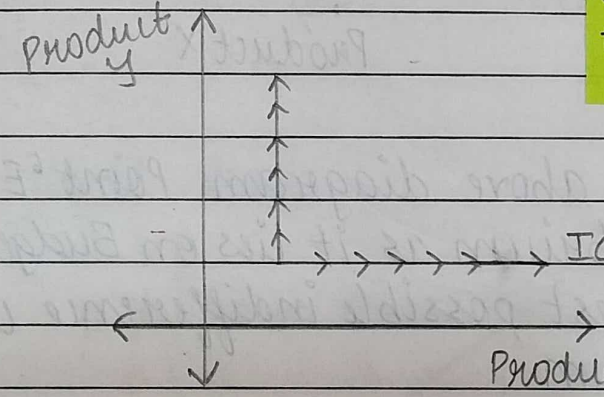
1. Perfect substitutes MRS is constant



P.S. has downward sloping

2. Perfect complementary MRS is zero

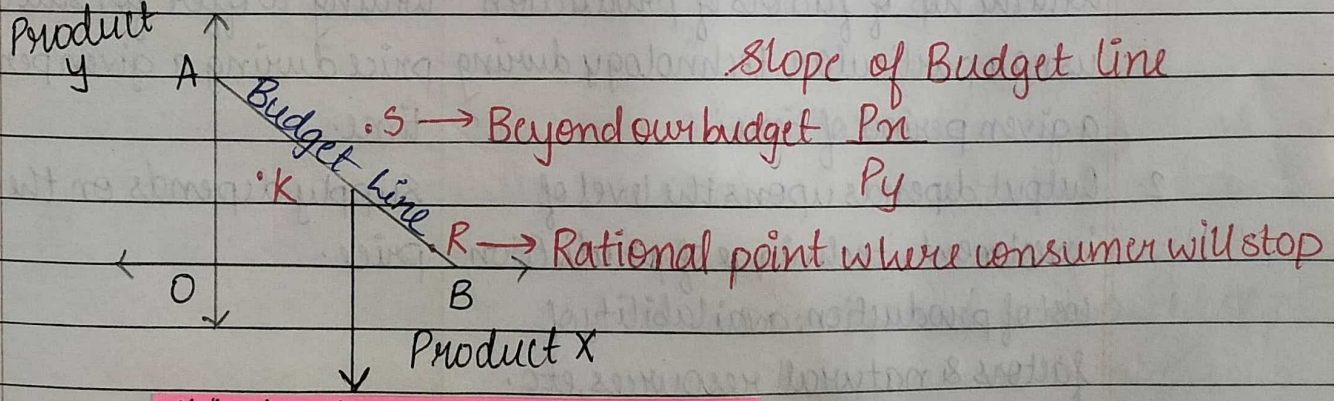
If I have 10 right pair shoes then I will also increase the left pair shoe.



L shape
Right Angle

* BUDGET LINE / PRICE LINE

Various combinations of two goods which a consumer can buy with his money income



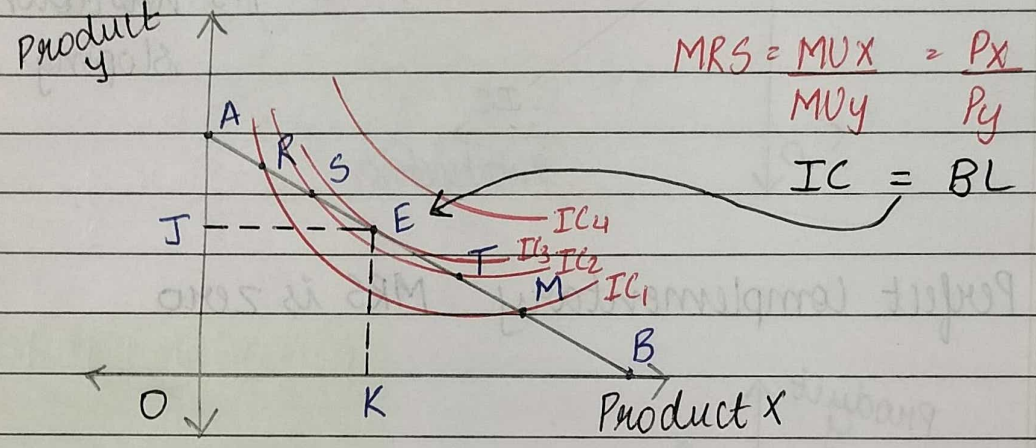
Slope of Budget line $\frac{Px}{Py}$

This line is called as – Downward sloping constant budget line touching both axis.

* CONSUMER EQUILIBRIUM

* It is a point where satisfaction is equal to budget.

* The consumer is said to be in equilibrium when he maximizes his satisfaction (i.e utility)



So from the above diagram Point 'E' is the point of equilibrium as it lies on Budget line and also on highest possible indifference curve. IC_3 gives maximum.

Output	Stock
1. Output refers to the total quantity of a commodity that a producer produces with the help of factors of production using a particular technology during a given period of time.	Supply refers to the quantity of a commodity which producers are willing to offer for sale at a given price during a given period of time.
2. Output depends upons the level of investment, technique of production, cost of production, availability of factors & natural resources, etc.	Supply depends on the stock & price.
3. Output forms the basis of stock.	stock forms the basis of supply.
4. Output is a function of input.	Supply is a function of stock.

* Anything which is available with seller to sell is called Stock.

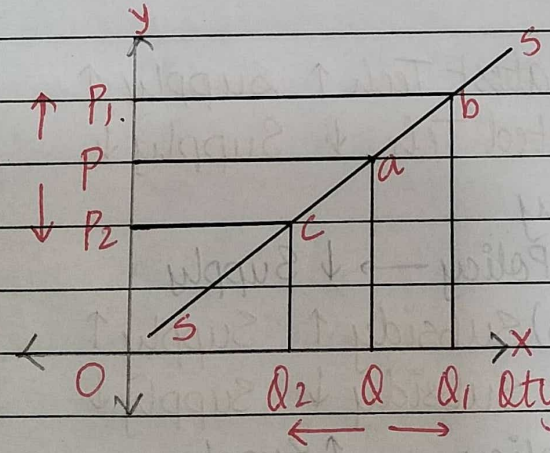
Flow concept
Demand Supply Income

* SUPPLY → Anything which is offer for sale in the market at a given price at a given point of time.

- Relative concept :- Price, Time
- Flow concept
- Production < output < stock < supply

Price ↑ ↓ Qty. Supply ↑ ↓

- Direct Relationship between Price and Quantity Supply.
- Upward slope



Upward / Positive slope

* DEFINITION

* Supply is defined as a Qty. of a commodity which is offered for sale in the market at a given price at a point of time.

* "Producer's plan to sell at a given price at a point of time."

* Producer is able and willing to offer.

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* Factors / Determinants Affecting Supply

1. Price of a commodity
   ↑P ↑D·S
   ↓P ↓D·S

2. Price of Related goods

Shirt	T-shirt
500 ↓	400 ↑
550	600

Complementory goods
When price of pen↑ supply of ink↑ (Direct relation)
Substitute goods
When price of related commodity↑ supply of main commodity↓ (Inverse relation)

3. Cost of Production
   ↑ COP ↓S
   ↓ COP ↑S

4. Technology
   Latest Tech ↑ Supply ↑
   Outdated Tech ↓ Supply ↓

5. Government Policy
   Unfavourable Govt. Policy ⟶ ↓ Supply
   Tax↑ S↓ (Help) Subsidy ↑ Supply ↑
   Tax↓ S↑ Subsidy ↓ Supply ↓
   Favourable Govt. Policy ⟶ ↑ Supply

6. Time
   Short Period ⟶ Less supply
   Long Period ⟶ More supply

7. Number of firms
   Monopoly ⟶ Less Supply
   Competition ⟶ High Supply

8. Natural Factors

Favourable N·F → ↑ Supply

UnFavourable N·F → ↓ Supply

* LAW OF SUPPLY (Qualitative relation)

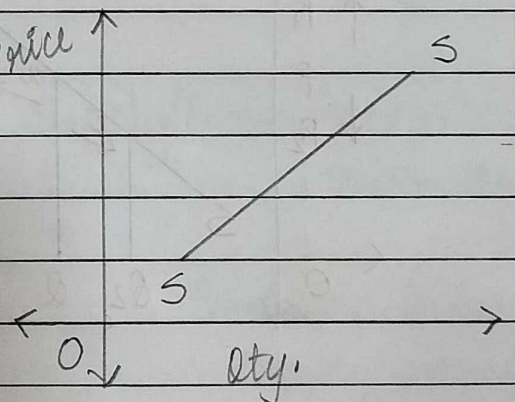
- Alfred Marshall POE (1890)
- Direct Relationship between Price and Qty. Supply

STATEMENT

Other things being constant

"More quantity will be supplied at higher price and less quantity will be supplied at lesser price."

Price	Qty.
10	60
20	70
30 ↑	80 ↑
40	90
50	100



Gompati Bappa Morya
Mangal Murti Morya

Higher the price higher the supply, lower the price lower the supply. This is called as Law of Supply (2) Ceterius Peribus higher the supply, ceterius peribus lower the supply. (2). This is called as Law of supply (2). Direct relation upward slope, direct relation positive slope (2). This is called as law of supply (2)

Alfred Baba ki Jai!

VARIATION IN SUPPLY

Expansion in supply

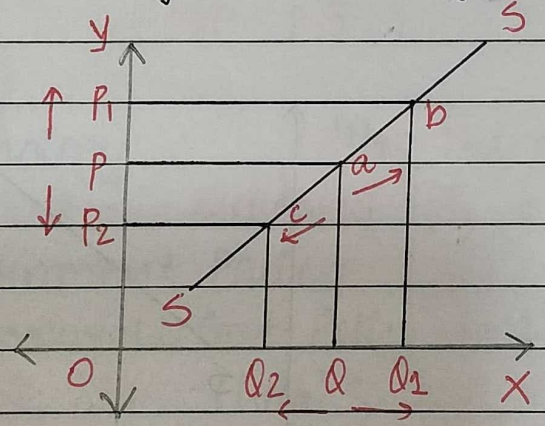
More qty. is supplied at high price

Contraction in Supply

Less qty. is supplied at low price.

{When supply changes due to Price only other factors are kept constant.}

{Change in qty. supplied or movement along same supply curve}



Upward movement
↓
Expansion (a → b)

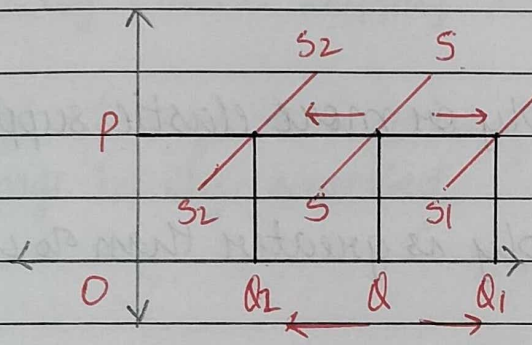
Downward movement
↓
Contraction (a → c)

CHANGE IN SUPPLY

- Increase in supply
- Decrease in supply

{When supply changes due to other factors, Price will be constant}

Shift in Supply Curve



Rightward Shift

* Elasticity Of Supply / Responsiveness to change in supply due to price

- Elastic: If I am able to supply produce more → Elastic supply
- Inelastic: If I am able to supply produce less → Inelastic supply

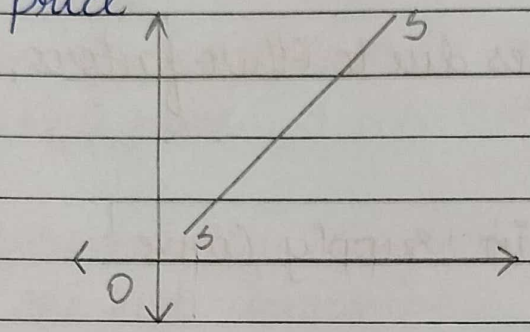
Price elasticity of supply = % change in Qty. Supply / % change in Price

$$EC = \frac{\Delta Q}{Q} \times \frac{P}{\Delta P}$$

* TYPES OF PRICE ELASTICITY OF SUPPLY

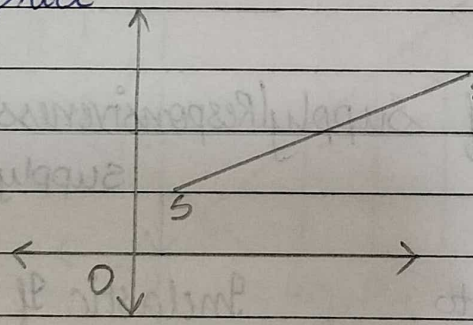
1. Unitary Elastic Supply $es = 1$

% change in Qty. supply is equal to % change in price



2. Relatively Elastic supply or more elastic supply

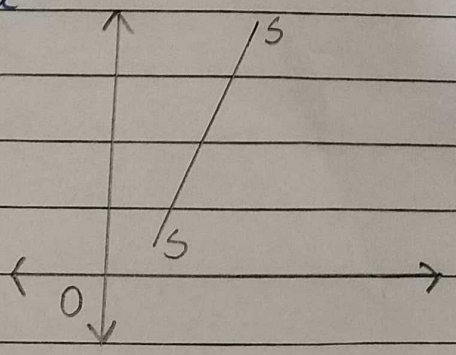
% change in Qty. supply is greater than % change in price



Flatter Slope

3. Relatively Inelastic supply / less elastic supply $es > 1$

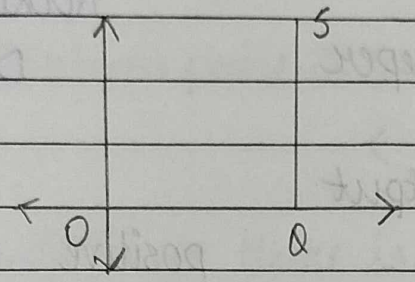
% change in Qty. supply is lesser than % change in price.



Steeper Slope

4. Perfectly Inelastic supply es = 0 (no change)

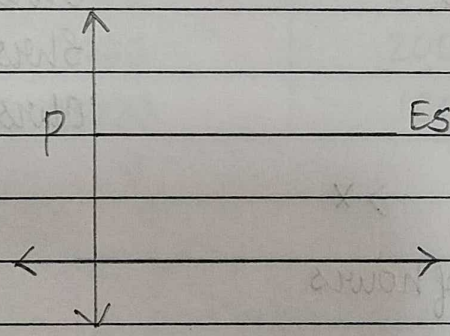
Slight change in price leads to no change in Qty. supplied.



Eg: Land,
Perishable goods,
Rare articles

5. Perfectly Elastic Supply Es = α

Slight change in a price of a commodity leads to infinite change in Qty. supplied



Horizontal line

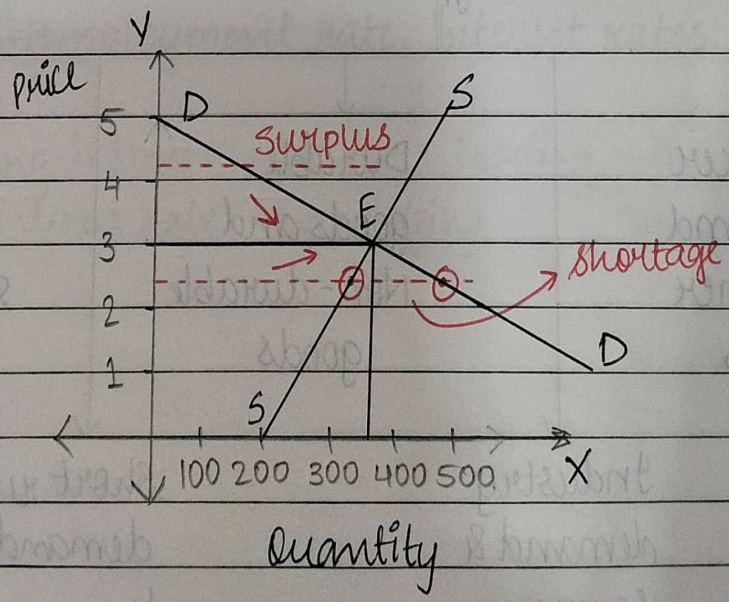
** (V.V.IMP) EQUILIBRIUM PRICE

* It is that price where quantity demand = Quantity supply.

* Equilibrium price is also known as Market clearing price.

* In equilibrium there is neither shortage nor surplus.

Price	Qty. Demand	Qty. supply	Effect on price
5	100	500	↓ Price (falls)
4	200	400	
3	300	300	Equal
2	400	200	↑ Price (Rises)
1	500	100	



Date :
Page No.:

* DEMAND FORECASTING

TYPES OF FORECASTS

- **Macro level** → General economic environment
- **Industry level** → Concerned with the demand of Industry's product
- **Firm level** → Forecasting the demand for a particular firm's product

* DEMAND DISTINCTIONS

Types

- Producer goods and consumer goods
- Durable goods and Non-durable goods
- Derived demand & Autonomous demand
- Industry demand & Company demand
- Short run demand long run demand

Concurrent

* COINCIDENTAL INDICATOR

It has a direct relation. They will change along with the economic changes (simultaneously)
Eg:- GDP, Inflation, Retail sales, Personal Income, Industrial Production

* LEADING INDICATORS

All those indicators which will change before the economy changes.
Eg:- Stock Price, Profit margin, Residential investment.

* LAGGING INDICATOR

All those indicator which will change after the economy changes.
Eg:- Unemployment rate, Interest rates,

Housing interest rate → Leading
Only interest rate → Lagging

Date :
Page No.:

* DEMAND FORECASTING

METHODS OF

- Survey of Buyer's Intention
  - Complete Enumeration method
    - Asking all
  - Enduse method
    - Burdern is put on customers
  - sample survey method
    - Asking some of them
- Collective opinion method
  - Also known as sales force opinion method or grass root approach
    - It differs as it is an subjective concept
      - Changes from place to place
- Expert opinion method
  - Also known as Delphi technique by Olaf Helmer
    - Expertise and less expensive

DEMAND FORECASTING

- Statistical methods
  - Trend Projection method (Classical method)
    - Graphical method
      - Free hand Projection
        - Simple, least, expensive
    - Fitting trend equation
      - Least square method
        - Assumptions taken on past rate
  - Regression analysis
- Controlled Experiments
  - Market Experiments
- Barometric methods of forecasting
  - 1) Coincident
  - 2) Leading
  - 3) Lagging Indicators

Ch4 Price Determination In Different Markets

- Perfect competition

- Monopoly
- Monopolistic competition } Imperfect competition
- Oligopoly

Market :-
It is a place where
- buyers and sellers come together and strike a bargain.
- Arrangement between buyer and seller.

Market :-
- Buyers and sellers
- Goods and services
- Price
- Market knowledge

Classification of Markets :-

- Local Market :-
Perishable goods
eg:- Milk, eggs

- Regional Market:-
  Semi-durable goods
  eg:- Shoes, shirts

- National Market:-
  Industrial goods
  eg:- Plant and Machine

- International Market:-
  High value goods
  eg:- Gold / silver

- Very Short Period Market:-
  Supply cannot be changed

- Short Period Market:-
  Supply can be changed but limited

- Long Period Market:-
  Supply can be changed unlimited

- Very long Period Market:-
  Also known as Secular Period Market

- Spot Market:-
  Transaction done on the spot

- Future / Forward Market:-
  Transaction done in near future
  eg:- Credit sales

- Retail Market :-
  Goods sold to unltimate consumers

- Wholesale Market :-
  Goods sold in bulk quantity

- Regulated Market :-
  Government control
  eg:- Stock Market

- Unregulated Market :-
  No government control
  eg:- Crypto Market

Concept of time element

↓

Alfred Marshall

Revenue

1. Total revenue [TR]

TR = Price × Qty.

2. Average Revenue [AR]

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

Average Revenue = Price

↓

known as Demand

3. Marginal Revenue

Additional revenue earned selling one additional unit

$MR_n = TR_n - TR_{n-1}$

OR

$MR = \frac{\Delta TR}{\Delta Q}$

Calculate MR when elasticity is given

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

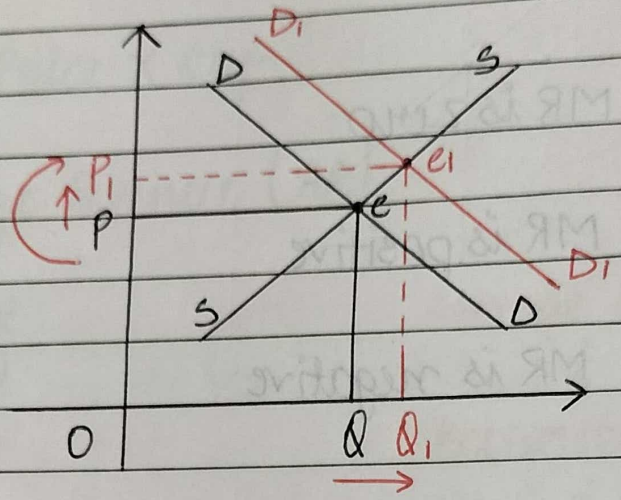
$e = 1$ MR is zero

$e > 1$ MR is positive

$e < 1$ MR is negative

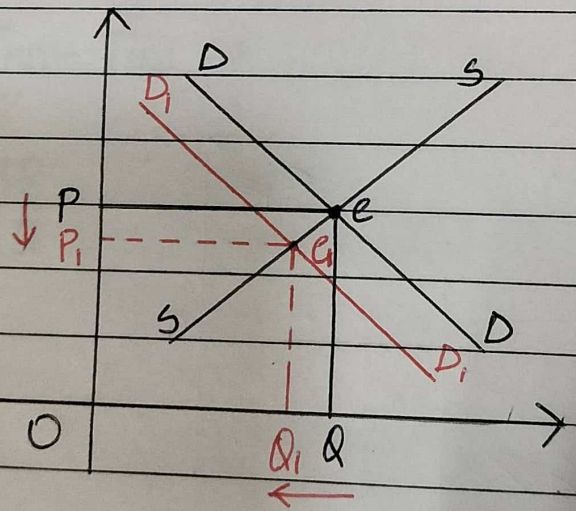
* Equilibrium Price

Case 1: When demand ↑ supply constant



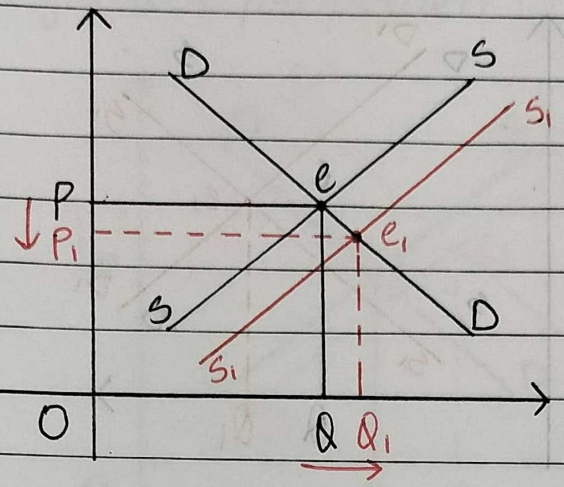
Qty Demand ↑ Price will rise

Case 2: When demand ↓ supply constant



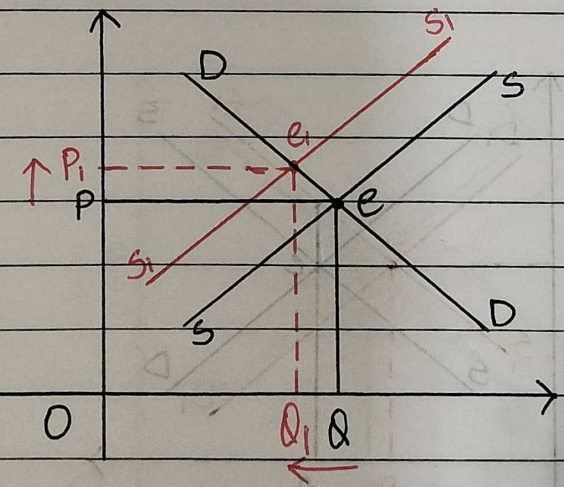
Qty demand ↓ Price will fall

Case 3: When Supply ↑ demand constant



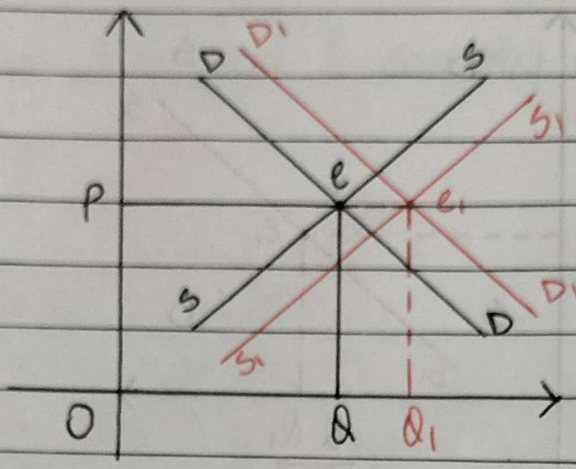
Qty Supply ↑ Price will ↓

Case 4: When Supply ↓ demand constant



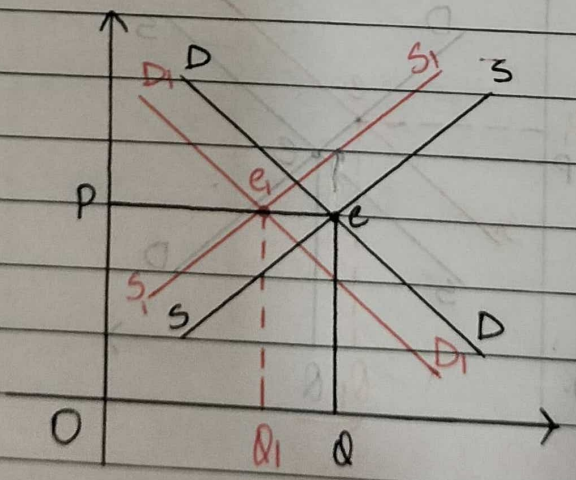
Qty Supply ↓ Price will ↑

Case 5: When demand ↑ & supply ↑ in same proportion



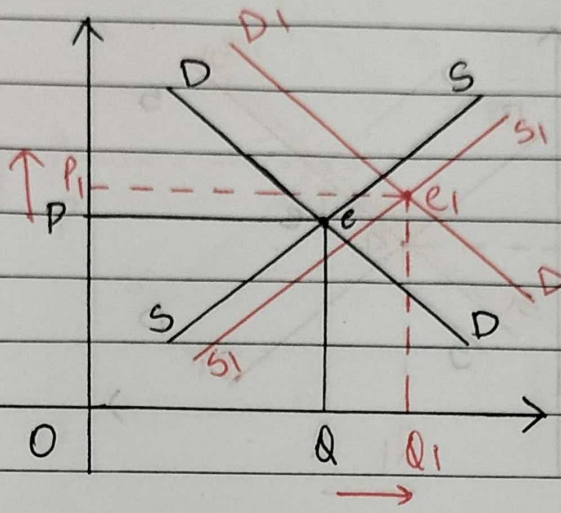
Qty demand & supply ↑ Price constant

Case 6: When demand ↓ & supply ↓ in same proportion



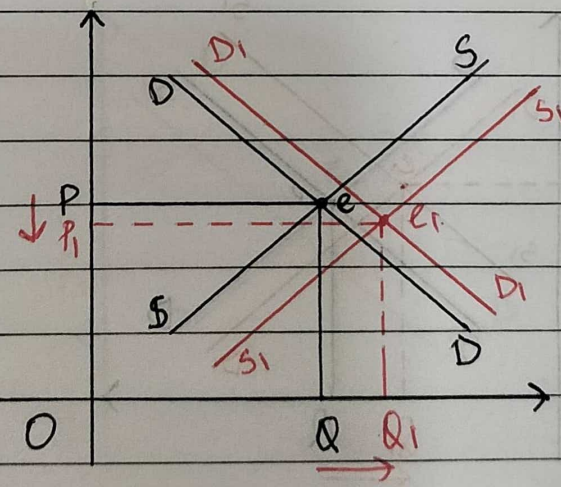
Qty demand & supply ↓ Price constant

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



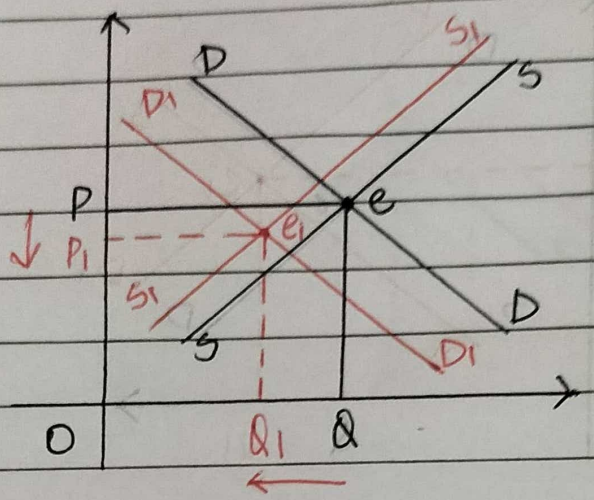
Qty demand & supply ↑ & slight ↑ in price

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



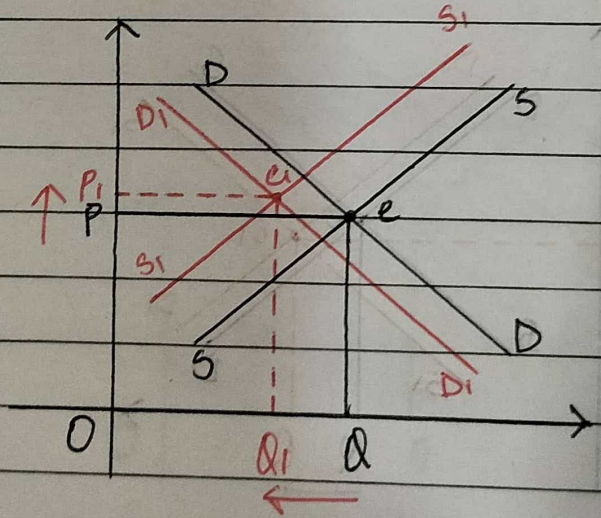
Qty demand & supply ↑
Slight fall in Price

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



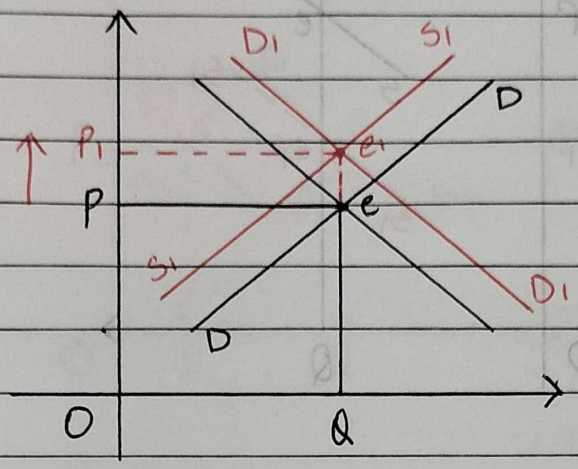
Qty demand & supply ↓
Slight fall in price

Case 10: When both demand and supply ↓ but supply ↓ in greater proportion



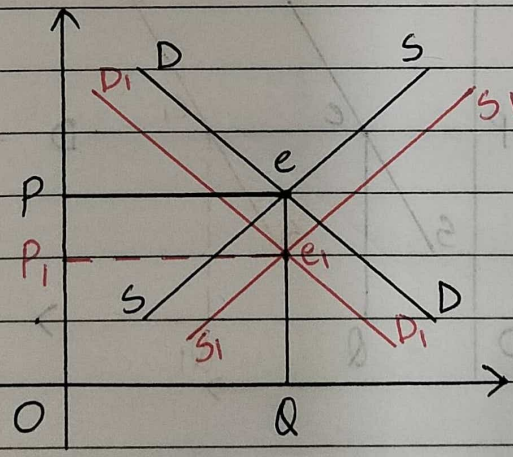
Qty demand & supply ↓ Slight Rise in Price

When II: when demand ↑ and supply ↓ in same proportion



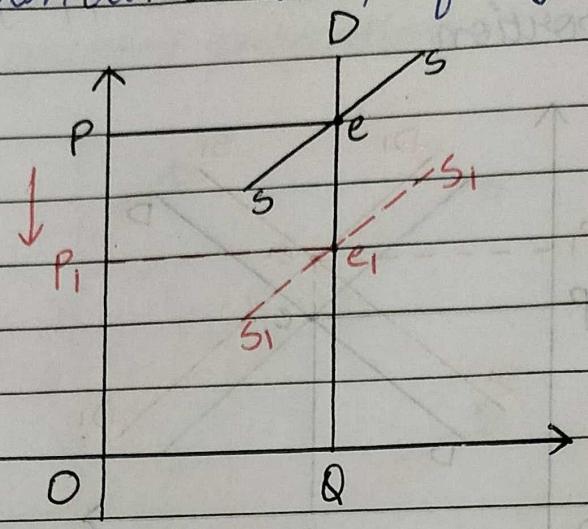
Qty demand & supply constant.
Slight ↑ in Price

Case 12: When demand ↓ and supply ↑ in same proportion



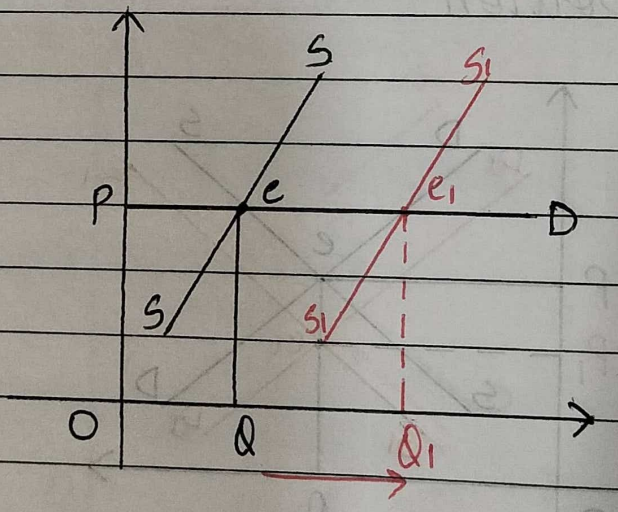
Qty demand & supply constant
Price falls

Case 13: When demand is perfectly inelastic and supply ↑



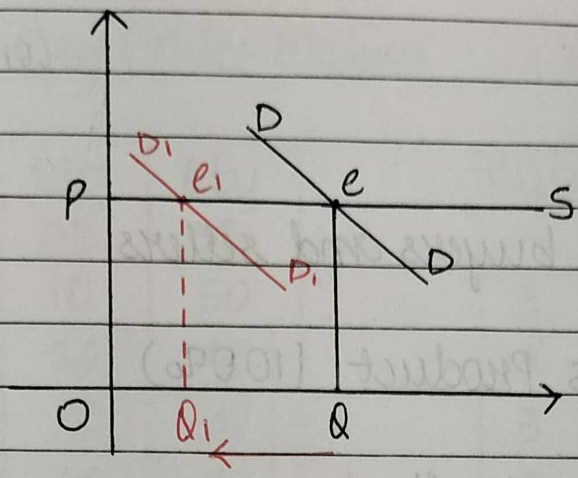
Qty remains constant price falls

Case 14: When demand is perfectly elastic and supply ↑



Qty increases & price remains constant

Case 5: When supply is perfectly elastic and demand falls



Qty decreases and price remains constant

Perfect Competition → Competitive Market

1. Large no. of buyers and sellers
2. Homogeneous Product (100%)
3. Free entry and exit ✱
4. Uniform Price ✱
5. Perfect Mobility
6. Perfect Knowledge

Firm under perfect competition cannot decide price but they can definately decide the quantity.

7. aker, Firm Price taker ✱
8. No Advertisement and selling cost ✱
9. No transport cost
10. No Government intervention

Perfect competition → Competitive Market

1. Large no. of buyers and sellers
2. Homogeneous Product (100%)
3. Free entry and exit ✱
4. Uniform Price ✱
5. Perfect Mobility
6. Perfect Knowledge
7. Industry Price Maker, Firm Price taker ✱
8. No Advertisement and selling cost ✱
9. No transport cost
10. No Government intervention

Slope of demand curve industry under Perfect competition.
DOWNWARD SLOPE

Shape of demand curve firm under Perfect competition
HORIZONTAL

Shape of the demand curve under Perfect competition
HORIZONTAL

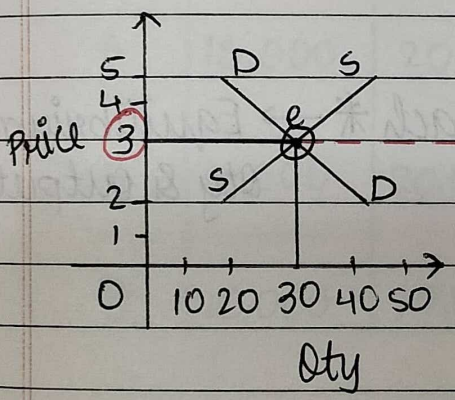
Concept Under PC

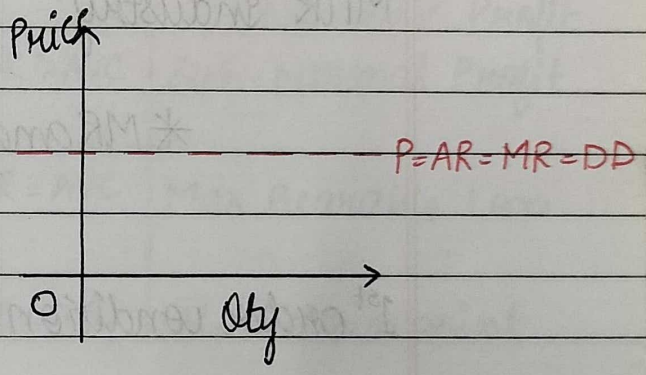
Industry [Price Maker]

Price	Qty DD	Qty SS
5	10	50
4	20	40
3	30	30
2	40	20
1	50	10

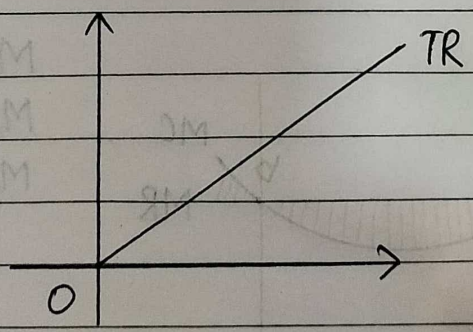
Firm [Price Taker]

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





TR under PC



* Shape of TR when firm is price taker *
Upward sloping straight line starting from origin

Slope of demand curve industry under Perfect competition.
DOWNWARD SLOPE

Shape of demand curve firm under Perfect competition
HORIZONTAL

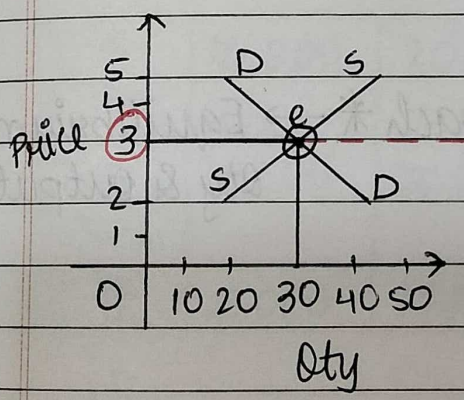
Revenue Concept Under PC

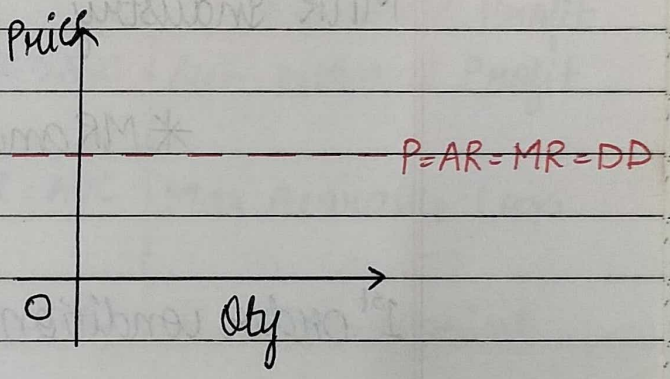
Industry [Price Maker]

Price	Qty DD	Qty SS
5	10	50
4	20	40
3	30	30
2	40	20
1	50	10

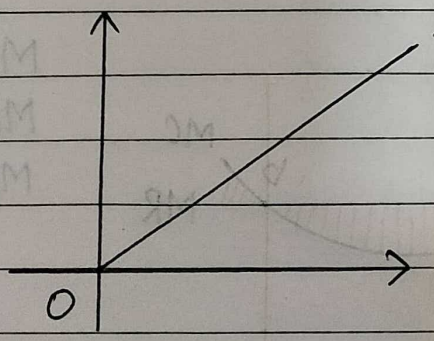
Firm [Price Taker]

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





TR under PC



* Shape of TR when firm is price taker *
Upward sloping straight line starting from origin

Date :

Page No.: 11

Came from Perfect Competition

* Pure Competition *

1. Large no. of buyers and sellers
2. Homogenous Product (98%)
3. Free Entry and Exist

Examples: Foodgrains & agricultural
Stock Market
Foreign Exchange Market
Milk Industry
} Related to PC also

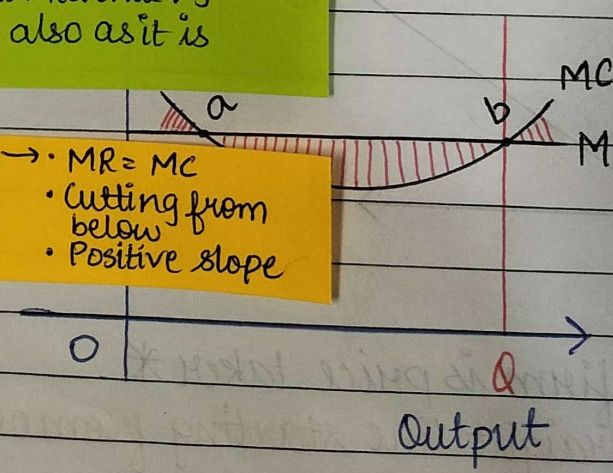
* MR and MC approach * → Equilibrium Qty & Output

1st order condition : MR = MC

2nd order condition : MC curve should cut MR from below. [MC has positive slope]

Before point a → cost ↑ Revenue ↓
After point b → cost ↑ Revenue ↓
} loss ✗
Not on point a also as it is above.

Will produce till → point b
- MR = MC
- Cutting from below
- Positive slope



MR > MC → Output ↑
MR < MC → Output ↓
MR = MC = Stop

Profit Max level

AR and AC Approach

Profits & losses

Average Cost (AC) = AFC + AVC
20,000 = 8,000 + 12,000

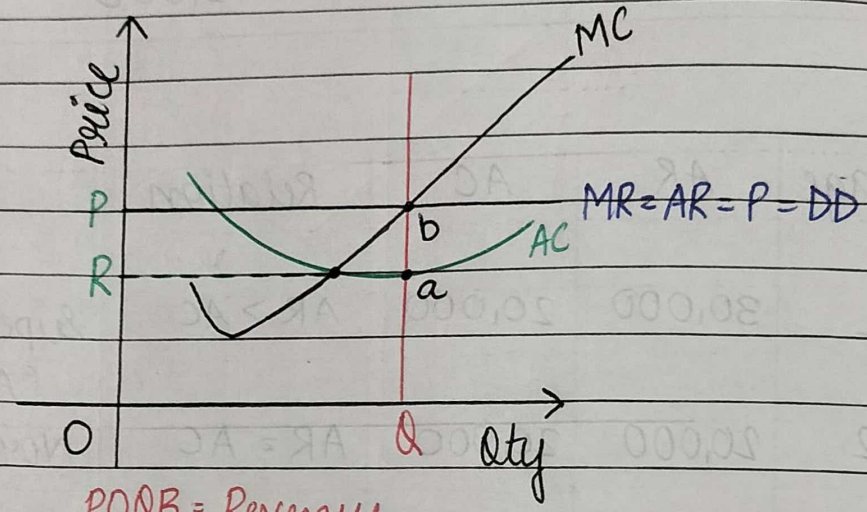
Stage	AR	AC	Relation	Name
1	30,000	20,000	AR > AC	Super-Normal Profit / Abnormal Profit
2	20,000	20,000	AR = AC	Normal Profit / Zero Economic Profit
3	15,000	20,000	AC > AR > AVC	Sub-Normal Profit
4	12,000	20,000	AC > AR = AVC	Max Bearable Loss
5	10,000	20,000	AC > AR < AVC	Shut down point

Shut down point
AR < AVC
AR = AVC
P < AVC
P = AVC
TR < TVC
TR = TVC
Loss = AFC
Loss = TFC

Date :
Page No.:

Short Run Equilibrium Under PC

* Super - Normal Profit [AR > AC]



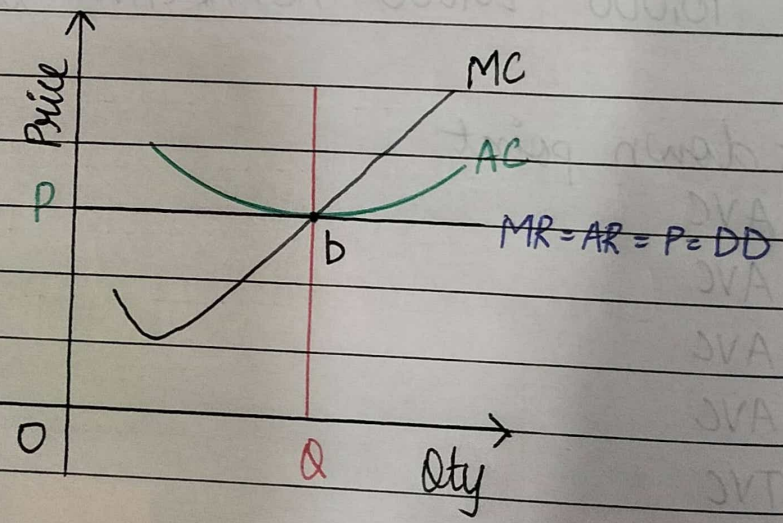
E

POQB = Revenue

ROQA = Cost

PRAB = Super - Normal Profit

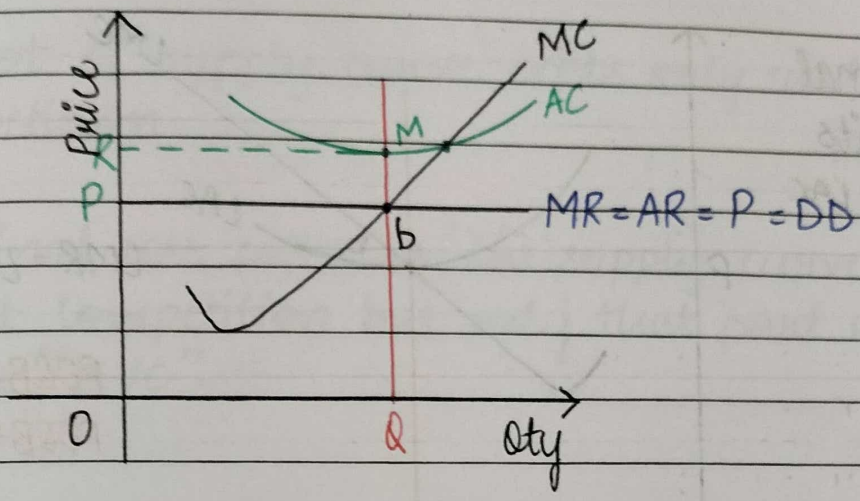
* Normal Profits [AR = AC]



POQB & POQB

= Revenue = Cost

* Losses [AR < AC]

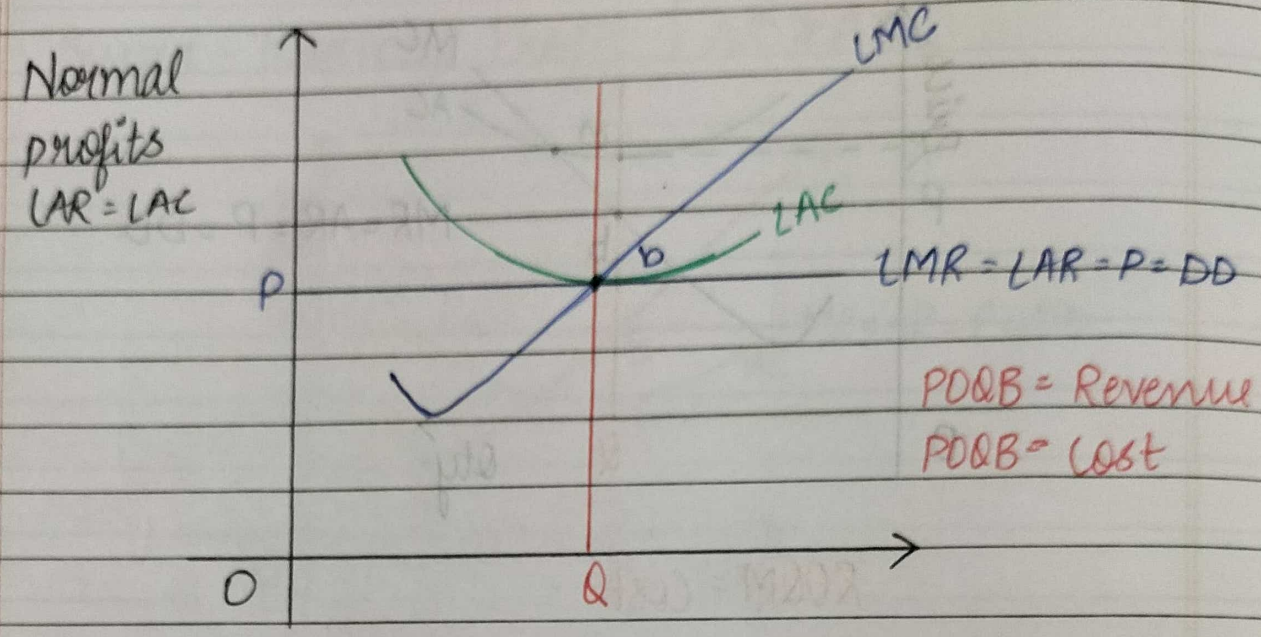


ROQM = Cost

POQB = Revenue

RPBM = Loss

Long Run Equilibrium PC



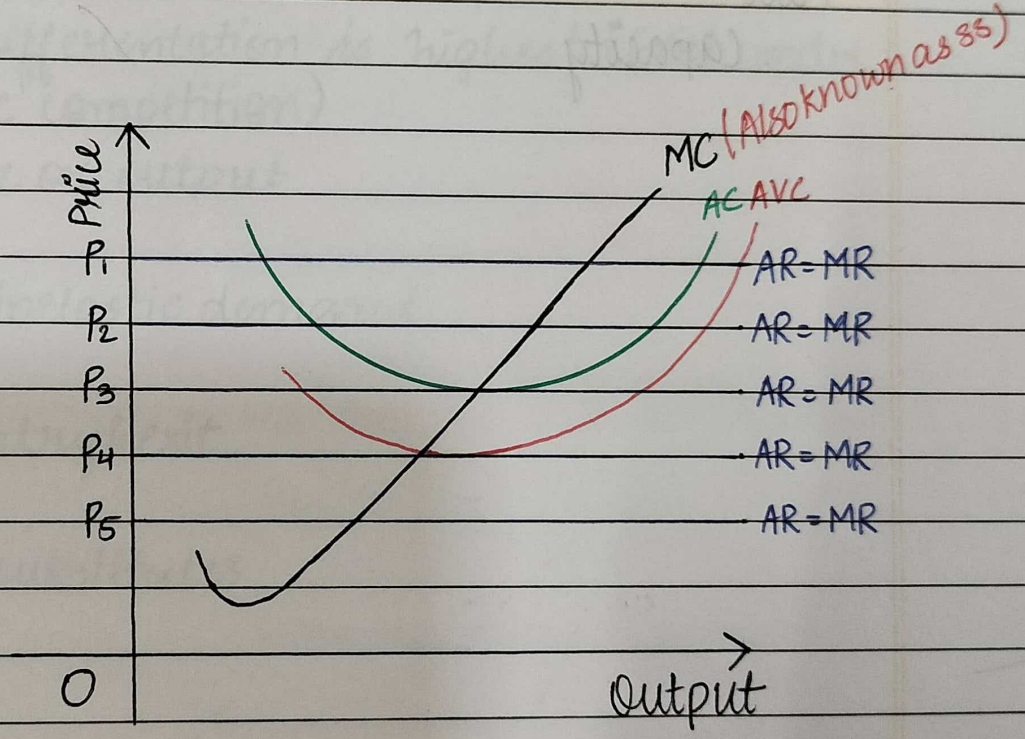
In long run under competitive market firm enjoys normal profit due to free entry and exit. (In long run number of sellers increases price falls due to increase in supply)

In long run under competitive market firm operates at least cost point (minimum point of AC) ∵ there is no selling cost and transport cost. (Found only under perfect competition long run)

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".



Productive efficiency : AC = MC

Allocative efficiency : AR = MC

DD SS

Full capacity

Monopoly

1. Single seller, many buyers
2. Price maker
3. Firm and industry same
4. Price discrimination — Different prices are charged to different people for the same product.
5. Product differentation is highest (Exist under monopolistic competition)
6. Either Price or output
7. Relatively inelastic demand
8. No Free entry & exit
9. No close substitutes

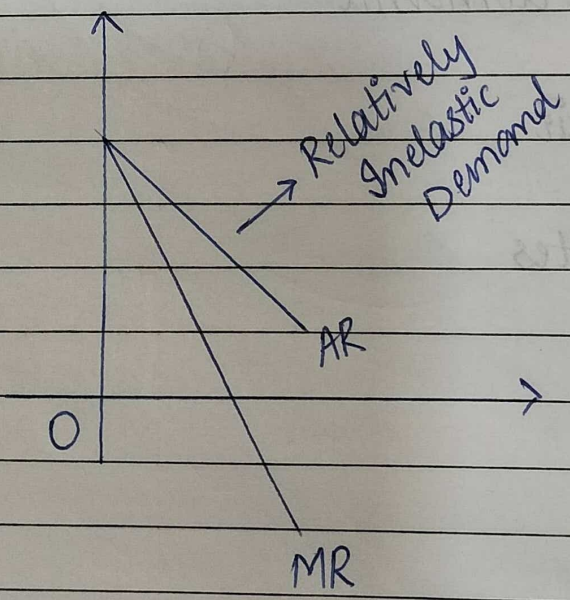
Revenue concept Under Monopoly

Price	Qty	TR	AR	MR
10	0	0	0	-
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

Every additional unit I am selling on discount MR ↓

Buy 1 Get 1

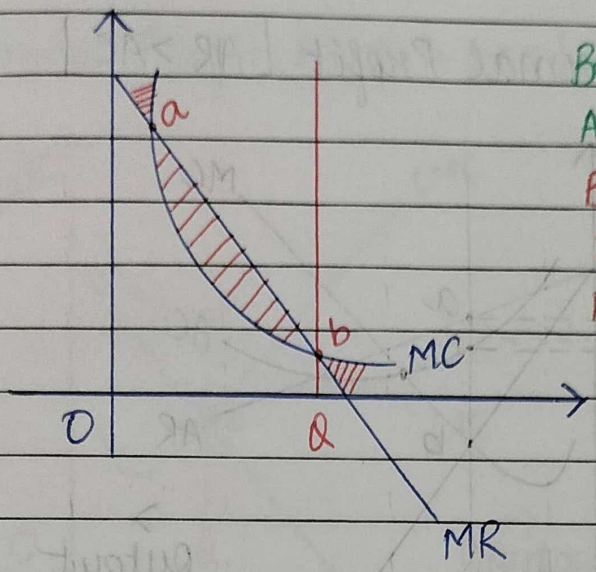
Loss (to create entry bearers)



1. Shape of DD curve under monopoly.
→ Downward Slope

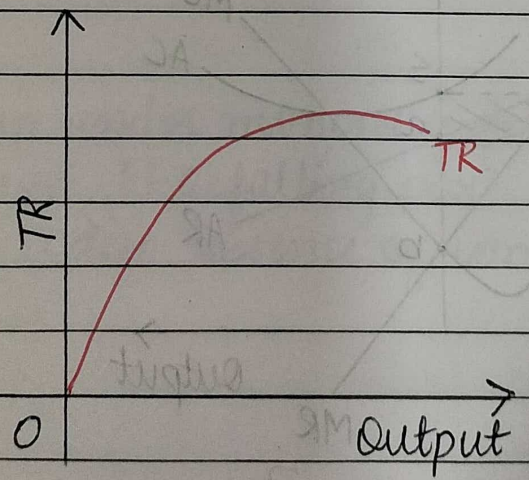
2. Shape of DD curve industry under monopoly.
→ Downward Slope (as industry & firm is same)

MR & MC Approach



Before 'a' → Cost ↑ Revenue ↓
After 'b' → Cost ↑ Revenue ↓
Between a & b → Yes
MR = MC
MC curve cuts MR from below.

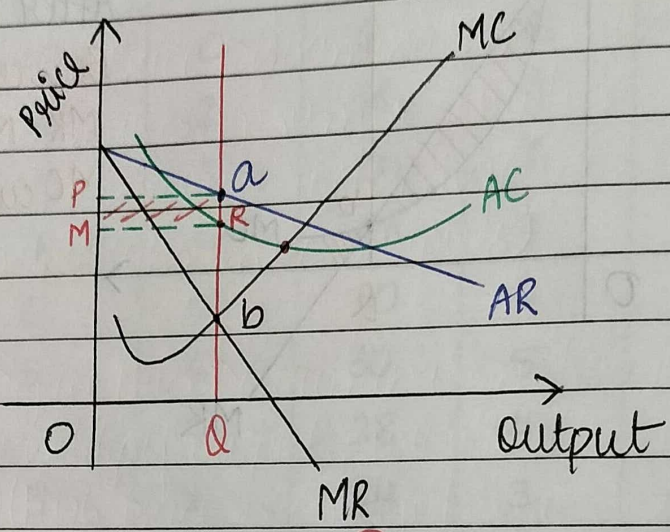
TR Under Monopoly



Inverted 'U'
OR
Dome Shape

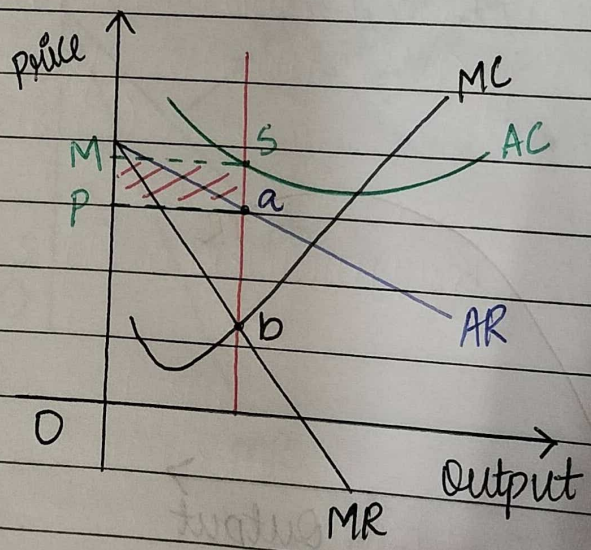
Short Run Equilibrium

* Super-Normal Profit [AR > AC]



POQA = Revenue } PMRA = Super-Normal Profit
MOQR = Cost }

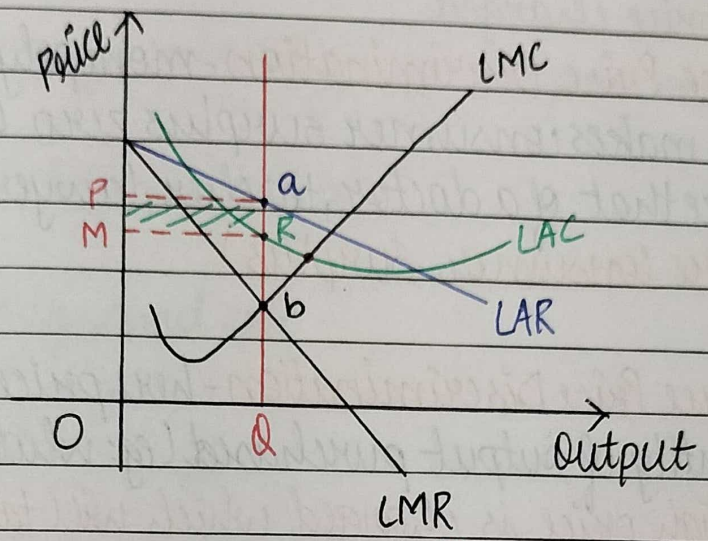
* Losses (AR < AC)



MOQS = Cost } MPAS = Loss
POQA = Revenue }

Long Run Equilibrium

* Super - Normal Profit [LAR > LAC]



POQA = Revenue } PMRA = Super - Normal Profit
MOQR = Cost }

In long run under monopoly market they enjoy super normal profit since there is no free entry and exit

In long run under monopoly firm operates at sub optimal level (i.e falling part of LAC on equilibrium line) this is due absence of competition.

Price Discrimination

- Prof. Pigou's three-way classification of Price Discrimination- very high price charged

1. First Degree Price Discrimination - monopoly fixes a very high price which makes consumer surplus zero (eg: personalized services like that of a doctor, teacher, lawyers, etc.) (Takes away entire consumer surplus)

completely loot liya

2. Second Degree Price Discrimination - here price varies according to the quantity of output purchased (eg: wholesaler & retail buying) (High price is charged which will take away a part of consumer surplus)

location / submarkets

Shatkopee Valkeshwar

3. Third Degree Price Discrimination - market is divided into different segments on the basis of age, use, gender, etc. and a different price is charged from each segment of the market (eg: railways, electricity etc.) (Different price in different submarkets) When different prices are charged to different consumer location to location different price are charged to different consumer having different elasticity

* Objectives of Price Discrimination

- To maximise Profit
- To sell off surplus stock
- To enjoy economies of scale (to reduce cost of production)
- To capture foreign market Dumping → China
- To secure equity through pricing (equitable distribution of income)

Monopolistic Competition

↓

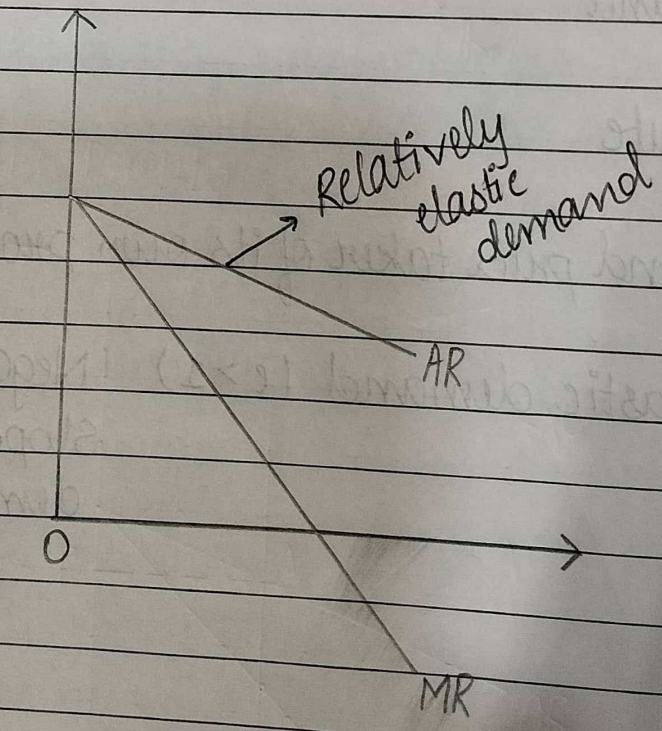
Perfect Competition + Monopoly

1. Fairly large number of buyers and sellers
2. Product differentation
3. Free entry and exit
4. Selling cost
5. Concept of Group
6. Concept of Brand
7. Close substitute
8. Price maker and price taker of its own product
9. Relatively elastic demand ($e > 1$) (Negative / Downward Slope highly elastic demand)

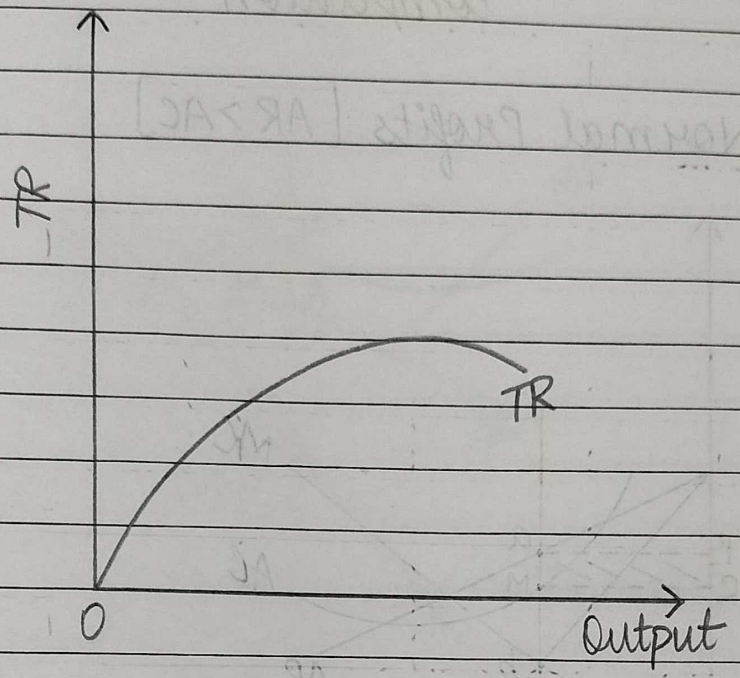
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Revenue concept under Monopolistic Competition

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



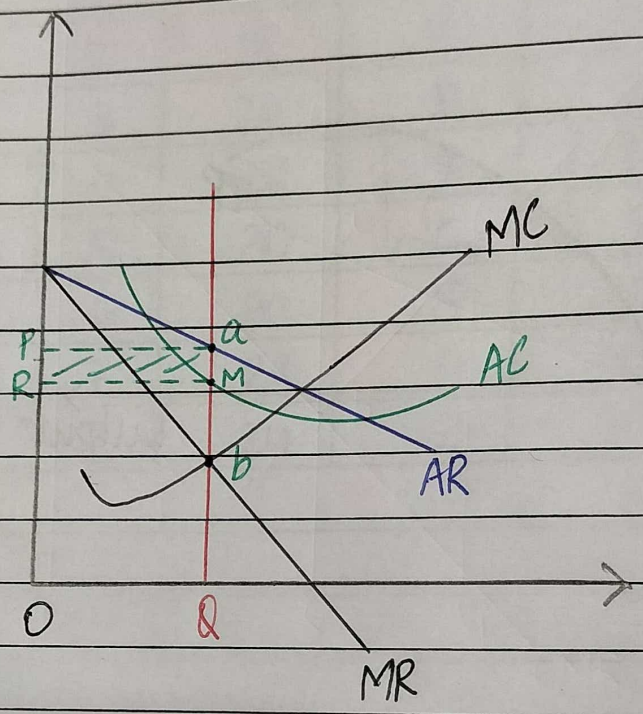
TR under monopolistic competition



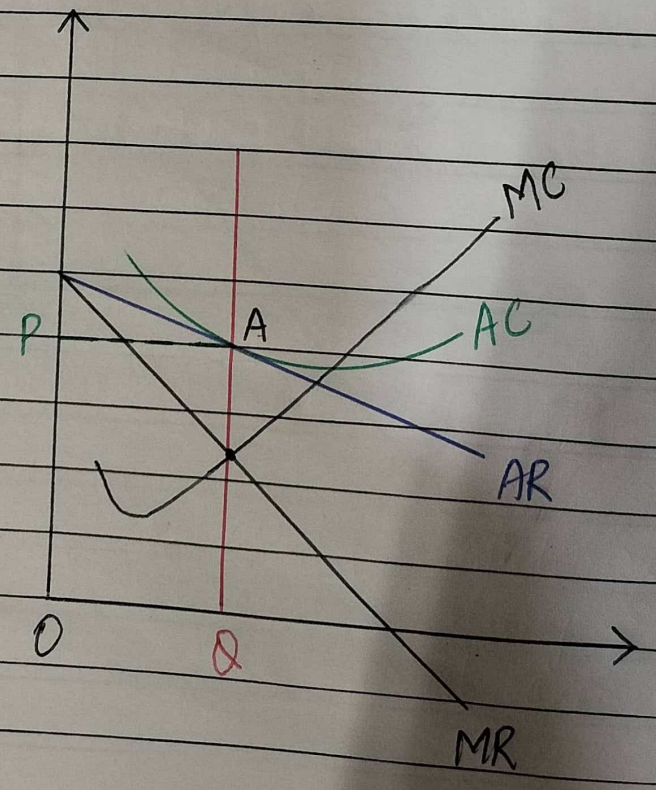
Inverted
'U'
Dome Shaped

Short Run Equilibrium under Monopolistic competition

Super Normal Profits [AR > AC]

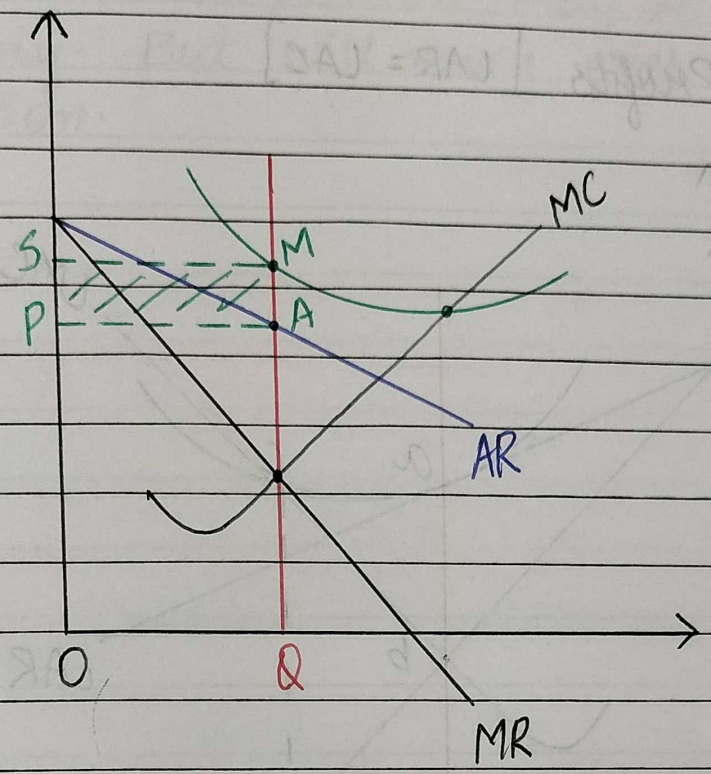


Normal Profits



POQA
↓
Revenue
&
cost

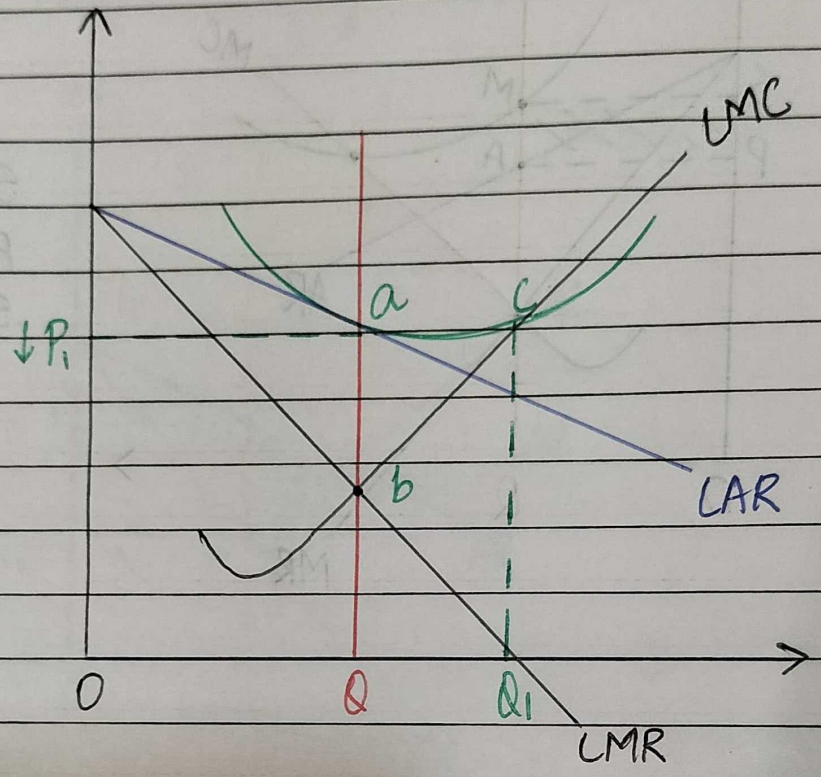
Losses



SOQM = Lost
POQA = Revenue
SPAM = Loss

Long Run Equilibrium under Monopolistic Competition

Normal Profits [LAR = LAC]



Excess capacity
Least cost output - Profit Maximising Output

OQ_1 ⟶ least cost output
OQ ⟶ Profit Max output
QQ_1 ⟶ Excess capacity

1. In long run under monopolistic competition firm enjoys normal profit due to free entry and exist

2. In long monopolisticly competative market operates at suboptimal level i.e falling part of LAC this is due to heavy advertisement expenditure.

3. Concept of Excess capacity definately exist under monopolistic competition. May or may not under monopoly. But will never exist under Perfect competition.

Date :
Page No.:

Oligopoly

1. Few and countable seller (competition among few)
2. Inter dependence
3. Homogeneous or differentiated
4. Selling cost
5. Concept of group
6. No free entry no blocked entry
7. Price Rigidity

Types of Oligopoly

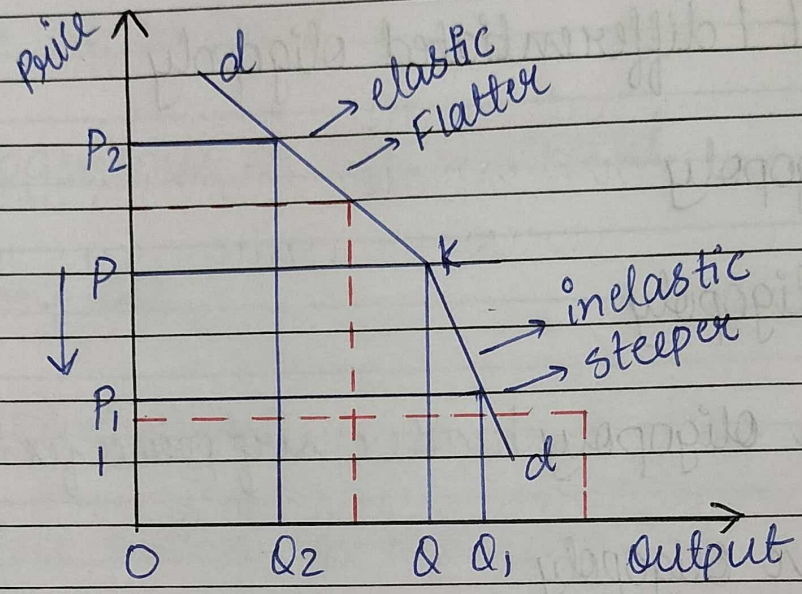
1. Pure and Perfect Oligopoly
2. Imperfect / differentiated oligopoly
3. Open Oligopoly
4. Closed Oligopoly
5. Collusive Oligopoly leader sirf price fix karta hai
6. Competitive Oligopoly
7. Partial Oligopoly follow the leader constant
8. Full Oligopoly No leader in group
9. Syndicated Oligopoly 5 seller milke lutega (regulatory body) → eg: OPEC
10. Organised Oligopoly

→ More producer concept than organised

Kinded Demand Curve

Paul Sweezy

Price Rigidity



Case 1: Price ↓

Case 2: Price ↑

1. In Kinked Demand Curve Analysis response of consumer is more in case of rise in price

2. Oligopoly may charge less price compare to monopoly and more price compare to Perfect competition

* Duopoly: It is a market situation in which they are only two firms in the market.
* Monopsony: It is a market which has only one single buyer of a Product or Service.
* Oligopsony: It is a market which has small number of large buyers.
* Bilateral Monopoly: In this market there is only a single buyer and single seller.

(Monopoly market + Monopsony market)

CH-6 :- Determination of National Income

earned income — Nation — CSO, NSO

→ National Income (- Depriciation)

- National Income is a money value of all final goods & services produced in a domestic economy during a Financial Year + NFIA.

→ GDP (+ Depriciation)

- GDP is a money value of all final goods & Services produced in a domestic economy during a F.Y.

* Precautions while calculating National Income.

1) All earned income to be added in national income.

2) All unearned income like Gift, Grant, charity, donations, scholarship, pension, etc to be ignored since they are transfer payments & transfer income.

3) Anything produced for self consumption to

be added in national income.

4) Any kind of financial investment where money is invested. in shares, bonds, FD's, not to be recorded. However intrest & divident earned over it to be added in National income.

(National Debt intrest not to be recorded in National Income).

5) Any kind of second hand transaction or old product where production is done in P.Y. not to be added in C.Y.

6) Any kind of illegal income where money is earned via smuggling, black marketing, hawala transaction, not to be added in national income.

7) Any kind of windfall gains or losses not to be added in national income since neith-

-er good nor service are produced

8) Foreign Company goods in India value of goods produced to be added profit to be excluded.

9) Rent, Wages, Intrest, profit, commision, brokerage mixed income to be added in national income since they all come under national income.

10) Value of only final goods to be added raw material, Intermidiate goods, work in progress, semi finished goods not to be recorded since it will lead to double counting.

11) All exports & Receipts are added & all imports & payments are deducted.

12) Change in stock, inventory investment, business stock, Stock of govt. goods to be

added in national income.

→ Transaction done in same year take netvalue

Profit - Enterprenur,

Gain - Personal.

* Formulas *

(R-P) = Receipts - Payments

x = export

m = import.

D = Demand.

IT = Indirect Tax

S = Subsidy

$(x-m)$ = export - import

C = consumption

I = Investment

G = Goverment

MP = Market Price

FC = Factor Cost.

→ Concept of National Income.

1) GDP MP :- $C + I + G + (x-m)$

GDP FC :- $C + I + G + (x-m) - IT + S$

2) GNP mp : $C + I + G + (x - m) + (R - P)$

GNP fc : $C + I + G + (x - m) + (R - P) - IT + S$

3) NDP mp : $C + I + G + (x - m) - D$

NDP fc : $C + I + G + (x - m) - IT + S - D$

4) NNP mp : $C + I + G + (x - m) + (R + P) - D$

NNP fc : $C + I + G + (x - m) + (R + P) - IT + S - D$

* Shortcuts *

→ GNP mp = GDP mp + NFIA

→ GDP mp = GNP mp - NFIA

→ National = Domestic - Depriciation.

→ NDP mp = GDP mp - NFIA.

→ Net = Gross - Depriciation.

→ Gross = Net + Depriciation.

→ NNPmp = GNPmp - Depriciation.

→ NNPmp = GDPmp + NFIA - Depriciation.

→ Factor Cost = Market Price - IT + S

→ Market Price = Factor Cost - IT - S

* Income Method

NNP FC : Compensation of employees [Salary + Wages]

+

Operating Surplus [Rent + Intrest + Profit]

+

Mix Income

+

NFIA.

* Personal Income. = National Income.

Wages + Intrest + Profit + Divident + NFIA + Rent + Mixed Income - Undistributed Corporate Profit - Corporate Profit tax - Social Security contribution.

* Personal Income (Acc to ICAI)

Personal Income = National Income + Income Received but not earned - Income earned but not Received.

* Private income

Factor income from net domestic product

+

NFIA

+

Current transfer from Goverment.

+

Other net transfer from rest of the world.

National GDP / NI	Real GDP / NI
→ Basis of Price	→ Basis of Output
→ Current Price	→ Constant Price
→ False Growth	→ True Growth.

Pen.	Case 1	Case 2
Output : 100,000	Output : 100,000	Output : 200,000
Price : 2₹	Price : 4₹	Price : 2₹
Value : 200,000	Value : 400,000	Value : 400,000

GDP deflator → Price Index.

$$\text{GDP deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$

→ GDP deflator helps us to measure changes in price that is inflation.

→ It takes into consideration both nominal GDP as well as Real GDP.

→ The word deflator means to deflate or to take inflation out of GDP

→ It is a price index used to convert nominal GDP into real GDP.

→ The deflator means to deflate or to take inflation out of GDP.

→ It is a price index used to convert nominal GDP into real GDP.

→ The deflator measures the changes in the price that has occured blw base year & the current years.

* Sums

① Real GDP = 4700

Nominal GDP = 3000

$$= \frac{3000}{4700} \times 100$$

$$= 63.62 < 100$$

= Prices have fallen.

② Nominal GDP = 1200

Real GDP = ?

Price Index = 110

$$110 = \frac{1200}{?} \times 100$$

$$= 1090.90$$

③ Nominal GDP = ?

Real GDP = 450

GDP deflator = 120

$$120 = \frac{?}{45} \times 100$$

$$= 540$$

* Calculate inflation in C.Y.

$$\text{Inflation for C.Y.} = \frac{\text{GDP deflator C.Y.} - \text{GDP deflator P.Y.}}{\text{GDP deflator P.Y.}} \times 100$$

* Sums

Year	GDP deflator
2018	100
2019	113.63
2020	130.25

for 2019

$$= \frac{113.63 - 100}{100} \times 100$$

$= 13.36\ \%$

for 2020

$$= \frac{130.26 - 113.83}{113.83} \times 100$$

$= 14.63\ \%$

* Methods of Calculating National Income.

GDP ← GVAmp : Value of Output − Value of intermediate consumption.

GVAmp : Sales + Change in stock − intermidiate consumption

↓

[Closing Stock − Opening Stock]

* Sums (Pg no 303)

1) $C + I + G + (x - m)$

$= 750 + 250 + 100 + (100 - 200)$

= 1000

2) GDPmp

Personal consumption (+)	6500
State govt. con. & inv. exp (+)	2000
Central govt. con & inv. exp (+)	500
Change in Inventory (+)	100
GP. domestic fixed inv. (+)	1200
(Export - Import) (+)	(300)
	10,000

+ NAA	100
(-) Dep.	(100)
(-) Net	(150)
	9750

3) GDPmp & NI

Inventory Mgm	100
(Export - Import)	100
Personal consumption exp	3500
Gross rese dential inv.	300
Stock Govt. purchased	1000

Gross Public inv.	200
Gross business fix inv.	300
NI	5500
- FI	50
- Dep.	50
- IT	100
	5300

5) Value of output in primary sector 500
Value of output in Teritary 700
Value of output in secondary 900
2100 (A)

Intermidiate consumption in teritary 300
" " " primary 250
" " " secondary 300
850 (B)

= A - B
= 2100 - 850
= 1250
NFIA -(20)
1230

15) Private final consumption expenditure 290

GOUT. " " " 50

Gross Domestic F.C. information. 105

Net addition to stock. 15

460

(-) Net export (5)

455

- Consumption of F.C. (45)

IT (70)

NFIA (5)

Subsidies 20

355

14)

Sales	1000
+ Change in Stock (CL - OP)	(100)
(-) intermidiate consumption	300
GDPmp	600
(-) Depriciation	150
NDPmp	450
(+) NFIA	10

(+) S	10
(-) IT	90
	420

12)

Gross investment	90
Net export	10
PCE	350
GP of G/S	100
	550
- IT	(5)
	545

19)

Wages	10,000
Rent	5,000
Int.	400
Div.	3,000
Mixed Income	400
UD profit	200
SSC	400
CPT	400

	19,800
(+) NFI	1,000
	20,800

4) GDPmp	6000
(R-P)	(75)
(-) Dep.	(800)
(-) IT	(700)
NI	4425
(-) Retained earnings	(600)
(+) Transfer Payment	1300
PI	5125
(-) Personal IT	(1500)
PDI.	3625

11) a) NDI

= Mixed income + Operating Surplus + Compensation of employees.

= 28000 + 10000 + 24000

= 62000

b) GDI

= NDI + Depri.

= 62000 + 1700

= 63700

c) NNI

= NDI + NFI

= 62000 + NFIA

=

	62000
	(300)
	61700

NNP FC =	61700
	9,000
	1,800
NNP MP	68,900

e) PI = NDP FC

+ NFIA

NNP FC

- Undistributed Profit

	9000
	200
	8200
	(1000)
	7200

- Corporate tax	(500)
	6700
TI	300
	7000
Tax	-500
	6500 PI.

16) NDPmp

GDPmp =	1100
NFIA (+)	100
	1200

NNP wp = NNP FC − Net IDT

= 850 + 150 = 1000

GNP - NNP = 1200 − 1000 = 200

Unit - 2

(H-6 Keynesian theory of determination of NI

Consumption

← Aggregate demand function (ADF)

↓

Maximum Sales Processed.

JM Keynes

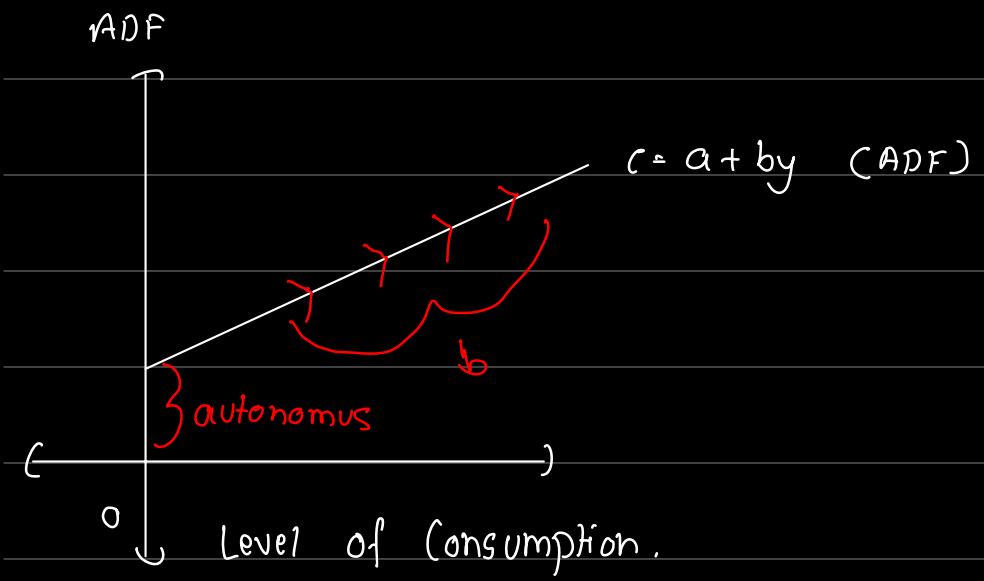
2 sector

$AD = C + \bar{I}$ (consumption + Investment (constant))

- Autonomus consumption exp. (a)
- Induced consumption exp. (b)

Not dependent on others

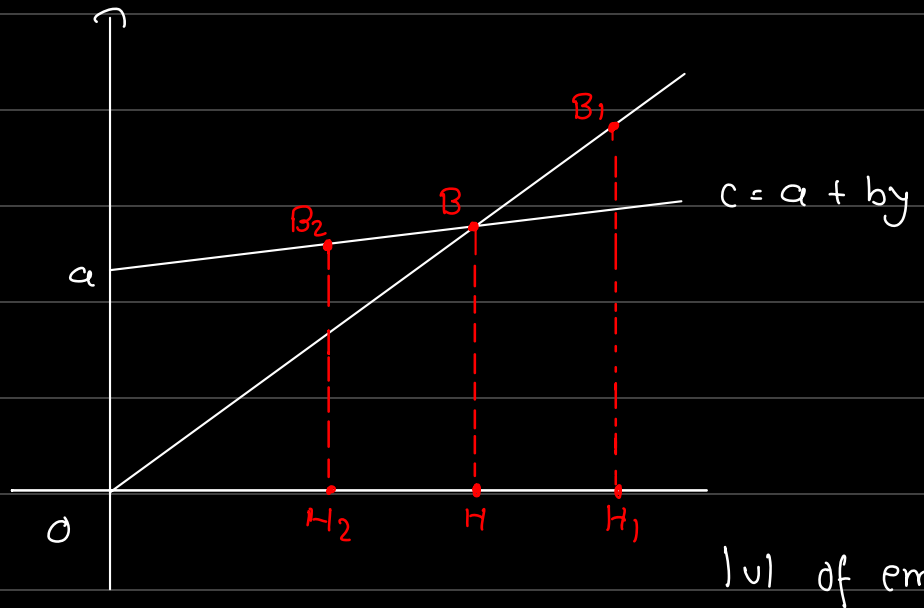
$C = a + by$



→ Consumption Function / Phsycological function.

Agg income — Agg consumption — Savings [S = Y - C]

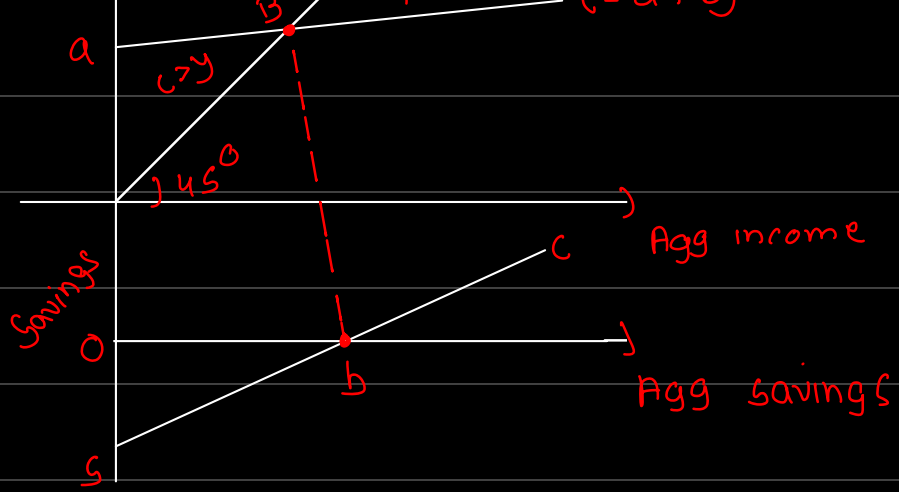
0	500	500	Dis savings
1000	1200	200	
2000	2000	0 → zero	
3000	2600	400	Savings
4000	3300	700	
5000	4000	1000	



→ Acc to keynes with increase in income both consumption & savings increase however consumption increase at diminishing rate, savings increase at increasing rate.

* Saving function $S = F(y)$.





- Savings is a counter part of consumption function income left after consumption is savings that is $S = Y - C$.

- The above diagram shows the level of savings at each lvl of disposable income.

- In the above diagram the gap b|w income & consumption measure savings. This gap after point b goes on increasing with rising income. This indicates that savings rises with rising income S curve represent saving function.

* Average Propensity to consume [APC]

$$APC = \frac{\text{Consumption}}{\text{Income}} \qquad \frac{C}{Y}$$

Income

* Marginal Propensity to consume [MPC]

$$MPS = \frac{\text{Change in consumption}}{\text{Change in Income}} \qquad \boxed{\frac{\Delta C}{\Delta Y}}$$

* Average Propensity to Save [APS]

$$APS = \frac{\text{Savings}}{\text{Income}} \qquad \boxed{\frac{S}{Y}}$$

* Marginal Propensity to Save [MPS]

$$mPS = \frac{\text{Change in Savings}}{\text{Change in Income}} \qquad \boxed{\frac{\Delta S}{\Delta Y}}$$

$$MPS = 1 - MPC$$

OR

$$1 - b$$

$$MPC = 1 - MPS$$

* Points to remember.

1) The unit having economic intrest in economic teretory of the country for 1 year or more irrespective of the nationality is called as resident unit.

2) GDP per capita = $\frac{\text{National Income}}{\text{Total Population}}$.

It measures countries economic output per person.

3) National income is useful for analysing & evaluating shortrun performance of the country.

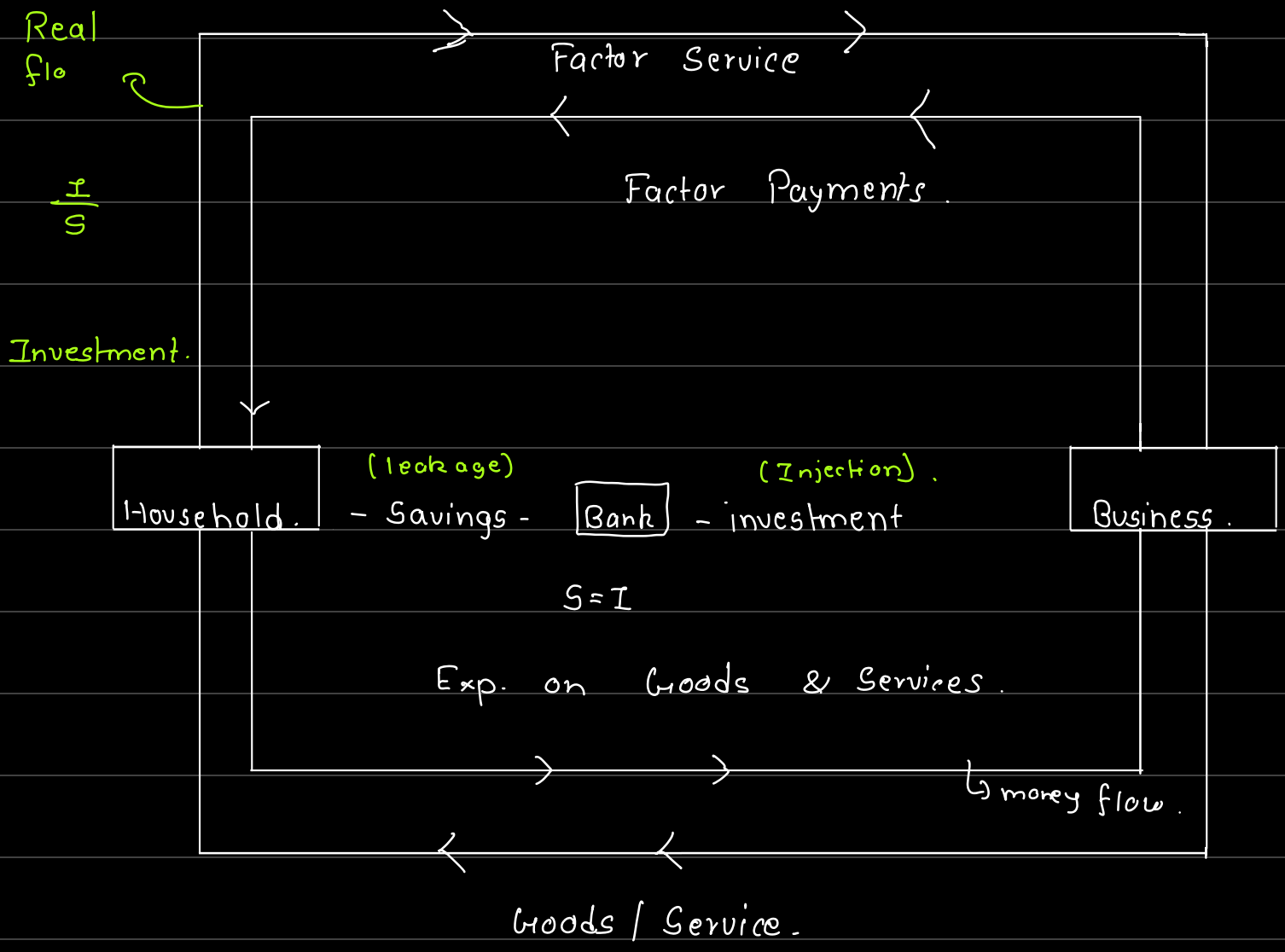
4) Goods & Services that are not exchanged in a market transaction or does not have a market value are called as non economic activities.

5) GDP is inclusive of capital consumption or depriciation

6) Contribution of Labour & Capital to production process

is called as value added.

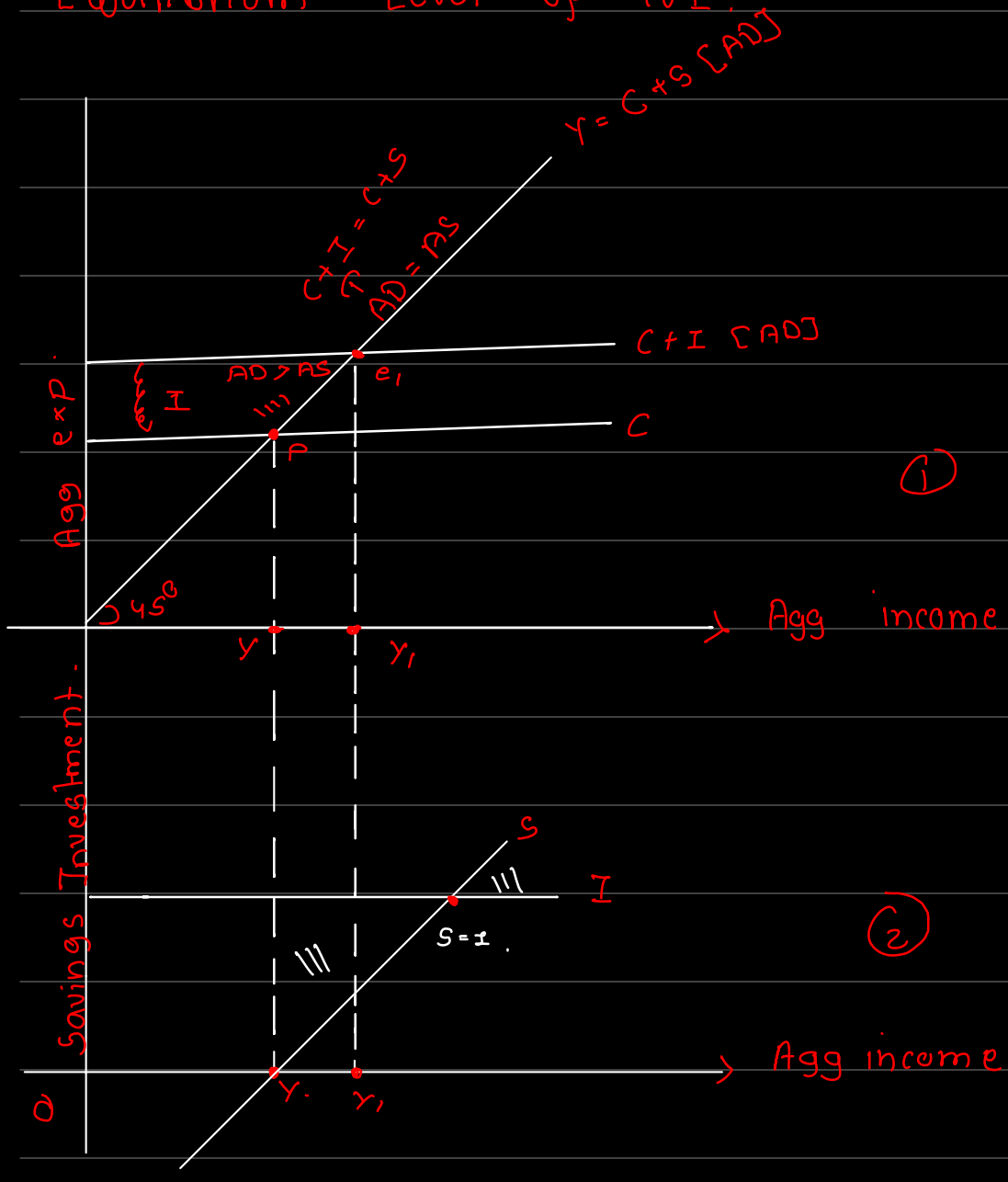
* Circulation flow of national income [C+I]



- The outer circle of the diagram shows real flow that is flow of factor services from household to business & flow of goods from business to household The inner circle shows money flow that is flow of factor payment from business to household & consumption expenditure from household to business.

Savings are conside as leakeages & investment are considered as injection.

→ Equilibrium Level of NI.



AD = C + I

↓

AD = AS (1)

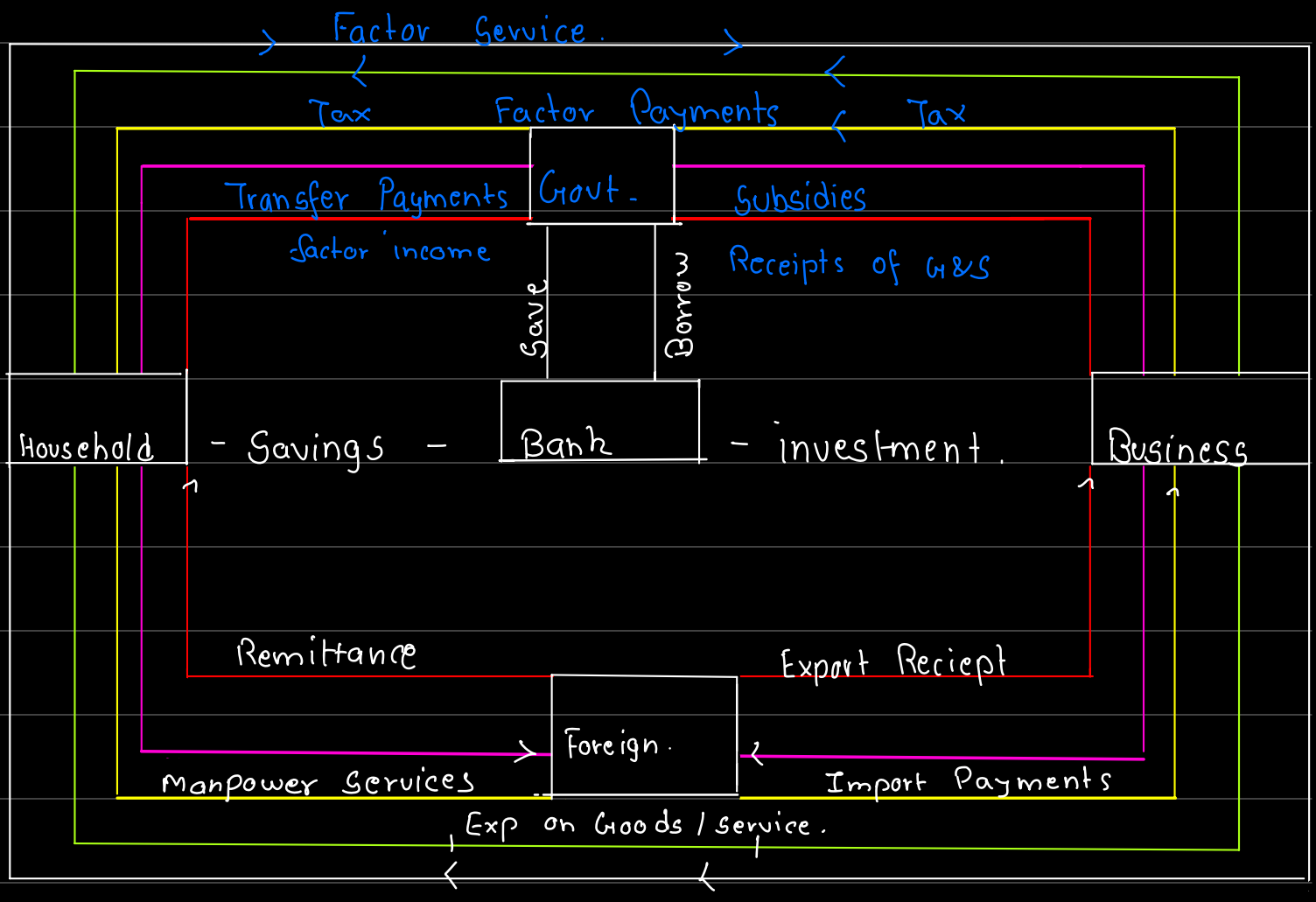
↓

C + I = C + S

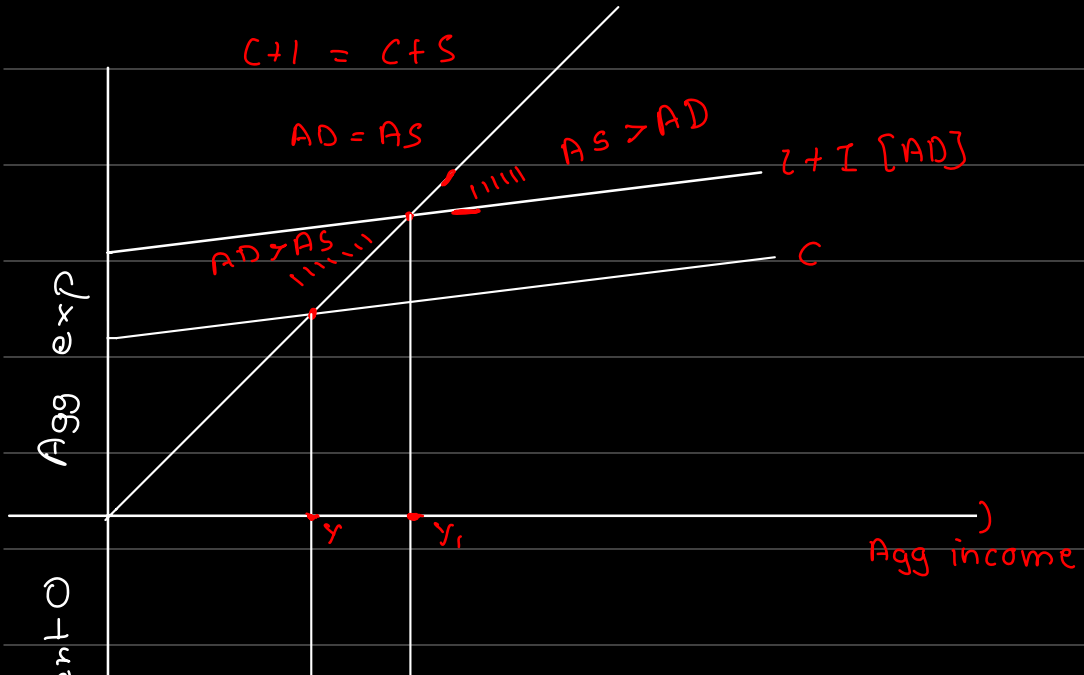
AS = C + S

↓

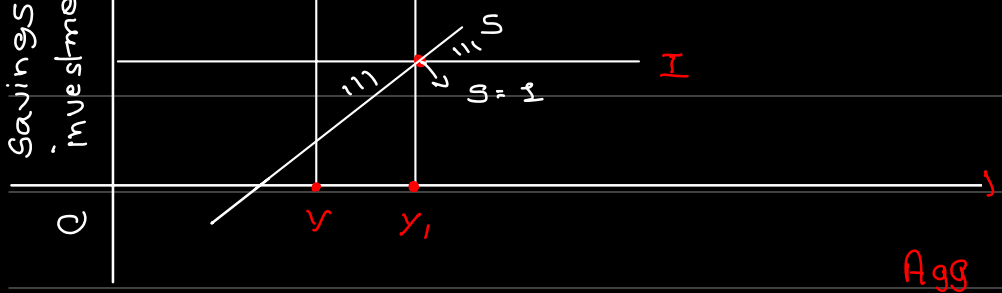
S = I = (2)



Equilibrium Level of NI — 2 Sector.

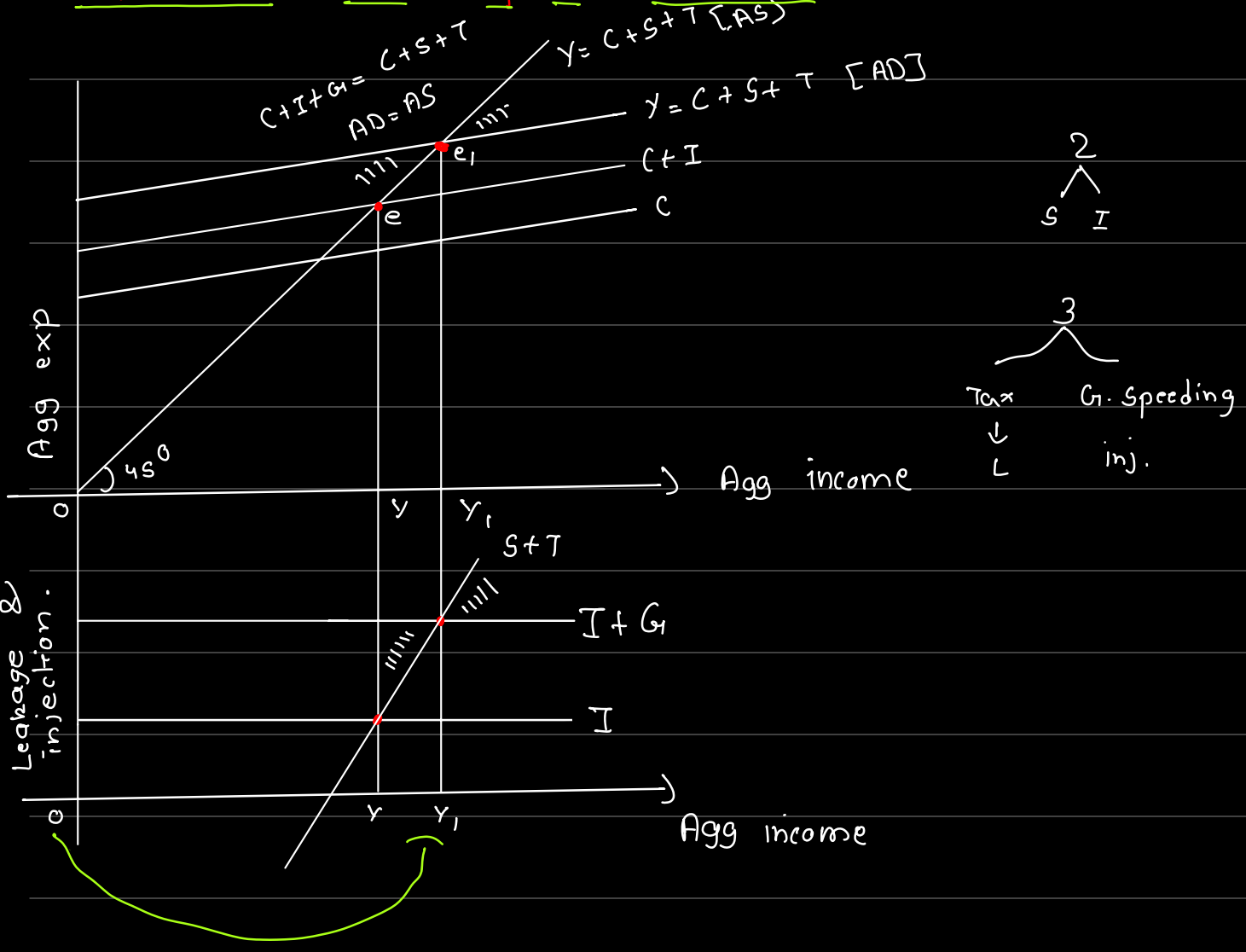


(1)



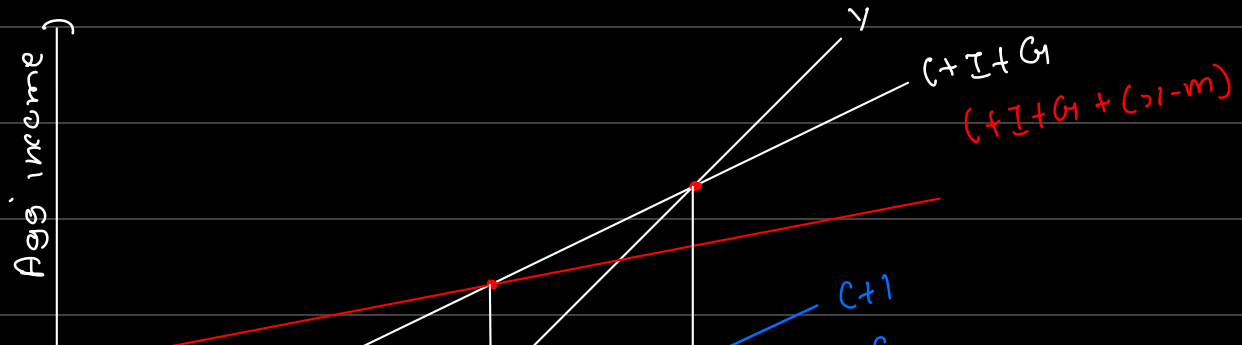
②

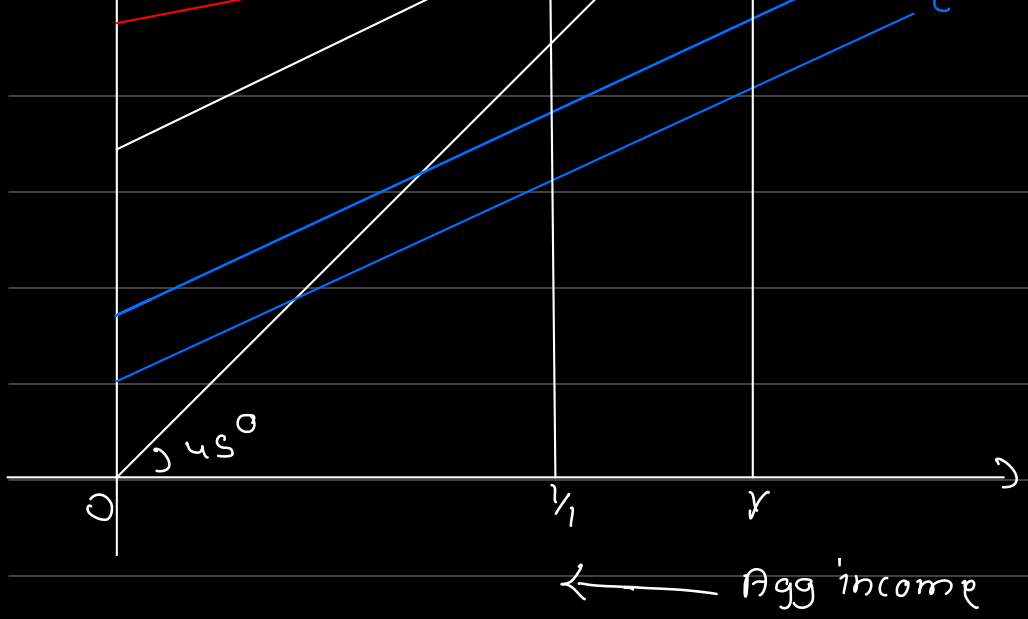
→ Equilibrium Level of NI 3 Sector



* Equilibrium level of NI 4 Sectors

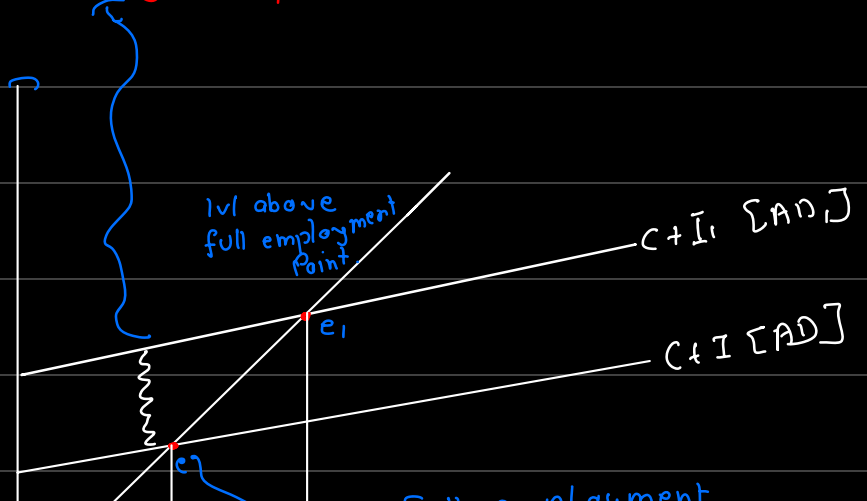
When imports > exports.

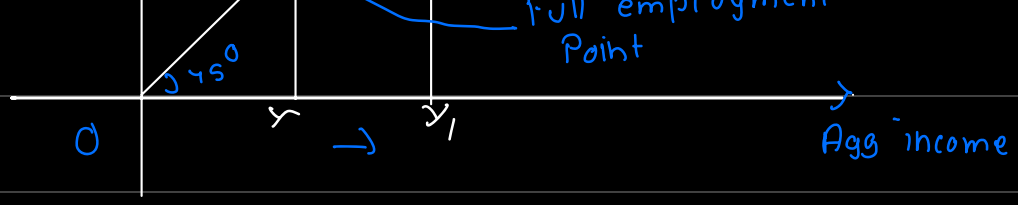




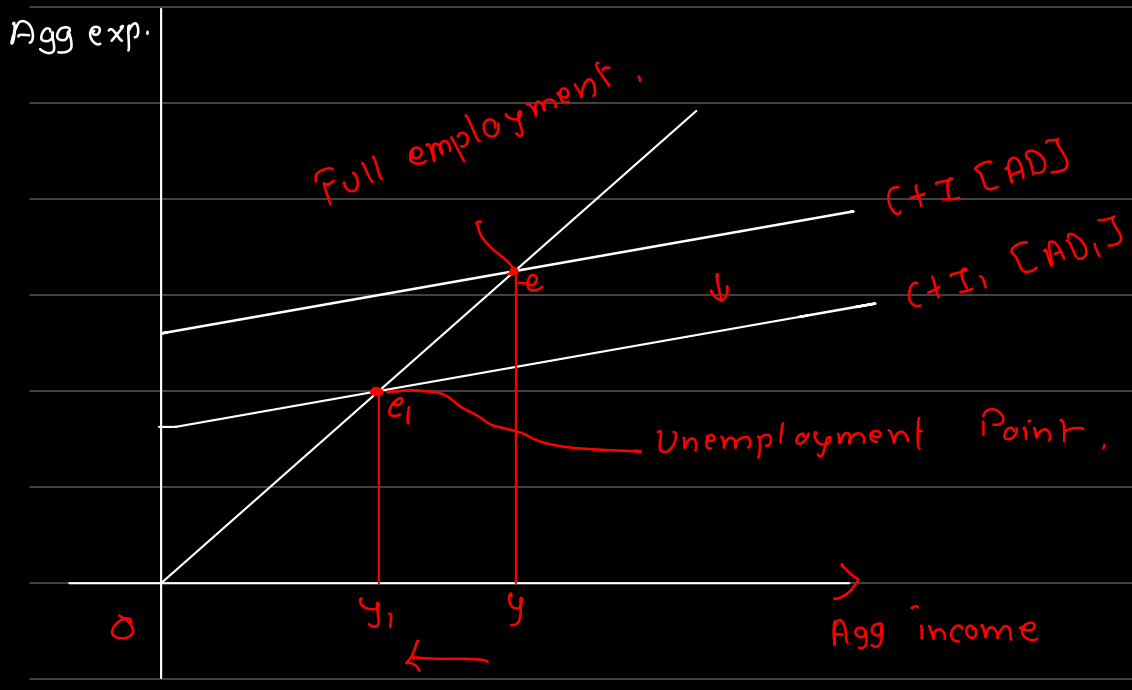
- An increase in demand for exports of a country is an increase in aggregate demand for domestically produced whereas imports per unit of income when increases constitute a additional leakage form, the circular flow of income in summary an increase in demand for countries exports has an expansnary effect an equilibri-um income whereas an autonomus increase in imports has a contractionary effect on equilibrium income.

* Inflationary Gap.





* Deflationary Gap.



Investment multiplier.

J.M. Keynes

1930

[GTEL]

R.F. Khan

1931

[Employment Multiplier]

{ Relationship blw change in investment & change in income. }

→ Defination,

- Defined as a Ratio of final change in income to intial change in investment.

$$K = \frac{\Delta Y}{\Delta I} \quad \text{OR} \quad K = \frac{1}{1 - MPC} \quad \text{OR} \quad K = \frac{1}{MPS}$$

* Assumption.

- MPC constant
- Closed economy
- One mans expenditure another mans income.

* Working of Multiplier.

Suppose govt spends 100 cr on Factory expense

↓

Income of employers 100 cr $S = I$

↓

$100 \times \frac{75}{100} = 75$ cr → [Goods / Service]

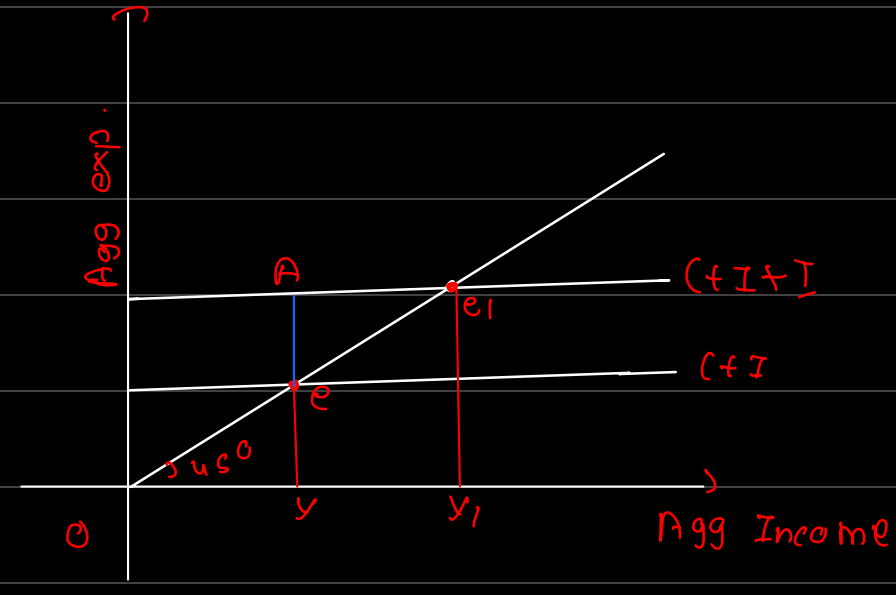
Income of Producer 75 cr.

$75 \times \frac{75}{100} = 56.25$ cr.

Stages	DI	DY	DC	DS
1	100	100	75	25
2		75	56.25	18.75
3		56.25	42.18	14.06
4		42.18	31.64	10.55
Total	100	400	300	100

$K = \frac{DY}{DI}$ $K = \frac{1}{MPS}$ $K = \frac{1}{25\%}$

= 4 times



Numerical Sums Unit-2.

① National income Y.- 2500

Autonomus Cons. a - 300

Investment I - 100

Calculate MPC & MPS

$Y = C + I$

$2500 = C + 100$

$2500 - 100 = C$

$C = 2400$

$C = a + by$

$2400 = 300 + b\ 2500$

$2400 - 300 = b \cdot 2500$

$2100 = b \cdot 2500$

$b = \frac{2100}{2500}$

MPC / b = 0.84

② Autonomus Consumption a = 100

MPS b = 0.2

Investment I = 200

→ Calculate NI

$Y = C + I$

$Y = 100 + 0.8y + 200$

$y = 300 + 0.8y$

$y = \frac{300}{0.2} = 1500$

$MPS = 1 - MPC$

$0.2 = 1 - MPC$

$0.2 - 1 = MPC$

$0.8 = MPC$

③ Calculate NI

$C = 20 + 0.6y$

$I = 10 + 0.2y$

$y = C + I$

$y = 20 + 0.6y + 10 + 0.2y$

$y = 30 + 0.8y$

$y = \frac{30}{0.2} = 150$

④ $S = (-10) + 0.2y$

Autonomus Consumption $I = 90$ cr

Investment increases by = 5cr.

→ Calculate Income & Consuption Also New Income &

consumption.

$$-10 + 0.2y = 50$$

$$0.2y = 50 + 10$$

$$y = \frac{60}{0.2}$$

$$\boxed{y = 300}$$

$Y = C + I$	$Y_1 = C_1 + I_1$
$300 = C + 50$	$325 = C_1 + 55$
$250 = C$	$C_1 = 270$

⑤ Investment increases by 40 cr

MPC = 0.8

Calculate ΔY & ΔS

⑥ $\Delta I = 400$ cr

$\Delta Y = 1900$ cr

Calculate MPC

$$K = \frac{1600}{400} = 4$$

$$MPC = \frac{1}{MPS} = \frac{1}{4} \quad \boxed{= 0.25}$$

$$MPS = 1 - MPS$$

$$MPS = 1 - 0.25$$

$$\boxed{MPS = 0.75}$$

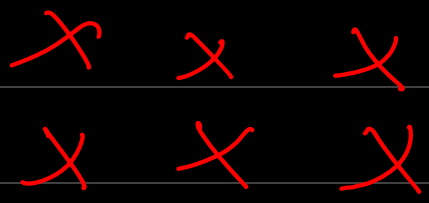
* Points to remember.

- Economy attend equilibrium level of output below the full employment lvl. of output.

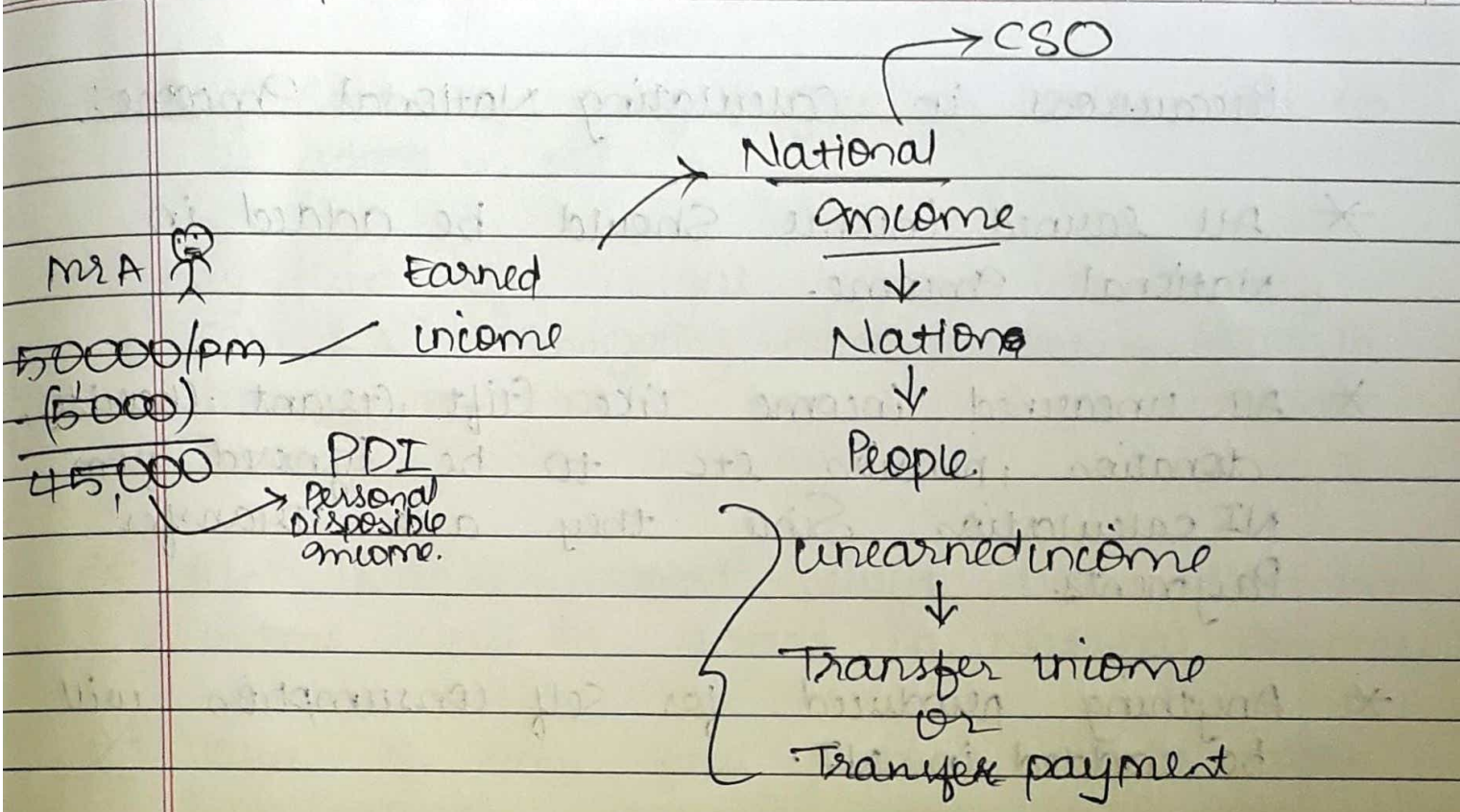
- The value of increment to consumer expenditure per unit to income is called as "MPC"

- More powerful the leakage smaller the value of multiplier.

- 45 °ro Degree line indicates equilibrium lvl. of income which may not be at full employ-ment lvl of income.



Chapter 1 National Income.



Meaning:

National income is a Money Value (Price (MRP)) of all final goods & services produced in domestic economy during a financial year (1st April to 31st March). (INDIA)
+ Net factor income from abroad (NFIA) (+R -P)

Precautions in Calculating National Income:

* All earned income should be added in National Income.

* All unearned income like Gift, Grant, Charity, donation, pension etc to be ignored from NI calculation since they are Transfer Payments.

* Anything produced for self consumption will be added in NI.

* Any kind of Financial investments where investment is done on Shares, Bonds, FD's etc not be added in NI.
[But income earned over it eg: Dividend/interest will be added]

* Any kind of Second hand product or transaction where goods are produced in previous year not to be added in current year National Income.

* Income earned by foreign companies in India.
(i) Value of Goods produced will be added
(ii) Profits will be excluded.

(Sudden)

* Any kind of windfall gain or losses not to be added in NI.

* Any kind of illegal income like money earned via Smuggling, Black marketing, Hawala money etc. Not to be added in National Income.

* Rent, Wages, interest, profit, Dividend, Mixed income will be added in National Income.

* Value of only final product to be taken Raw material, intermediate goods, WIP, Semi finished goods to be excluded.

* All exports & Receipts are added.
&
all Imports & Payments are deducted.

* Depreciation to be deducted from NI and also Indirect taxes are deducted.

(* Indirect taxes are unearned income.)

* Change in Stock, Business Stock, Inventory investment to be added in NI.

Concepts of National Income:

1.) $GDP_{MP} = C+I+G+(X-M)$

$GDP_{FC} = C+I+G+(X-M)-IT+S$

2.) $GNP_{MP} = C+I+G+(X-M)+(R-P)$

$GNP_{FC} = C+I+G+(X-M)+(R-P)-IT+S$

3.) $NDP_{MP} = C+I+G+(X-M)-D$

$NDP_{FC} = C+I+G+(X-M)-IT+S-D$

4.) $NNP_{MP} = C+I+G+(X-M)+(R-P)-D$

$NNP_{FC} = C+I+G+(X-M)+(R-P)-IT+S-D.$

National income

- $GNP_{MP} = GDP_{MP} + NFIA.$
- $GDP_{MP} = GNP_{MP} - NFIA$
- National = Domestic + NFIA.
- $NDP_{MP} = GDP_{MP} - Dep^{n}.$
- $NDP_{MP} = NNP_{MP} - NFIA.$
- Gross = Net + $Dep^{n}.$

(*) Net = Gross - Dep^n.

(*) $NNP_{MP} = GNP_{MP} - Dep^n$.

(*) $NNP_{mp} = GDP_{mp} + NFIA - Dep^n$.

(*) Market Price = Factor cost + IT - S

(*) Factor cost = Market Price - IT + S.

GDPFC = Compensation of employees (Cash & kind)
+
Operating Surplus [Rent, interest, profit]
+
Mixed income
+
Depreciation. → [You will add only when you go from NI to GDPFC.]

NDPFC = Compensation of employees
+
Operating Surplus [R + I + P]
+
Mixed income

Retained earnings
= (1000 cr)
= Corporate Profit
(–) 500 cr.
Dividend.

Personal income
=
National income

Rent + Wages + Profit + Dividend + NFIA + Mixed Income.	Less: (i) Undistributed corporate tax (ii) Corporate tax (iii) Social Security Contribution (Employee benefits which are yet to be received) Add: Transfer Payments. (unearned income eg dowry)

Personal income = National income
+
income received but not earned
(–)
income earned but not received.

(Module) ☆

Private Income:

Private income is a measure of the income [both factor income & transfer income] which accrues to Private Sector from all Sources within & outside the country.

Private income
=
Net factor income from abroad (NFIA)
+
Factor income from Net domestic Product
+
National debt interest. (Govt Bond pe interest)
+
Current transfers from the Govt. (Subsidies given to corporates)
+
Other Net transfers from rest of the World.

Personal disposable ~~income~~ income (PDI)

PDI = Personal income
−
Personal income tax.

Per Capita income (PCI)

$$PCI = \frac{\text{National income}}{\text{Total Population}}.$$

Nominal GDP	Real GDP.
Price	Output (Qty.)
Current Price	Constant Price (2011-12)
(False info)	(True info.)

Eg:- Pen Output = 1 lakh.
Price = 2/-
Value = 2 lakh.

Case 1	Case 2
Output = 1 lakh	Output = 2 lakh
Price = 4/-	Price = 2/-
Value = 4 lakh	Value = 4 lakh.
↓	↓
NGDP	RGDP.

GDP Deflator → Price Index.

(*) It is a measure of General price i.e inflation

(*) It takes into consideration both Nominal GDP & Real GDP

(*) The word deflator indicates to "deflate" or to take inflation out of GDP.

(*) It is a Price index used to convert Nominal GDP into Real GDP

(*) The deflator measures the changes in Price that has occured between base year & current year.

$$\text{GDP deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$

2m | 1 Question

Eg:1 Real GDP = 4700 Rs.
Nominal GDP = 3000 Rs
Calculate GDP deflator

$$\text{GDP deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$

$$= \frac{3000}{4700} \times 100$$

$$= \boxed{63.82}$$

Eg: 2 Nominal GDP = 1200
Price index = 110.
Real GDP = ?

$$\text{Price index} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$

$$110 = \frac{1200}{\text{Real GDP}} \times 100$$

$$\therefore \text{Real GDP} = 1090.90$$

Eg: 3 Real GDP = 450.
GDP deflator = 120.
Nominal GDP = ?

$$\text{GDP deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$$

$$120 = \frac{\text{Nominal GDP}}{450} \times 100$$

$$\therefore \text{Nominal GDP} = 540$$

Calculate Inflation Rate in the current year: (4)

Inflation Rate in current year = $\frac{\text{GDP deflator current year} - \text{GDP deflator Previous year}}{\text{GDP deflator Previous year.}} \times 100$

Year	GDP deflator.
2018	100
2019	113.63
2020	130.25

Calculate GDP deflator for 2020.?

$\rightarrow \frac{130.25 - 113.63}{113.63} \times 100$

$= \boxed{14.62\%}$

Inflation for 2019 $\rightarrow \frac{113.63 - 100}{100} \times 100$

$= \boxed{13.63\%}$

(3m) Please Show calculation compulsory

Calculate GDP deflator and Interpret it.

Billion (₹)

Year	Nominal GDP	Real GDP.	GDP deflator. Calculation	
2014	500	500	$\frac{500}{500} \times 100$	100
2015	800	650	$\frac{800}{650} \times 100$	123.08
2016	1150	800	$\frac{1150}{800} \times 100$	143.75
2017	1300	950	$\frac{1300}{950} \times 100$	136.84
2018	1550	1190	$\frac{1550}{1190} \times 100$	130.25
2019.	1700	1240	$\frac{1700}{1240} \times 100$	137.09

Interpretation:

(*) From the above table we will take 2014 as a base year where deflator is 100

(*) From 2015 to 2019 GDP deflator is greater than 100

(*) GDP deflator above 100 indicates prices have risen.

(*) If GDP deflator is greater than 100 then Nominal GDP is > than Real GDP.

(*) If GDP deflator next year is less than the GDP deflator current year then Prices have fallen.

Methods for Calculating National income:

1.) Product method / Output method / Inventory method / Value added approach / Final goods method.
latest name given to this method.
"industry origin method"

(3m)

Final Output

↓

GVA
Gross value added.
PS
+SS
+TS
GDP mp
+NFIA
GDP mp.

GNP mp
(-) Depn
NNP mp.
(-) IT + S
NNP FC → (National Income)

Eg:

Bread

Stages	Value of Output	Input	Value Added
Farmer	700	0	700
Flour mill	1000	700	300
Bakery	1300	1000	300
Retailer	1400	1300	100
		→ (NI) →	1400

(GDP mein aayegi)

Product Method:

1.	GVA = GDP
2.	NVA = NDP

(1.) GVA mp = Value of output − Value of Intermediate consumption.

(2.) GVA mp = Sales + Change in stock − Intermediate consumption.
(C.stock − OP stock)

(3.) GVA mp − Dep^n = NVA mp.

(4.) NVA mp − IT + S = NVA Fc

(5.) NVA Fc + NFIA = National Income.

2.) Income Method [Factor cost Method:
[used in developed countries]

NI → Calculated → from Distribution side
Brokerage + +
NI = Rent + Wages + Salary + Commission + Dividend + Interest + Mixed Income + NFIA.
(Only Earned Income.)

(3.) Expenditure method / Outlay method:

National Expenditure = National Income

NE = Consumption + Investment + GOVT + (X-M)
Expenditure Expenditure Expenditure Expenditure

Hint:
(1.) Koi bhi type Ka expenditure must be added.
(2.) Koi bhi type Ki investment must be added
Except: "Financial Investment" which is not considered.

Eg: St. Govt construction Expenditure → Added.

Eg: St. Govt Inventory Investment → Added

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Q:1)

	Consumption	750
+	Investment	250
+	Govt. Purchase	100
+	(X − M) (100 − 200)	(100)
	National Income (NI)	1000

NI = ₹1,000

Q:2)

	Personal consumption Expenditure	6,500
Add:	State Government Expenditure	2,000
Add:	Central Government Expenditure	500
Add:	Change in inventory	100
Add:	Gross private domestic fixed investment	1,200
Add:	(x − m) (900 − 1200)	(300)
	GDPmp	10,000

	GDPmp	10000
less:	Indirect taxes − Subsidiaries	(150)
less:	Net factor payment to abroad	100
less:	Depreciation	(200)
	NI	9750

GDPmp	=	₹10,000
NI	=	₹9750

Q:3) Inventory investment. 100.
Add: (X−M) (200−100) 100
Add: Personal consumption Expenditure 3500
Add: Gross Residential construction investment 300
Add: Stock Govt. purchased. 1000
Add: Gross public investment 200
Add: Gross business fixed investment 300
GDPmp. 5500

GDPmp. 5500
Less: Indirect taxes. (100)
~~Add~~: Net factor income from abroad. (50)
Less: Depreciation (50)
NI 5300

GDPmp	= ₹ 5500
NI	= ₹ 5300

HW Pg 442.

Q:19) (₹ in crores)

Item	Amt (₹)
Gross investment	90
+ (X − M)	10
+ Private consumption Expenditure.	350
+ Government purchases of goods & Services.	100.
GDPmp.	550
GDPmp	550
− Indirect taxes − ~~Subsidiaries~~ (Net)	(5)
GDPFC	545

GDPmp	= ₹ 550 crores
GDPFC	= ₹ 545 crores

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(₹ in crores)

Q:20)

Gross Domestic fixed investment	10000
+ Inventory investment	5000
(-) Depreciation	(2000)
(-) Indirect Taxes.	(1000)
+ Subsidies	2000
+ Consumption Expenditure	20000
NDP$_{FC}$	34000

NDP$_{FC}$ = ₹34000 crores

Q:5)

Value of Output in Primary Sector	500
+ Value of Output in Secondary Sector	900
+ Value of output in Tertiary Sector	700
Value of output (A)	2100

Intermediate consumption in primary sector	250
Intermediate consumption in Secondary Sector	300
Intermediate consumption in tertiary sector	300
Value of Intermediate Consumption (B)	850

GVA$_{MP}$ = Value of Output − Value of intermediate consumption.

= 2100 − 850

GVA$_{MP}$ = 1250

GVA$_{MP}$ = GDP$_{MP}$ = 1250.

GNP$_{MP}$ = GDP$_{MP}$ + NFIA

= 1250 + (20)

GNP$_{MP}$ = 1230

Q:6)

Private final consumption Expenditure	290
+ Govt. Final consumption Expenditure	50
+ Gross Domestic fixed capital formation	105
+ Net Exports.	(-5)
+ Net addition to Stock	15
GDPMP.	455

GDPMP	455
+ Subsidies	20
(-) Indirect Taxes.	(70)
GDP_{FC}	405

GDP_{FC}	405
(-) Depreciation/Consumption of fixed capital.	(45)
+ NFIA	(5)
NI	355

$GDP_{MP} = 455$; $GDP_{FC} = 405$; $NI = 355$

Q:4)

GDPMP	6000
+ (R-P) (150 - 225)	(75)
(-) Depreciation	(800)
(-) Indirect Taxes.	(700)
National Income	4425

National Income	4425
(-) Retained Earnings (Corporate profit - Dividend) (1200 - 600)	(600)
+ Transfer payment	1300
Personal Income	5125
(-) Personal Income Tax	(1500)
Personal Disposible Income	3625

NI =	4425
PDI =	36215

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8.7) Sales 1000
+ Change in Stock (100 − 200) (100)
(−) Intermediate Consumption. (300)
(−) Depreciation (150)
NDPmp 450.

NDPmp	= 450
+ NFIA	= 10.
(−) Indirect Tax	= (50)
+ Subsidies.	= 10
NNPFC	420

8.10) Net Domestic Product at factor cost = 8000
+ NFIA = 200.
NNPFC 8200
(−) Undisbursed Profit (1000)
(−) Corporate tax (500)
+ Transfer Payment 300
Personal Income 7000

Personal Income 7000
(−) Personal Tax (500)
Personal Disposable Income 6500

Personal Income	= 7000
Personal Disposable Income	= 6500

Q:18)

Wages.	10000
+ Rent	5000
+ Interest	400
+ Dividend	3000
+ Mixed Income	400
+ Undistributed Profit	200
+ Social Security Contribution.	400
+ Corporate Profit Tax	400
NDPMP.	19800

NDPMP	= 19800
+ NFIA	= 1000
NI	= ₹ 20,800 crores

Q:8)

Particulars	Industry A	Industry B	Industry C
Sales.	400+200 +1000	500+800	600+500
	= 1600	= 1300	= 1100
(-) Intermediate Consumption	(100)	(400)	200+500 =(700)
GVAmp.	1500	900	400

GDPmp → 2800

GDPMP → GNPmp.

[Since NFIA is not given].

(a) GNPmp = 2800
(-) IT = (100)
+ S = 50
2,750

(b) GNPFC
(-) Depⁿ = (100)

(c) National Income NNP(FC) = 2,650
+ IT = 100
- S = (50)
2,700

(d) NNPmp.

Q:17) (a.) Net Domestic Income: (NIDPmp)

Mixed Income = 28000
+Operating Surplus = 10000
+Compensation of employees. = 24000
NDPmp. 62,000

(b) Gross Domestic Income: (GDPmp)

NDPmp 62000
(+) Depreciation. 1700
GDPmp. 63,700

(c) Net National Income. (NNPmp.)

Net National Income (NNPFC)

Net domestic income	62,000
+NFIA	(300)
Net National Income	61700

Net National Product at Market Price

NNPFC	61,700
+ IT	9000
(-) Subsidies	(1800)
NNP(MP)	68900

HW.

8:13)

Particulars	Firm A	Firm B
Sales.	100	200
(-) Purchases.	(40)	(60)
+ Change in Stock (Cl. Stock - Op. Stock)	(5)	(10)
Value Added.	55	130
Total Value added =	55 + 130 =	185
(-) Indirect Taxes		(30)
GDPFC		155

Unit 2 : The Keynesian theory of determination of National income.

Aggregate demand Function (ADF)

Maximum Sales Proceeds. GDP = AD

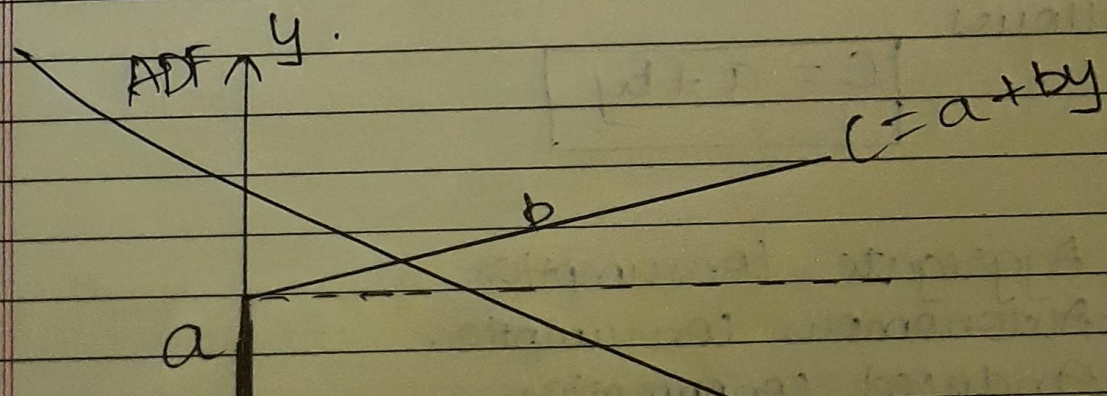
TWO Sector Economy.

$AD = C + \bar{I}$ (Bar) i.e Investment should remain constant

Autonomous consumption Exp. (a) { consumption cannot become zero Never Eg Food (We students)

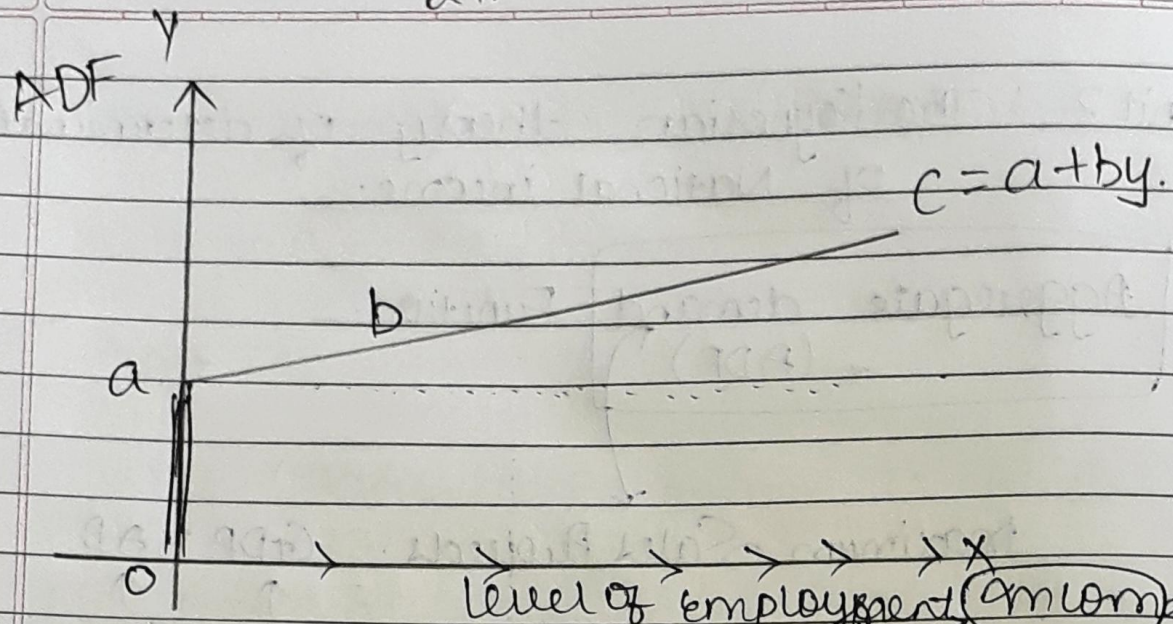
Induced Consumption Exp. (by) { Can become zero } Eg Luxury Expenditures.

$C = a + by$



2 marks ke liye itna likhna

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(*) Explains the positive relation between consumption and disposible income.

(*) Expressed as $C = F(Y)$

(*) As per Keynes
"Total volume of Peivate expenditure in an economy depends on the total curred disposable income of the people and proportion of income which they decide to spend.

(*) Consumption - income relation is as follows.

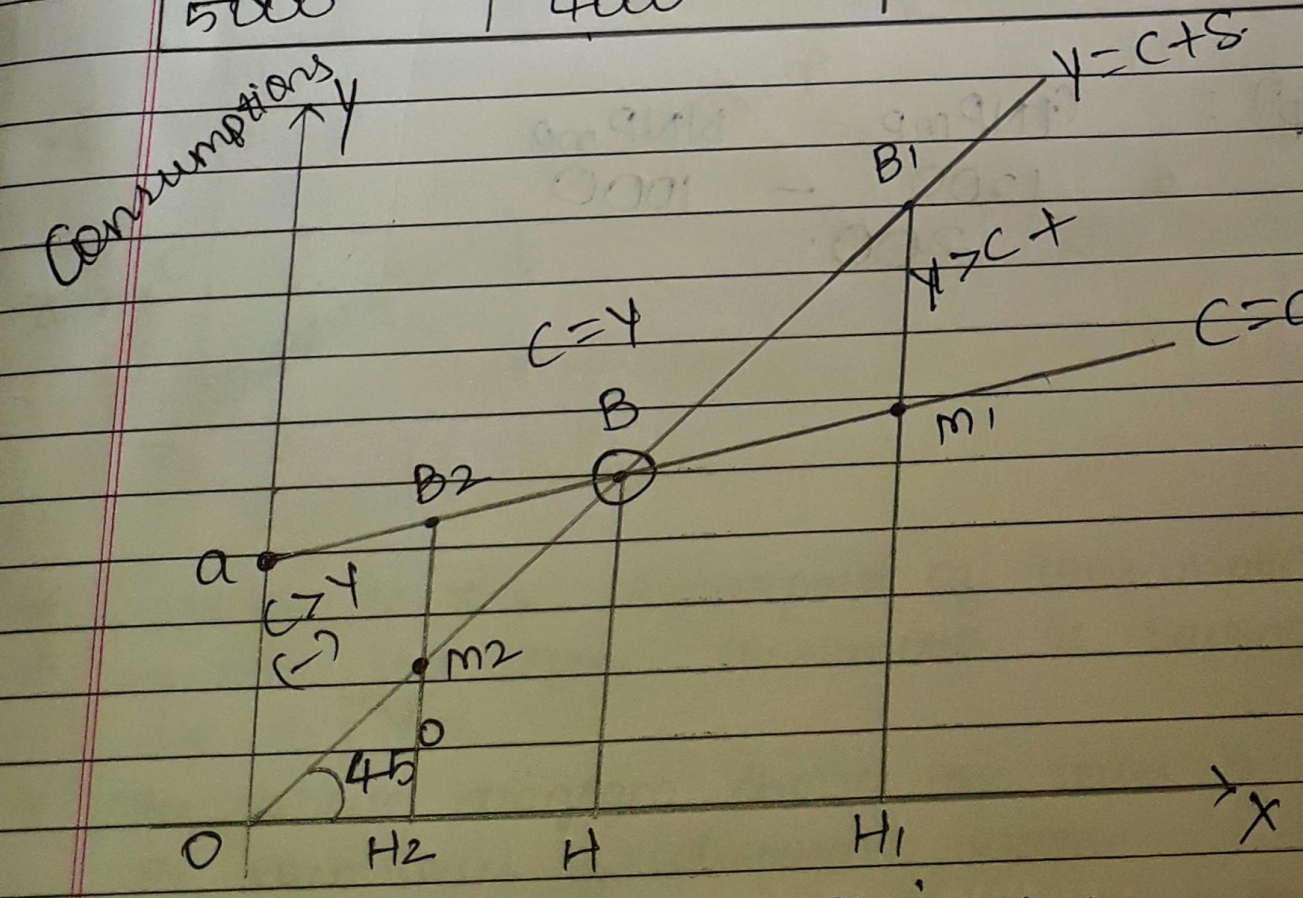
$$\boxed{C = a + by}$$

C - Aggregate consumption.
a - Autonomous consumption.
b - Induced consumption.
Y - Total disposable income.

Explain consumption function with table & diagram NOV19 (3m)

$C = F(Y)$

Aggregate income Y	Aggregate consumption C	Savings $S = Y - C$
0	500	-500 } Dissavings (-)
1000	1200	-200 } Dissavings (-)
2000	2000	0 zero
3000	2600	+400 } Savings +.
4000	3300	+700 } Savings +.
5000	4000	+1000 } Savings +.



Level of income.

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Q.9) GDP$_{MP}$ = 1100. NNP$_{FC}$ = 850.
NFIA = 100.
Net I Tax = 150.
Dep^n = ?.

GNP = ?
GDP = 1100.
+ NFIA = 100
1200

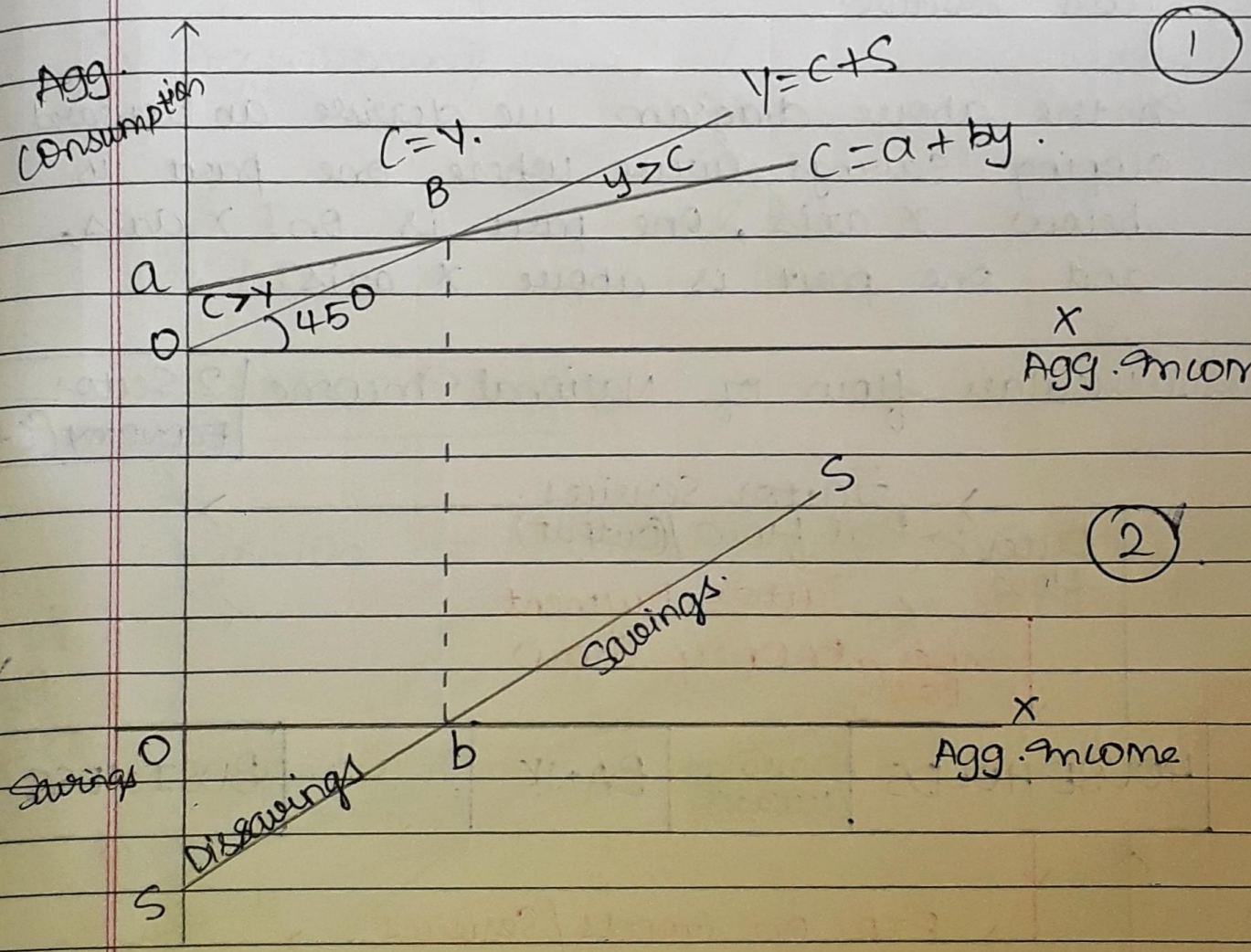
NNP$_{MP}$ = ?.
NNP$_{FC}$ = 850 { 1100 − 100 − 150 }.
+ I Tax = 150
NNP$_{MP}$ = 1000

Dep^n = GNP$_{MP}$ − NNP$_{MP}$
= 1200 − 1000
= 200.

Savings Function

Same table remains same as consumption function

$$S = F(Y.)$$ (2 marks)



(1)

(2)

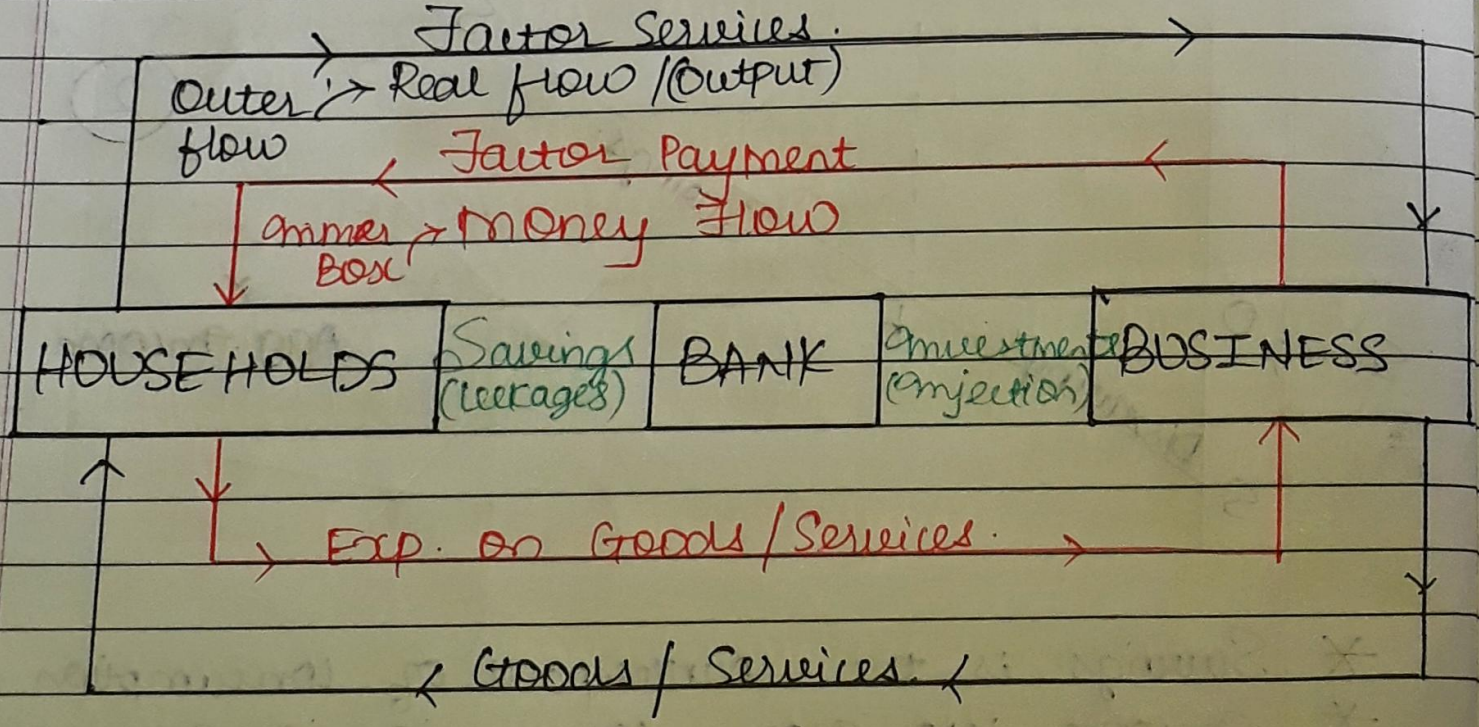
* Savings is the counterpart of consumption function.
* Income left after consumption is savings
  i.e $S = Y - C$
* The above diagram shows the level of savings at each level of disposable income.
* When income is zero, household tend to dissave to meet their consumption needs. So savings at that point are Negative.

* When consumption is equal to income Savings are zero

* When Consumption is less than income Savings are Positive.

* On the above diagram we derive an upward sloping Savings curve where one part is below x axis, one part is on x axis, and one part is above x axis.

Circular flow of National Income | 2 Sector ECONOMY (C+I)



Determination of Equilibrium income in two Sector.

C+I → (AD) Agg. Demand

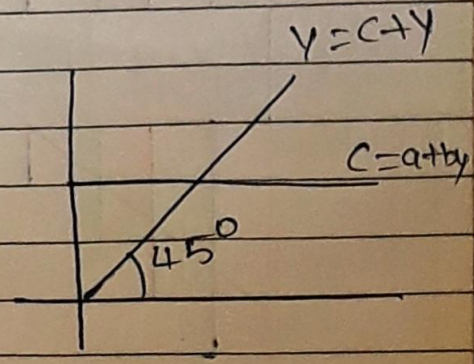
Y = [C+S] → AS (Agg. Supply)

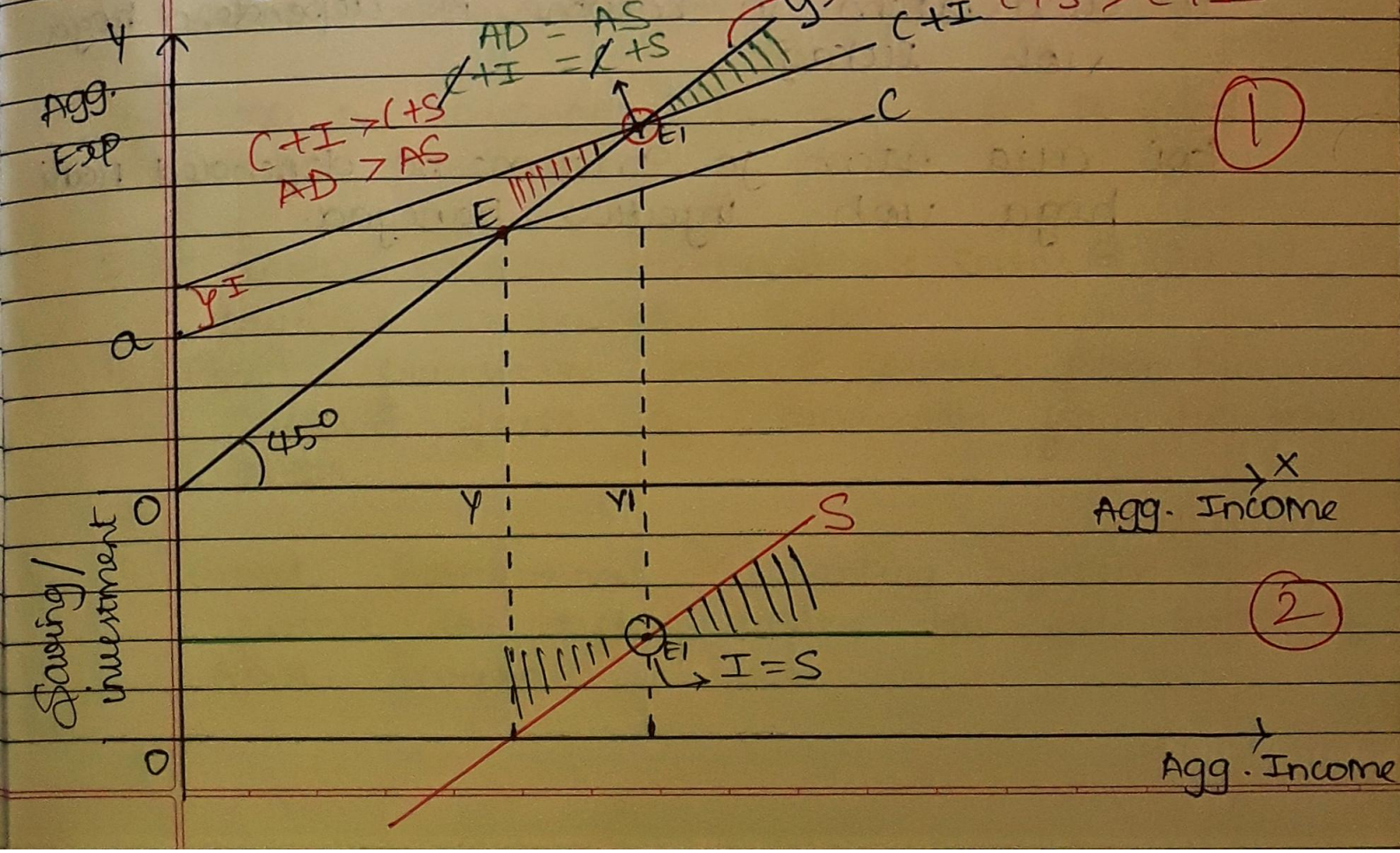
C+I = C+S.

AD = AS

I = S

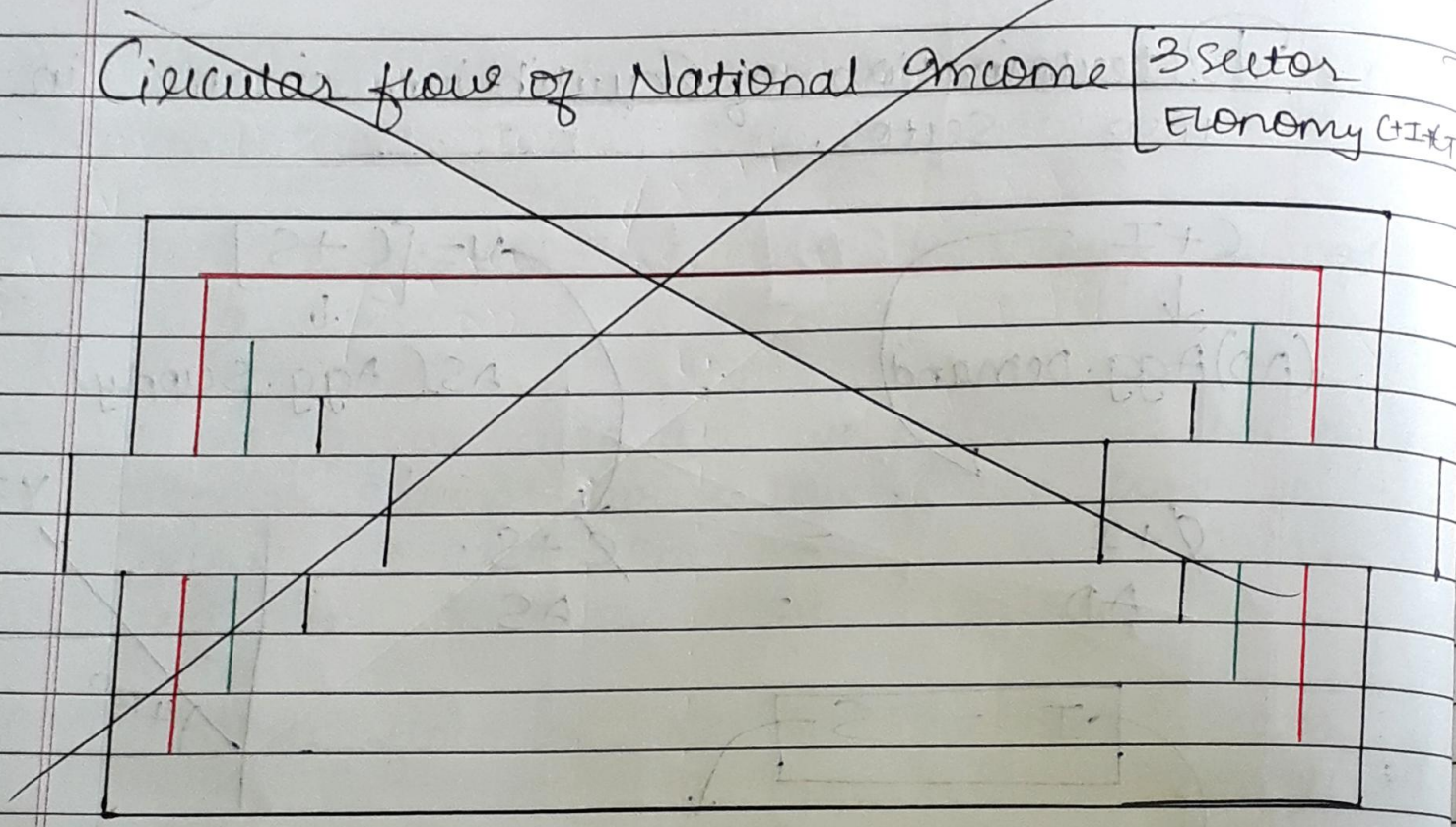
Injection = Leakages. ; AS > AD ; C+S > C+I





Circular flow of National Income

3 sector Economy (Hi

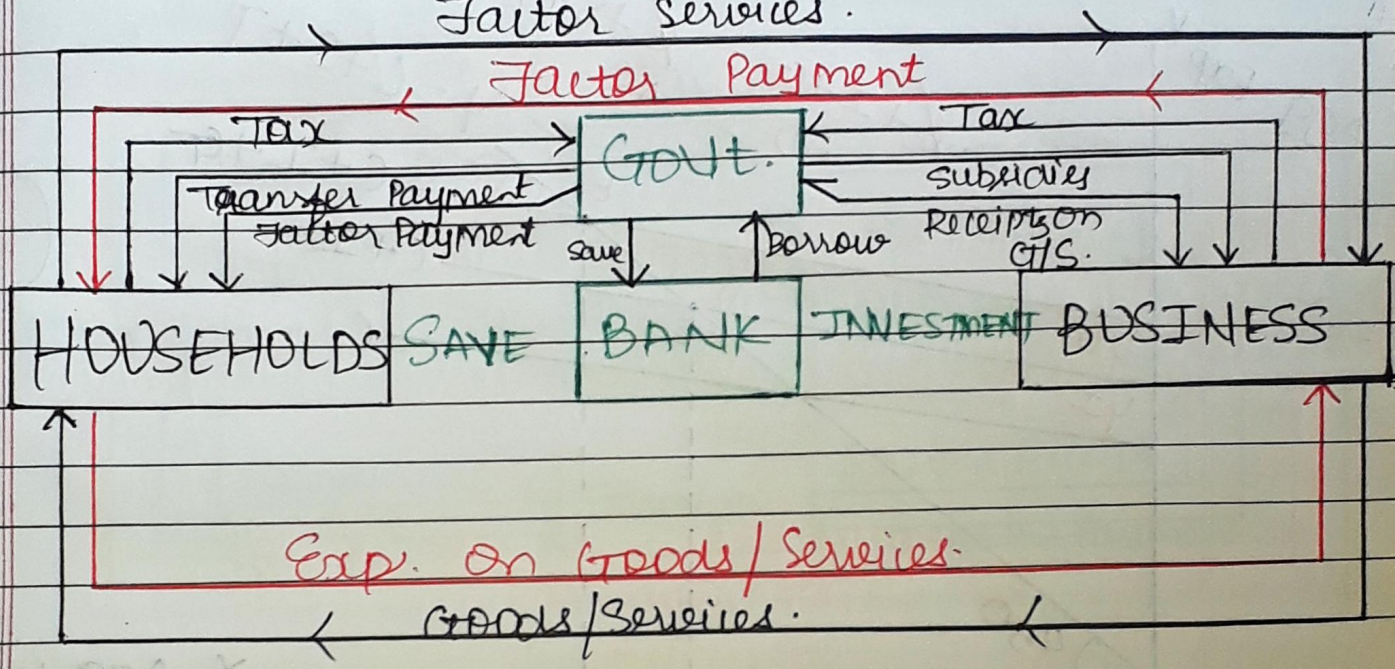


Principle

Koi aisa item jo income pe dependend hoga voh leakage

Koi aisa item jo income pe depended nahi hoga voh injection banegaa

Circular flow of National Income [3 sector ECONOMY (C+I+G)]



From the following flow chart we can find that Govt. Sector adds the following things:

1.) Taxes on household & Business Sector to fund Govt. purchase

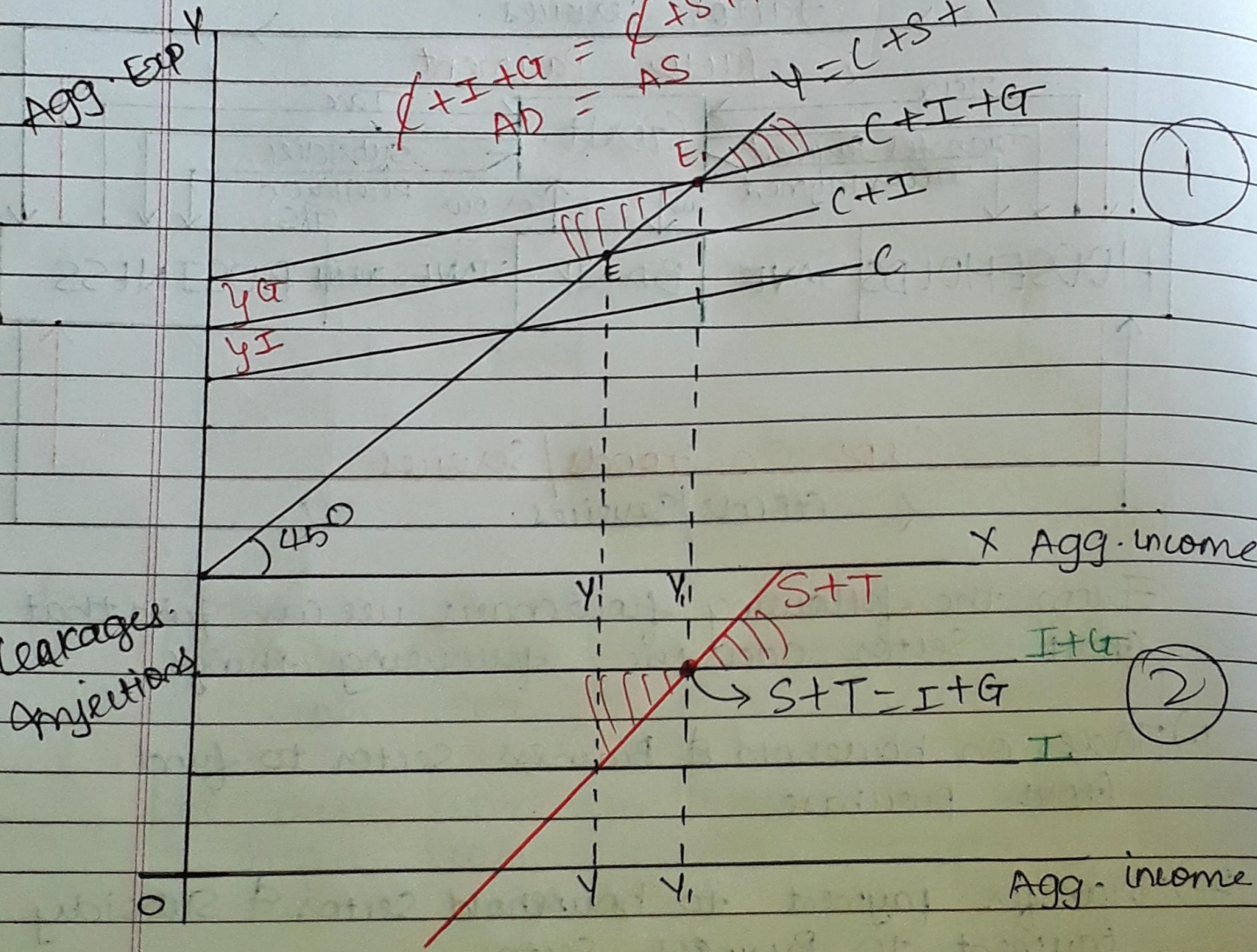
2.) Transfer payment to household Sector & Subsidy payment to Business Sector.

3.) Govt. purchases goods & services from Business Sector & factor of Production from household Sector.

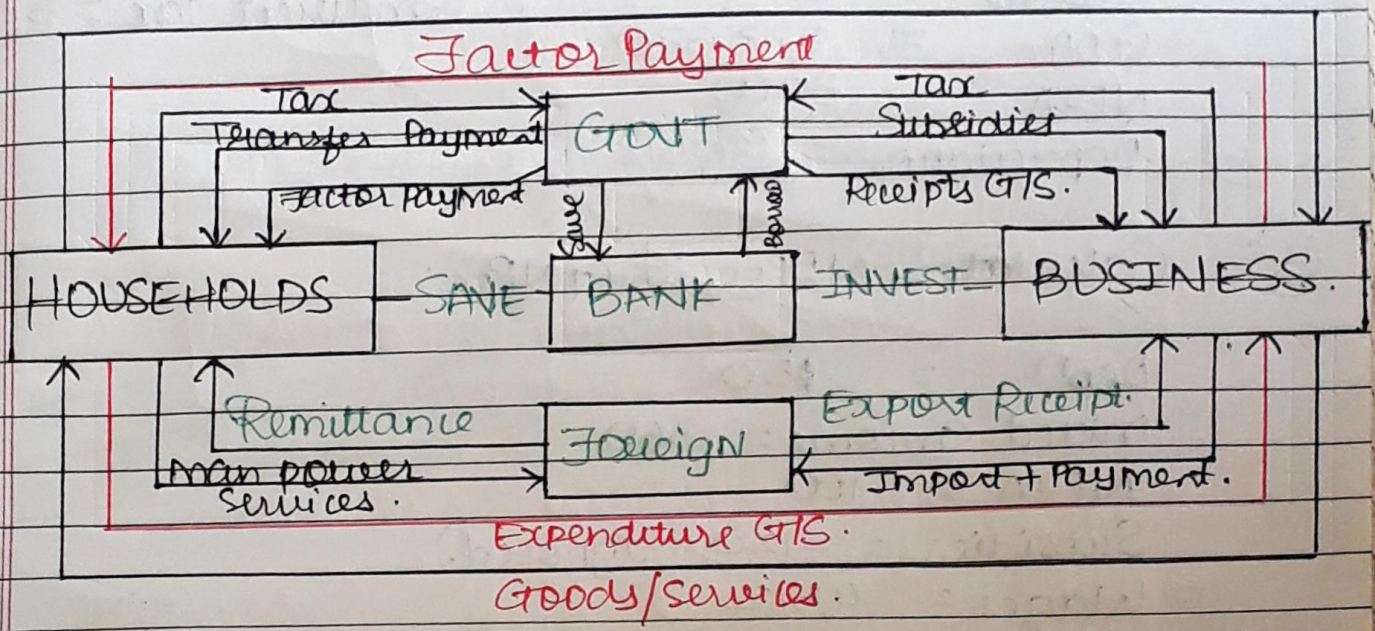
4.) Govt. Borrowings in Banking System to finance the deficit when tax fall short of Govt. Purchase.

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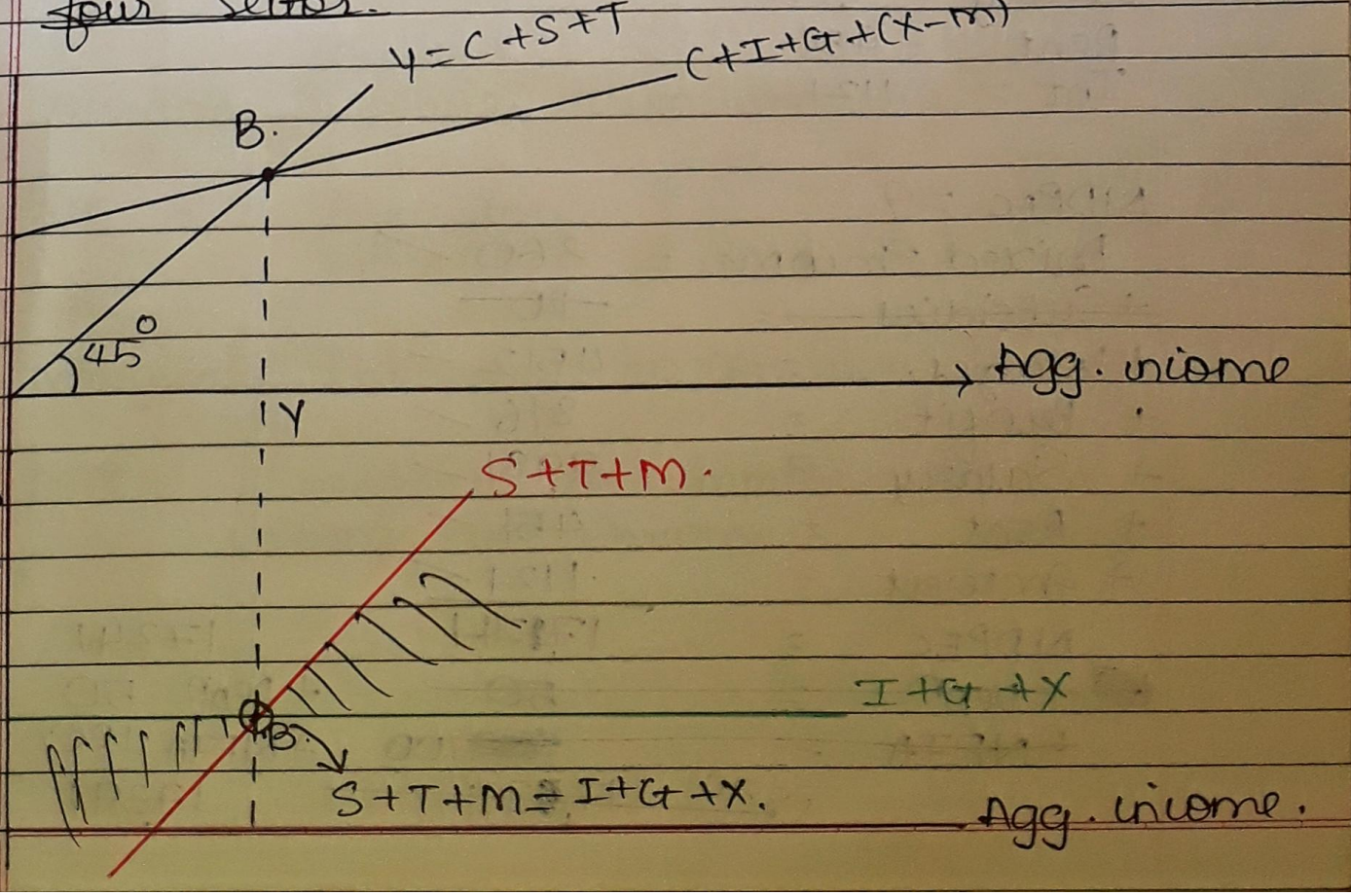
Determination of Equilibrium level of income in three Sector.



Circular flow of National income 4 sector $[C+I+G+(X-M)]$



Determination of Equilibrium level of income in four sectors:



Q. Calculate Net Indirect Taxes:

1. GDPmp = 875600 ∴ Indirect Tax = 351930
   GDPfc = 523670
   NFIA = 3500
   Depreciation = 120518

Q. Calculate NDPFC & GNPFC:

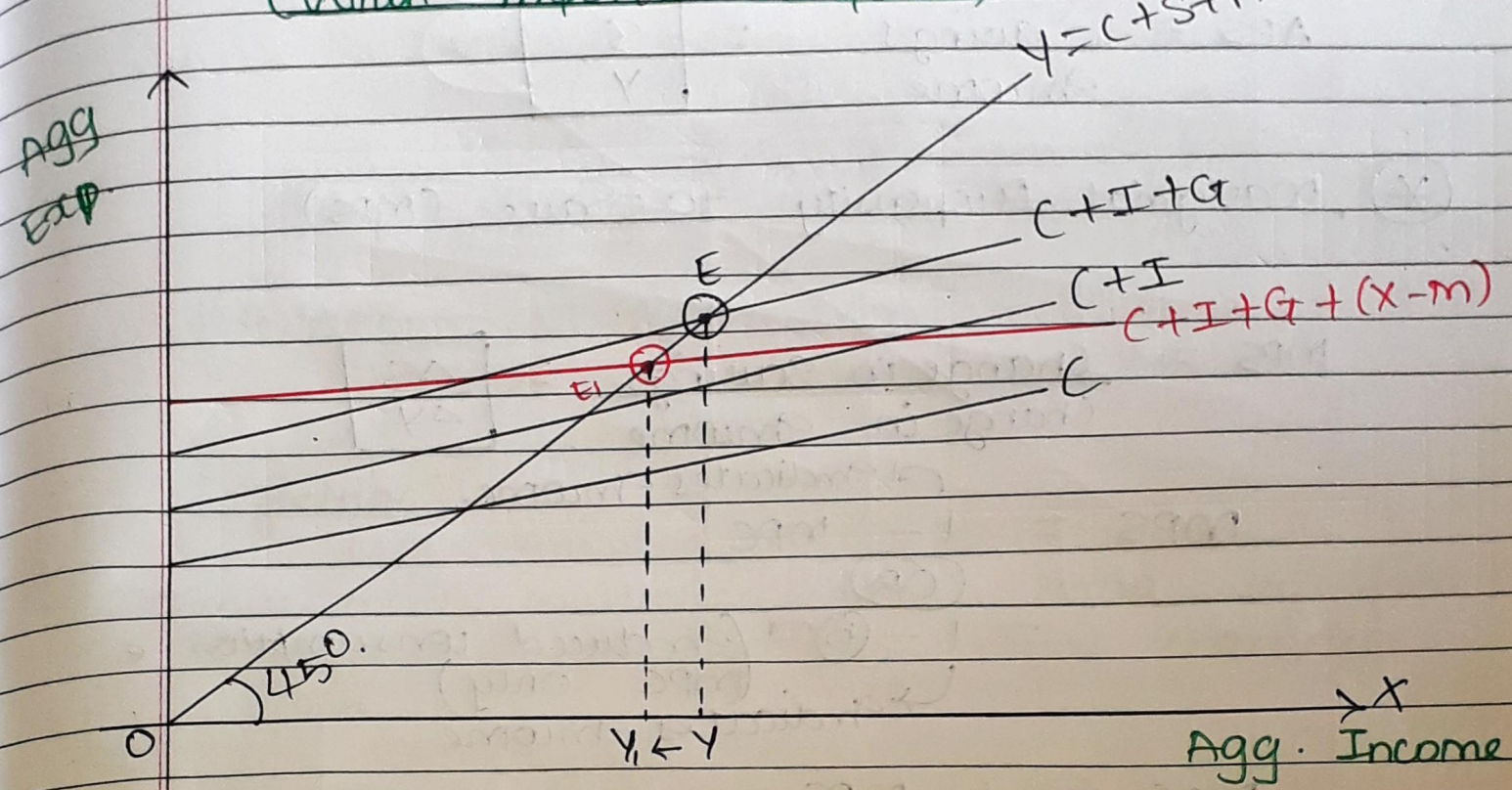
Depn = 150
Mixed Income = 360.
NFIA = 100
Subsidies = -120 (Ignored)
Wages = 4,512
Perofit = 816
Salary = 9,981
Rent = 451
Int = 1121

NDPFC = ?

Mixed Income	=	360 ✓
~~+ Subsidies~~	=	~~120~~
+ Wages.	=	4512 ✓
+ Perofit	=	816 ✓
+ Salary	=	9981 ✓
+ Rent	=	451 ✓
+ Interest	=	1121 ✓
NDPFC	=	17241
~~+ Depn~~	=	~~50~~
~~+ NFIA~~	=	~~100~~
		~~17391~~

17241
+ Depn 50
+ NFIA 100
17391

Equilibrium level of National income (4 Sector)
(When Imports > Exports)



(Capacity)

⊗ Average Propensity to Consume (APC)

$$APC = \frac{\text{Consumption}}{\text{Income}} \quad \boxed{\frac{C}{Y}}$$

⊗ Marginal Propensity to Consume (MPC)

$$MPC = \frac{\text{Change in consumption}}{\text{Change in Income}} = \boxed{\frac{\Delta C}{\Delta Y}}$$

Never constant

(*) Average Propensity to Save (APS)

$$APS = \frac{\text{Savings}}{\text{Income}} = \boxed{\frac{S}{Y}}$$

(*) Marginal Propensity to Save (MPS)

$$MPS = \frac{\text{Change in Savings}}{\text{Change in Income}} = \boxed{\frac{\Delta S}{\Delta Y}}$$

↳ Indicates Income.

$$MPS = 1 - MPC$$

(OR)

$$= 1 - \frac{D}{Y}$$

↳ (Reduced consumption i.e MPC only)

↳ Indicates Income

$$MPC = 1 - MPS$$

Income	Consumption	APC	MPC	MPS. (1-MPC)
0	500	-	-	-
1000	1250	1.25	0.75	0.25
2000	2000	1	0.75	0.25
3000	2750	0.92	0.75	0.25
6000	5000	0.83	0.75	0.25
10000	8000	0.8	0.75	0.25

(Income Multiplier)

Investment Multiplier

J.M. Keynes. → 1936. [GTE IM].

R.F. Kahn. 1931.

4 times

400 Cr / 100 Cr

K

[Relationship between change in Investment & Change in Income]

Definition:

Investment multiplier is a ratio of final change in income to initial change in investment

$$K = \frac{\Delta Y}{\Delta I} \quad (400) / (100) \quad (4 \text{ times})$$

OR $K = \frac{1}{1 - MPC}$

OR $K = \frac{1}{MPS}$

Assumptions

* MPC is kept constant
* closed economy
* One man's exp. is another man's income

Working of multiplier

Suppose Govt. invest 100 cr in expansion of factory.

↓

Income of the Employees 100 cr.

[MPC constant] $100 \times \frac{75}{100} = 75$ cr → [Goods / Services

[MPC constant] Income of Producers 75 cr

$75 \times \frac{75}{100} = 56.25$ ..... Impt!

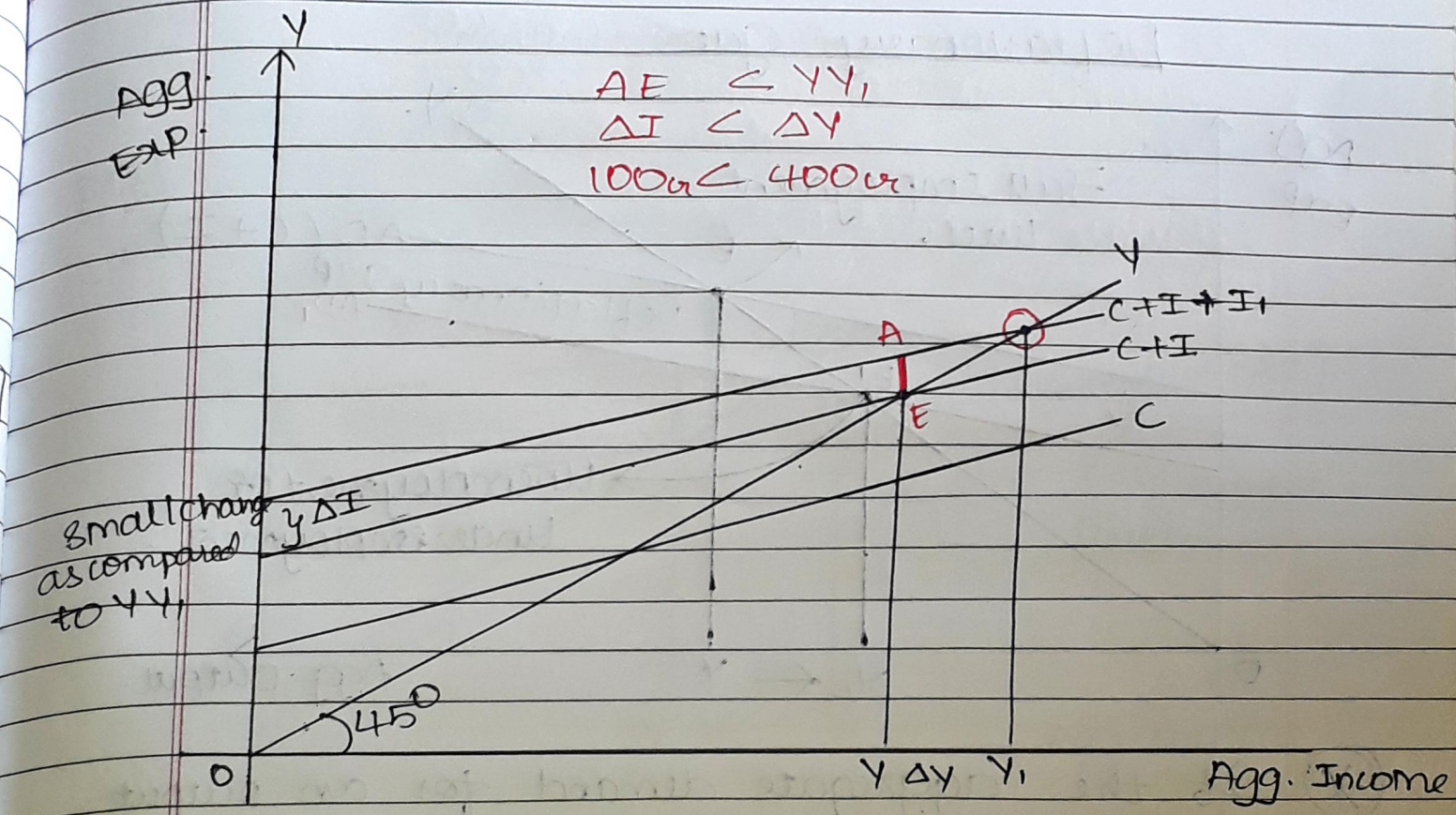
MPC = 75%

MPS = 25%.

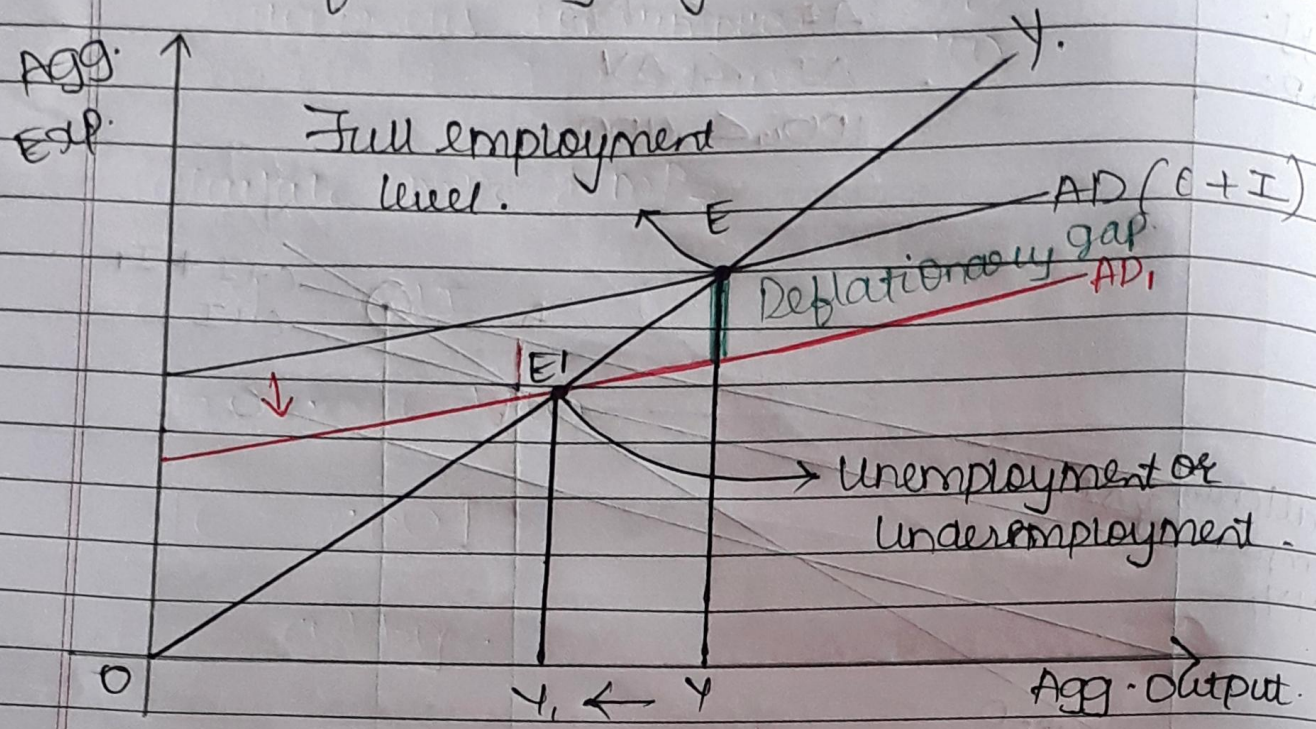
Stages	ΔI	ΔY	ΔC	ΔS.
1	100	100	75	25
2		75	56.25	18.75
3		56.25	42.18	14.06
4		42.18	31.63	10.54
			.....	
Total	100.	400	300.	100

$K = \frac{1}{MPS} = \frac{1}{25\%} =$ 4 times.

$K = \frac{\Delta Y}{\Delta I} = 4 = \frac{\Delta Y}{100}$ $\Delta Y = 400$


Y
Agg. Exp.
AE < YY1
ΔI < ΔY
100cr < 400cr.
Y
C+I+I1
C+I
C
A
E
small change as compared to YY1
yΔI
45°
O
Y ΔY Y1
Agg. Income

Deflationary gap.



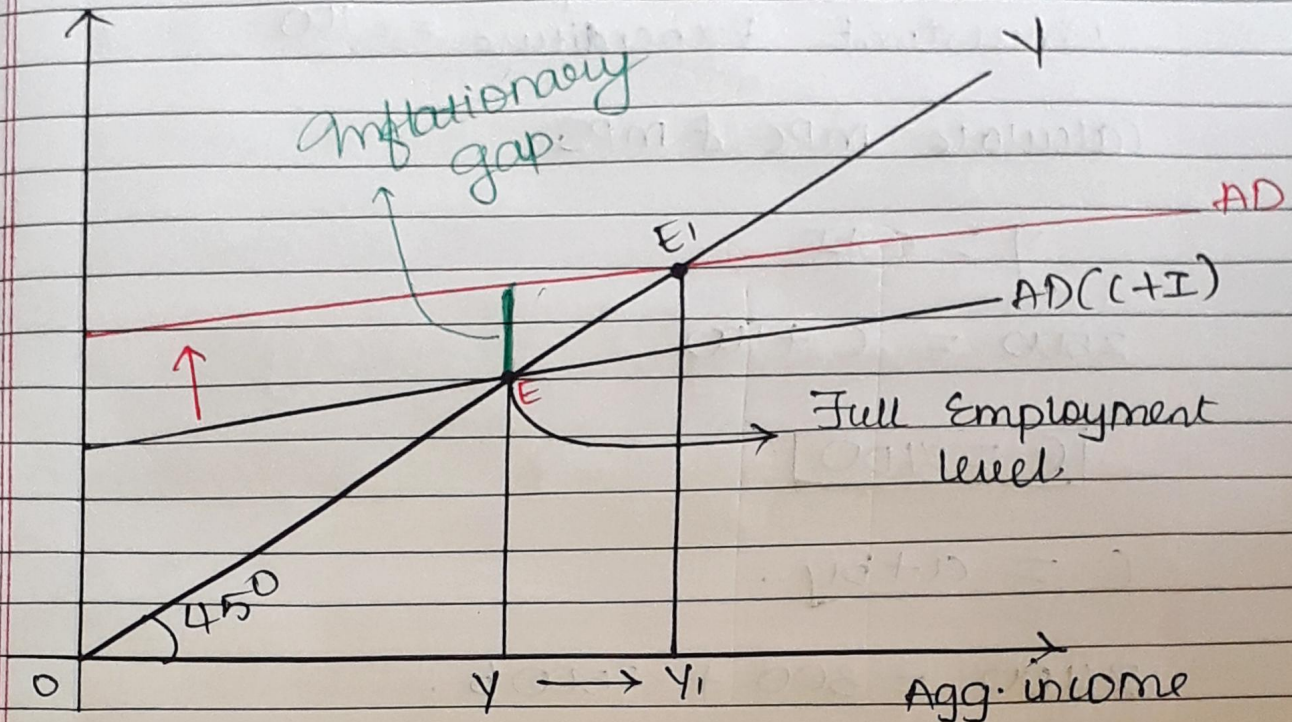
(*) If the aggregate demand for an output is less than the full employment level of output then it is called deficient demand.

(*) Deficient demand given rise to deflationary gap or Recessionary gap.

(*) It happens when equilibrium level of aggregate production is less than full employment output

(*) Deflationary gap is thus a measure of the extent of deficiency of aggregate demand and thus it leads to income, output and employment to decline thus pushing the economy into unemployment.

Inflationary Gap



- If the aggregate demand for an output is greater than full employment level of ouput then it leads to excess demand.
- Excess demand given rise to inflationary situation or inflationary gap.
- This situation occurs during expansion phase of Business cycle which leads to demand pull inflation.
- Inflationary gap which is the amount by which aggregate demands exceeds the level of aggregate demand required to establish the full employment equilibrium

If $I = S$ $\quad S = I$

Q:1) "I given "S" is also given (NOV18 3M)

National Income. = 2,500
Autonomous Consumption = 300
Investment Expenditure = 100.

Calculate MPC & MPS.

$Y = C + I$

$2500 = C + 100$

$\boxed{C = 2400}$

$C = a + by.$

$2400 = 300 + 2500b.$

$b = \frac{2400 - 300}{2500.}$

$b = 0.84$

i.e $\boxed{MPC = 0.84}$

$MPS = 1 - MPC$
$= 1 - 0.84$
$= \boxed{0.16}$

Q:2)

Autonomous Consumption = 100

MPS = 0.2

Investment = 200

Calculate = NI ?

~~Y = C + I~~
~~Y = 100 + 0.8 y~~

Y = C + I.

Y = 100 + 0.8y + 200.

Y = 300 + 0.8y.

y = $\frac{300}{0.2}$ = 1500

Q.3)

Calculate NI ?.

$C = 20 + 0.6y.$

$I = 10 + 0.2y$

$Y = C + I$

$= 20 + 0.6y + 10 + 0.2y.$

$= 30 + 0.8y$

$0.2y = 30.$

$\boxed{y = 150}$

Q.4) Savings Function

Savings $S = -10 + 0.2y.$

autonomous investment = 50 cr.

* investment increase by 5 cr.

Calculate : income & consumption.
also
New income & consumption.

Sol^{n} $S = I$.

$-10 + 0.2y = 50$

$0.2y = 60$

$\boxed{y = 300}$

~~$C = I + S$~~ $C = Y - I$

$= 300 - 50$

$\boxed{C = 250}$

New income = 55

$-10 + 0.2y = 55$

$0.2y = 65$

$\boxed{y = 325}$

$C = Y - I$

$= 325 - 55$

$\boxed{C = 270}$

Investment multiplier

Q:5)

Investment exp. increased by ₹400.
MPC = 0.8.

Calculate Increase in income ? ΔY.
Increase in Savings.

MPC = 0.8. $\Delta I = 400$.

$$K = \frac{1}{1-MPC} = \frac{1}{1-0.8} = \frac{1}{0.2}$$ = 5 times

$\Delta Y = ?$

$$K = \frac{\Delta Y}{\Delta I}$$

$$5 = \frac{\Delta Y}{400.} = \boxed{\Delta Y = 2000}$$

MPS = 1 - MPC
= 1 - 0.8
= 0.2

$\boxed{\Delta S = 400}$

8.6)

Δ Investment = 400 crore
ΔNI = 1600 crore

Calculate MPC

$$K = \frac{\Delta NI}{\Delta I} = \frac{1600}{400} = \boxed{4 \text{ times}}$$

$$K = \frac{1}{MPS} \quad \therefore 4 = \frac{1}{MPS} \quad \boxed{MPS = 0.25}$$

$$\therefore MPC = 1 - MPS \quad \therefore \boxed{MPC = 0.75}$$

HW.

8.1) Per capita income increased from 42,300 to 50,000 and per capita consumption increases from 35,400 to 42,500

Calculate Multiplier (K).

12.5 times
MPC = 0.92

$$K = \frac{\Delta I}{\Delta} \qquad \boxed{K = \frac{\Delta NI}{\Delta I}}$$

$I_1 = 42300 - 35400 = 6900$
$I_2 = 50000 - 42500 = 7500$ $\Big\}$ $\boxed{\Delta I = 600}$

$\therefore \Delta NI = 50000 - 42300 = 7700.$

$$K = \frac{7700}{600}$$

Govt finance

Chapt. 2 Public Finance.

(Unit 1)

It is the study of finance related to Govt.

- Local
- State
- Central

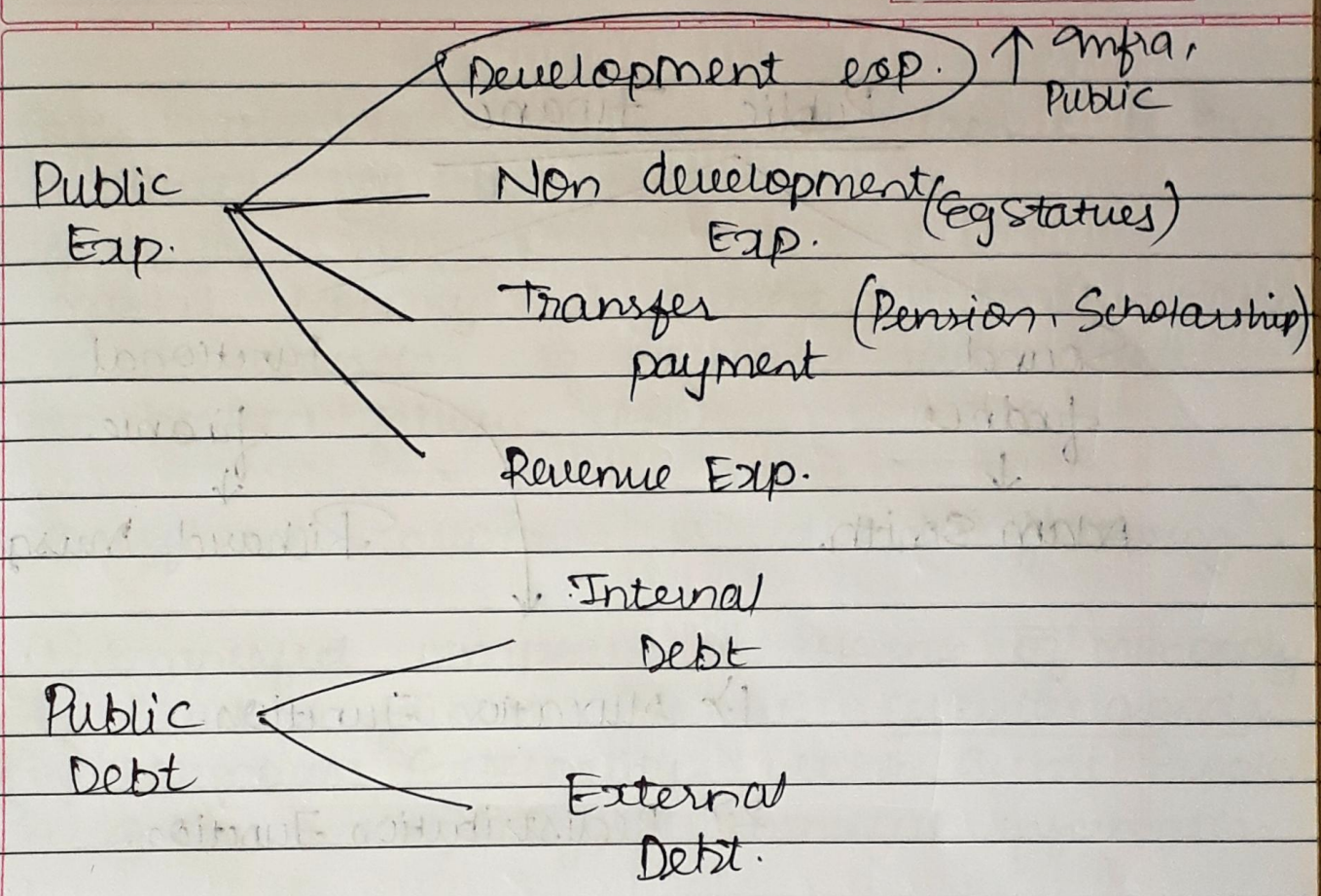
Basically Public finance is a study of Principles of income and Exp. of the Govt.

(Unit 4 same) Structure of Public Finance

- Public Revenue
- Public exp.
- Public Debt
- Budget.

Public Revenue

- Tax
  - DT
  - IDT
- Non Tax
  - Eg [redacted], Challan, Penalty



→ A - 112

Budget

↓

Annual Financial

Public Finance

Sound finance → Adam Smith.

Functional finance → Richard Musgrave

1.) Allocation Function.

2.) Redistribution Function.

3.) Stabilization Function.

(8m) (2 times)

1.) Allocation Function: Govt (Externalities) / Private sector/entrepreneurs

* Resource allocation refers to way in which available factors of production are put to best use.

* One of the most important function of economic system. is Optimum allocation of Resources without wastage.

* Private sector resources allocation is based on market demand and supply price mechanism, consumer preferance & Profit motive.

* State allocation is based on revenue & exp aitivities of Govt Budget.

(Private entrepreneurs)
* Market economy is subject to malfunitioning & misallocation of resources which leads to market failure (loss).

* Inefficient allocation is due to following.

(1.) Imperfect competition & Presence of monopoly
(Electricity, Railways, Watersupply) (2) Markets fail to Produce collective goods.
(3) Negative externalities which affects People.
(4) Income inequalities & imperfect information

Conclusion: According to Musgrave Govt. is a medium by which Needs and concerns of the citizens are fulfilled which will lead to optimum allocation of Resources.

2.* Redistribution Function:

(1.) The distribution funition of Budget is related to a Basic Question for Whom should an economy produce goods & Service

(2.) It mainly focus on Equity fareness & justice.

(3.) Distribution function of Govt. aims at advancing well being to those members of society who suffer from absolute Poverty.

(4.) Providing income wealth & opportunity and ensuring minimum standard of living.

(5.) The distribution function performed by Govt. are as follows:
(i) Progressive taxation & giving subsidy to Poor
(ii) Financing public services that Benefit low income households. (Aayushmaan Bharat)
(iii) Employment Reservation.
(iv) Special Scheme for Backward areas.
(v) Regulate & ban certain harmful products.

Conclusion: The distribution function of Government aims at providing Security to people who have hardships In other words Redistribution should be achieved by carefully balancing Equity & efficiency objective.

Govt – Fiscal activity for welfare

RBI – Monetry activity

3.] Stabilization Function:

Recession	Inflation
Public Exp ↑ Tax ↓ (Fiscal) PP ↑ Spend ↑ AD ↑	Public Exp ↓ Tax ↑ PP ↓ E ↓ Y ↓ PP ↓ AD ↓
RBI ROI ↓ Loan ↑	RBI ROI ↑ Loan ↓

yaha pe govt. Nahi aayega Sir Ne bola hath ki assume karne kaa.

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Unit 2 Market Failure

Market failure is the situation when Free Market leads to misallocation of Society's Scare resources which either leads to

Overproduction OR Underproduction of goods and Services leading to less Optimal Outcome.
(Below efficiency level)

Who is creating problem is impt, who is facing it is not impt

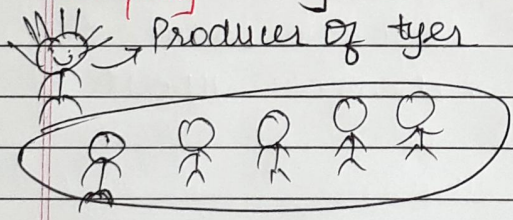
Market Failure.

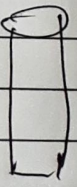
Demand Side Failure (Individual is Responsible)

Do not take into account full willingness of consumer to pay

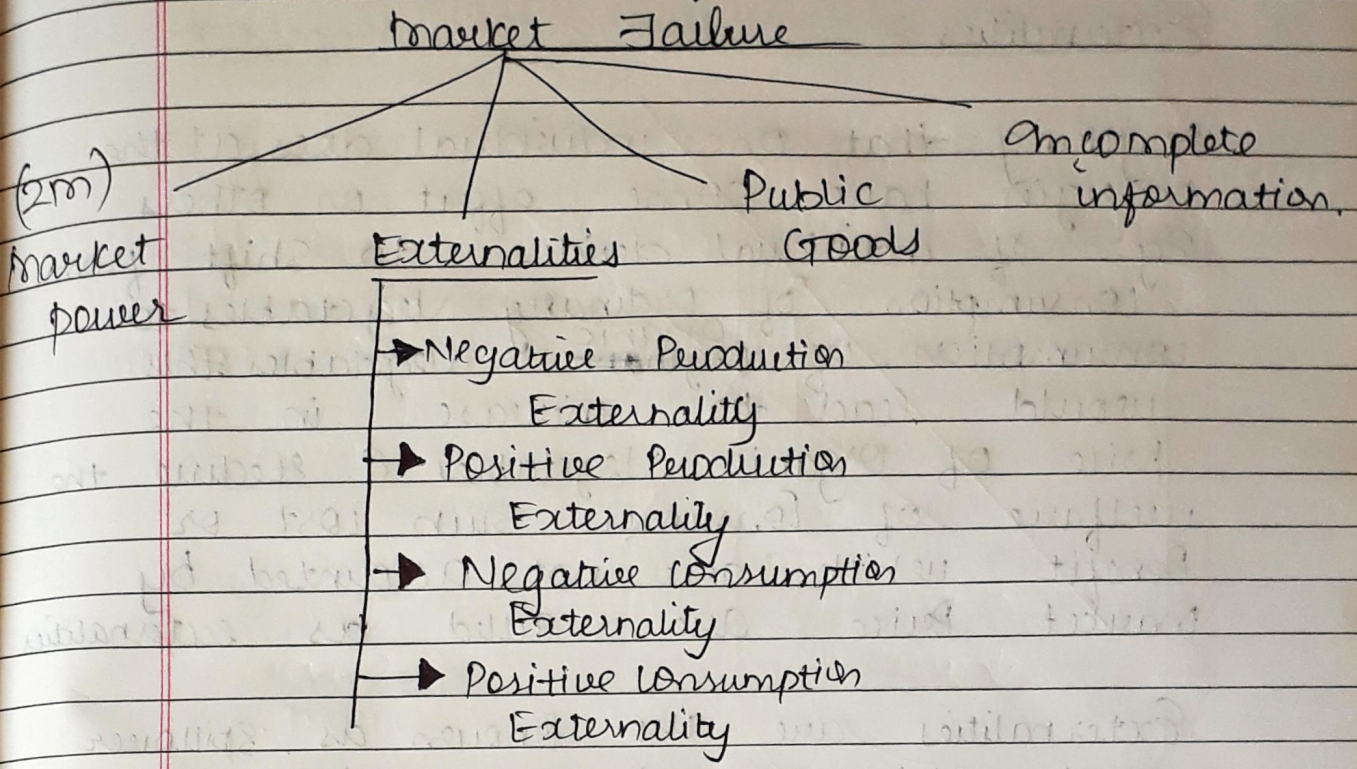
Supply Side failure (Producer is Responsible)

Do not incorporate full cost of producing the production.





Mfg Cost + External cost
5000 ↑ + 2000 eg. ↑
= 7000 Cost ↑
Price ↑
Demand ↓ ∴ Pollution ↓



Market power (Monopoly power)

Market power is a ability of firm to profitably raise the market price of goods & services over its marginal cost

* Market power causes market to be inefficient because it keeps price higher & output lower. This leads to less Benefit to consumer.

* Excessive market power causes the Single Producer or small number of Producer to produce & sell less output than would be produced in competitive Market.

Externalities:

Anything that one individual does at the margin have some effect on others
Eg: If individual decides to Shift from consumption of ordinary vegetables to consumption of organic vegetables this would lead to increase in the price of organic vegetables & reduce the welfare of consumer Such cost or Benefit which are not accounted by market price are called as externalities

Externalities are also known as Spillover effect, Neighbourhood effect, third party effect or side effect.

* Negative production Externalities:

They occur when action of one party imposes cost on another party.
Eg: discharge of medical waste into rivers & lakes which leads to Health Hazards.

* Positive production Externalities:

They occur when action of one party impose Benefit on another party.
Eg: When an individual or a firm raises an attractive garden and people who are walking by enjoying the garden.

* Negative Consumption externalities:

They are extensively experienced by people in day to day life having negative impact.
Eg: Active Smoker creating Problem to passive Smoker
Throwing garbage and creating litter.

* Positive Consumption Externalities:

They impose external Benefit on others may be received on consumption or Production.

Eg: A person getting steralized against contagious disease which will prevent others from getting infected.

* Marginal Private Benefit (MPB).
* marginal Social Benefit (MSB)
* Marginal Private cost (MPC)
  ↓
  cost of manufacturing.
* Marginal Social cost (MSC)

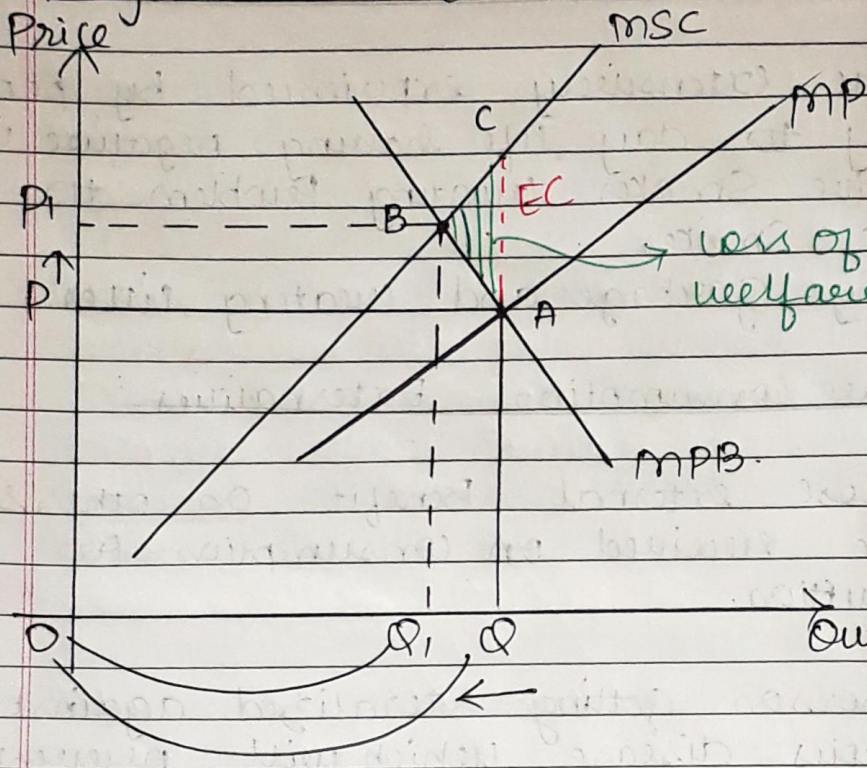
MSC = MPC + External cost.
  ↓
= 5000 + 2000
= 7000.

Any shaded area in diagram will be loss of welfare

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(3M)

Negative Production Externalities



loss of welfare → Pollution.

loss of welfare

* The Equilibrium level of output that would be produced by free market is OQ at which MPB = MPC

* MSC represents full or true cost to the Society. Since it includes both MPC & External cost.

* Social efficiency occurs at Q_1 level of output where MSC = MPB at point "B".

* The shaded triangle ABC represents loss of welfare. It indicates the area of overproduction

* Thus we conclude that there is Negative externality in a competitive market.

Public Goods

* Characteristics of Private Goods:

- Private Goods refers to these goods that yield utility to people. Anyone wants to consume must purchase them.
- Owners of private goods can exercise private property rights
- Consumption of Private goods is rivalrous in Nature. Simultaneous consumption by more than one person will give reduced Benefits.
- Private goods can easily be distributed or Parceled out.
- Private goods can be Rejected if person's Preferance & Budget changes.
- Private goods do not have problem of Free rider
- Private goods are excludable in Nature. It is possible to prevent others from using it.

* Characteristics of Public Goods:-

- Public goods yield utility to ~~Pub~~ people whose consumption is essentially collective in Nature

- Public goods are Non Rivalrous in Nature Eg: If you walk in a street light, other person too can walk without any reduced Benefits from street light.

- Public goods are characterised by indivisible. [redacted] (cannot be distributed)

- Public goods do have a problem of Free rider.

- Public goods are Non Excludable in Nature. One individual cannot deny other from using it.

- When Public goods are Provided the additional resource cost of another Person consuming it is Zero.

Public Goods

- Pure & Impure public goods.
- Quasi (Mixed) public goods.
- common access resources | Tragedy of Common
- Global Public goods
- Free Rider Problem.

Incomplete information

Asymmetric information | Adverse selection | moral Hazard.

Incomplete Information

It is that situation in a competitive market where people are not aware about many matters, generally they have inaccurate & incomplete data consequently makes wrong choice or decision.

1. Asymmetric information:

Asymmetric information occures when there is imbalance information between buyers & sellers i.e when buyer knows more than seller or seller knowens more than buyer

Eg: Landlord knows more about property than tenant.

There are situation where one party purposely hides certain material facts from the other party.

Adverse Selection.

Adverse Selection is the situation in which asymmetric information about quality eliminates high Quality goods from the market Good Quality goods disappear Eventually market may offer nothing but lemon

Moral Hazard.

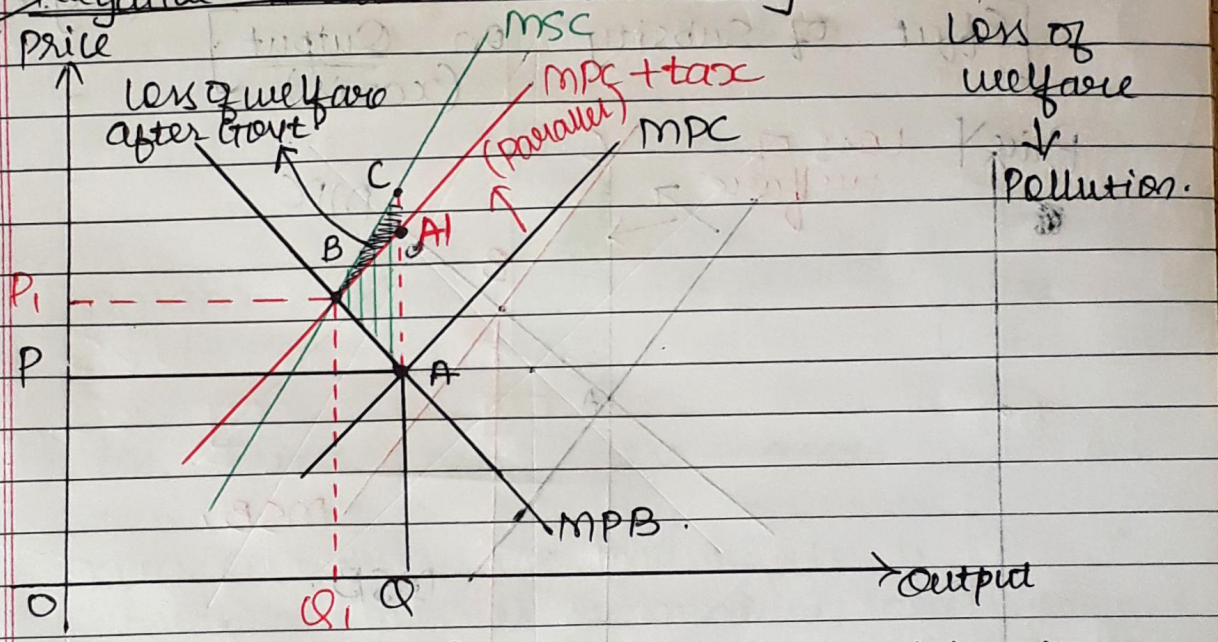
It is a situation where by a well informed person taking advantage of less informed person. This situation takes place when an individual knows more about his or her action than other

Unit 3. Government intervention in case of market failure

* Govt intervention in case of "market Power"
* GOVT intervention in case of Negative Production Externality.

Ans^n

Negative Production Externality.

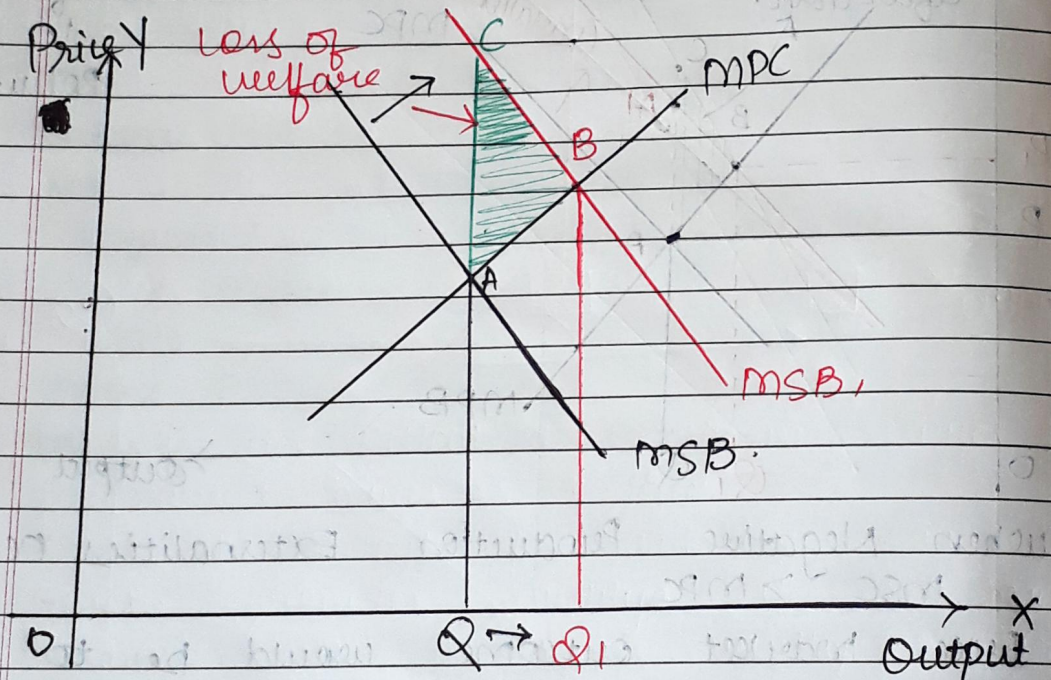


* When Negative Production Externalities occur MSC > MPC
* Free market outcome would be to produce socially Non optimal output i.e OQ.
* When externalities are present the welfare loss to society would be shaded area ABC
* The tax imposed by the Govt. i.e the vertical distance A A1 would shift MPC curve upwards by the amount of tax charged i.e MPC + tax

* Price will rise to OP, output will decrease to OQ which reduces the loss of welfare due to overproduction.
* So current loss of welfare after Govt intervention is BCA.

Govt. intervention in case of Positive Externalities (Eg. Agriculture)

[Effect of Subsity on Output (x axis)]



Subsidies involve Govt. paying part of the cost to the firms in order to promote production of goods having positive externalities.

* A Subsidy on a product which has substancial positive externalities would reduce the cost & consequently the price & will shift the Supply Curve to right (Supply increases) & increase the Output. (Don't get confused)

* A higher output would equate MSB, & MPC at point B which will give Socially optimal output OQ leading to reduction in loss of welfare.

Govt. intervention in case of Merit goods

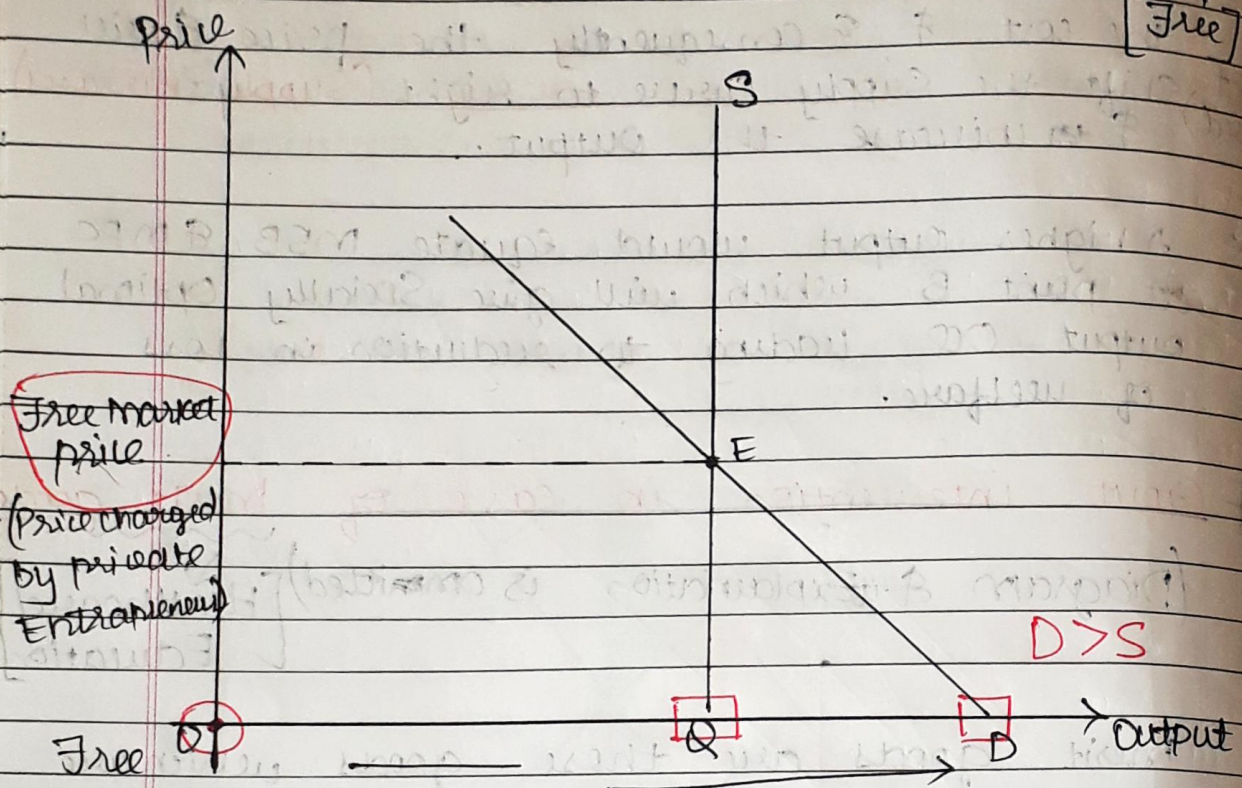
(Diagram & its explanation is omitted) [Healthcare, Education]

* Merit goods are those goods which are deemed to be Socially desireable therefore Govt encourages its consumption.
* Substantial positive Externalities are involved in Consumption of merit Goods Eg: Healthcare
* In contrast to public goods merit goods are excludable in Nature, rival in consumption limited in Supply & rejected by those unwilling to pay & involves Positive marginal cost.
* Merit Goods can be provided through market mechanism but are likely to be underproduced & under consumed.
* When Government provides merit goods it may give rise to large Economies of Scale which will generate substantial Positive Externalities overcoming the problem of under production.

(2 marks question)

Consumption of merit goods at zero price

[Free]



* OQ is the output of healthcare services when free market prices is charged.
* OD is the output of Healthcare services when Govt. provides facilities at zero price.
* When merit goods are directly provided Free of cost there will be substantial demand for the same.
* From the above diagram if people are required to pay market price they will consume only OQ qty of Healthcare if provided free of cost i.e at zero price. Demand increases to OD which will exceed Supply.

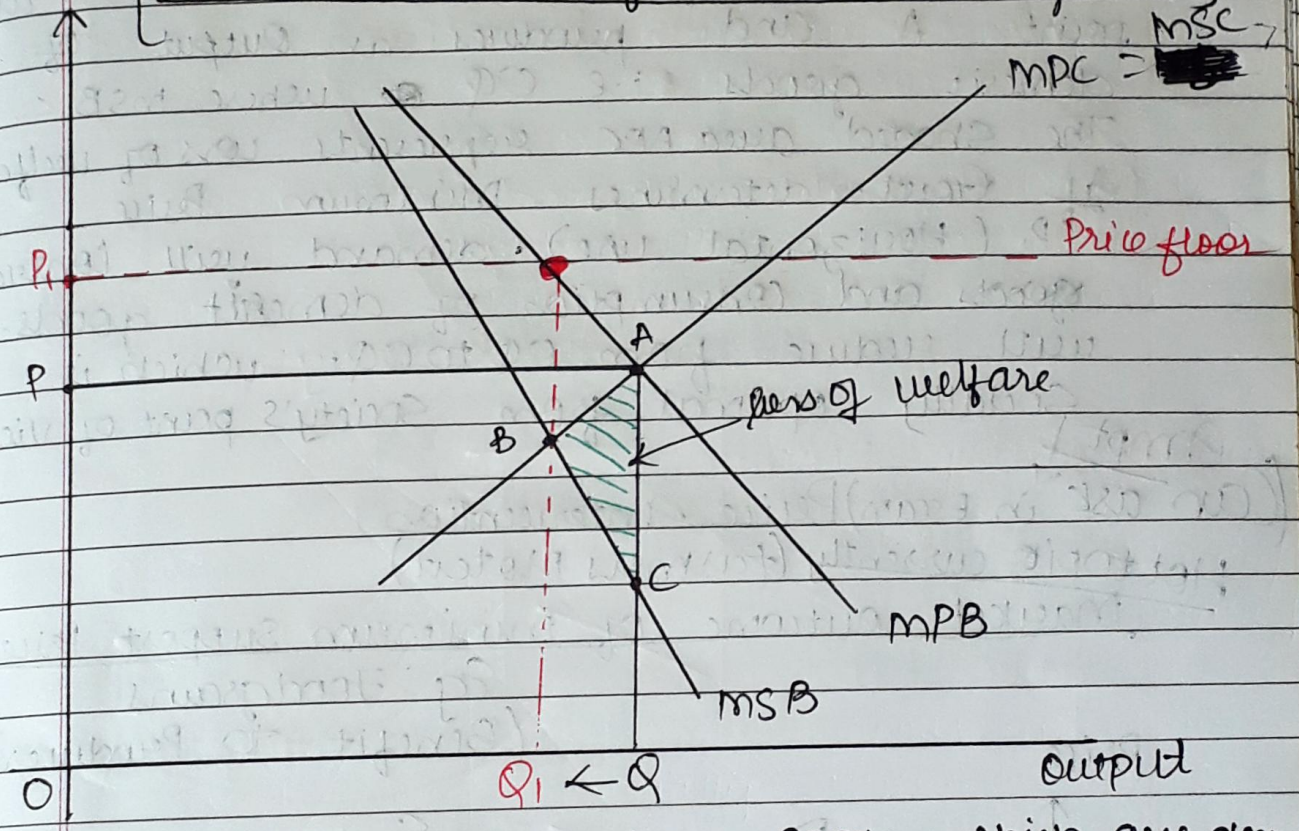
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(3marks)

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Govt intervention in case of Demerit goods.
[eg: alcohol]

[Minimum Price for a demerit goods]



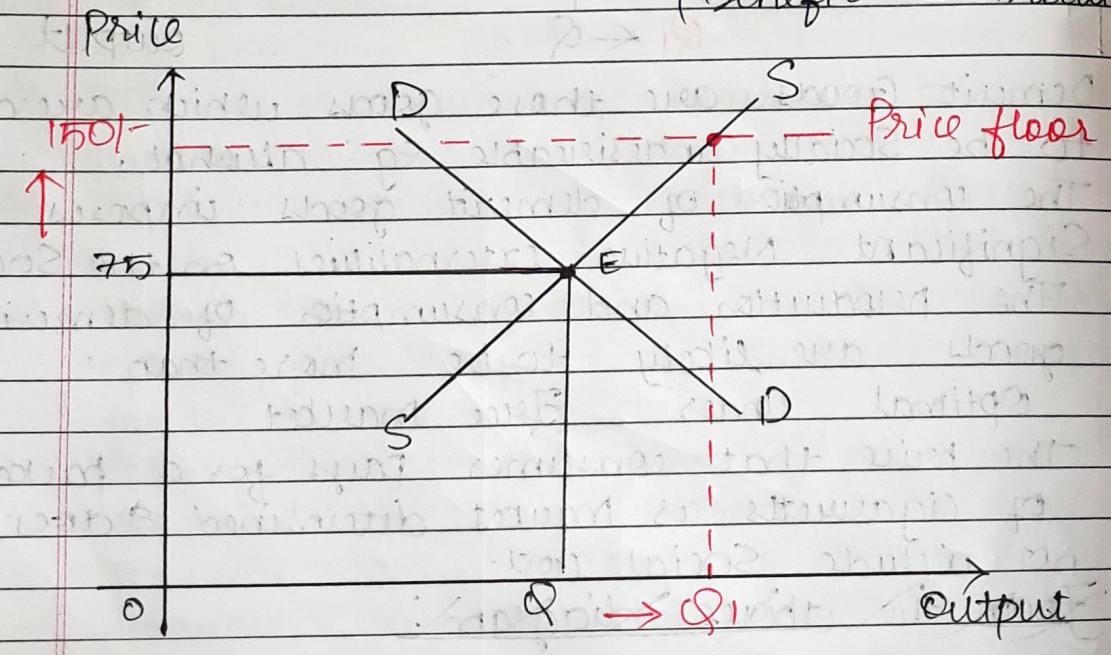
* Demerit Goods are those goods which are deemed to be Socially undesireable eg: alcohol.
* The consumption of demerit goods imposes Significant Negative externalities on the Society
* The production and consumption of demerit goods are likely to be more than optimal under Free market.
* The price that consumer pays for a packet of cigarretts is market determined & does not include Social cost.

From the above diagram:

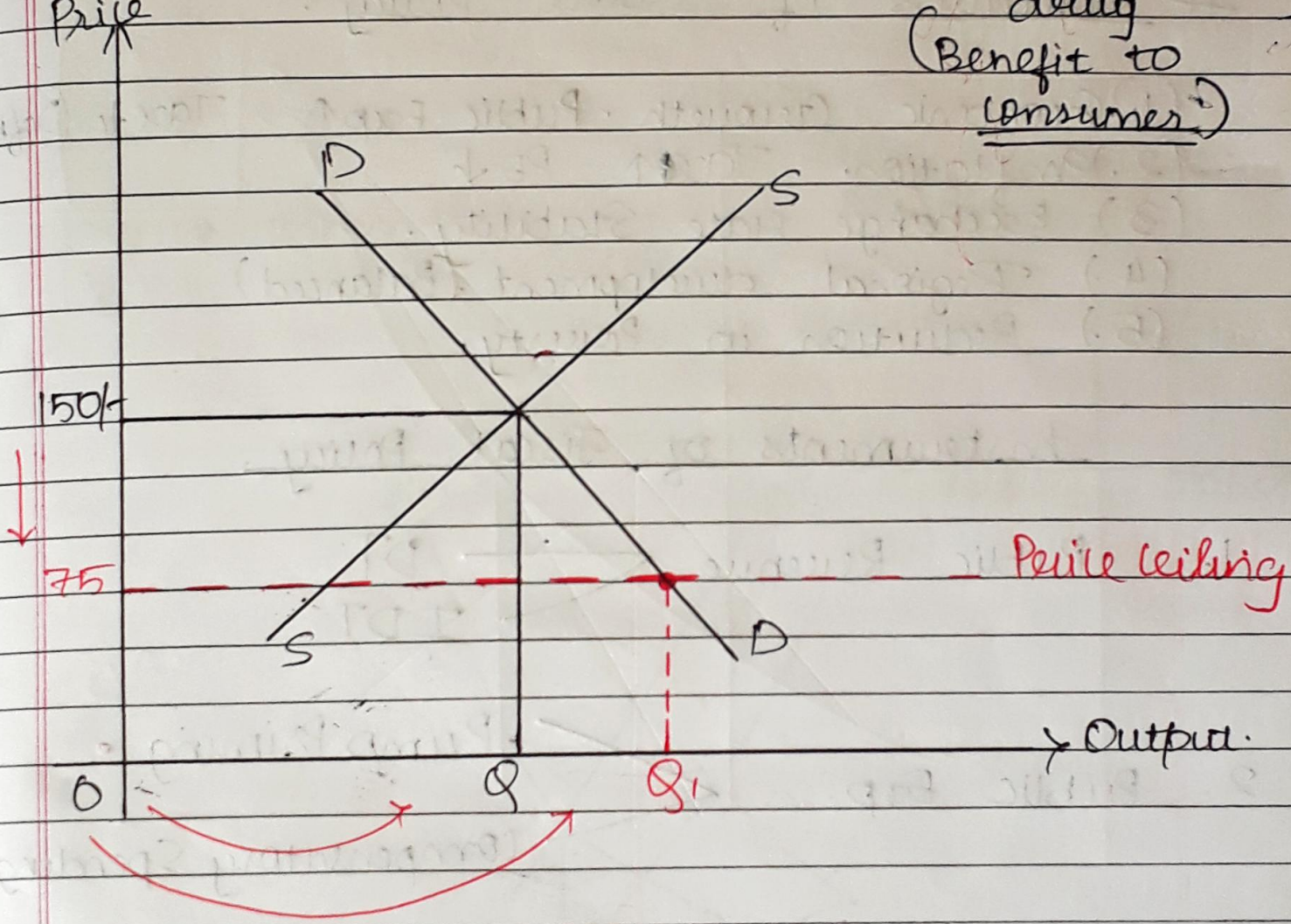
From the above diagram

Free market equates MPC with MPB at point A and produces an Output of demerit goods i.e OQ where MSB < MPB. The shaded area ABC represents loss of welfare. If Govt. determines minimum Price P_1 (Horizontal line) demand will contract and consumption of demerit goods will reduce from OQ to OQ_1 which is socially optimal from society's point of view.

Impt
(Can ask in Exam) Price Intervention
Hot topic currently (Farmers Protest)
Market Outcome of Minimum Support Price (MSP)
Eg: Foodgrains
(Benefit to Producer)



Market outcome of Price ceiling [Eg: Life Saving drug (Benefit to consumer)]



ECONOMIC POLICY

Fiscal Policy. By (Govt) | Monetry Policy By (RBI)

PAGE NO. 70 DATE / /

Unit 4: Fiscal Policy

Objectives of Fiscal Policy.

(1.) Economic Growth. Public Exp↑ Tax↓ (Deficit Bud
(2.) Inflation. Tax↑ PE↓
(3.) Exchange rate Stability.
(4.) Regional development (Balanced)
(5.) Reduction in Poverty.

Instruments of Fiscal Policy.

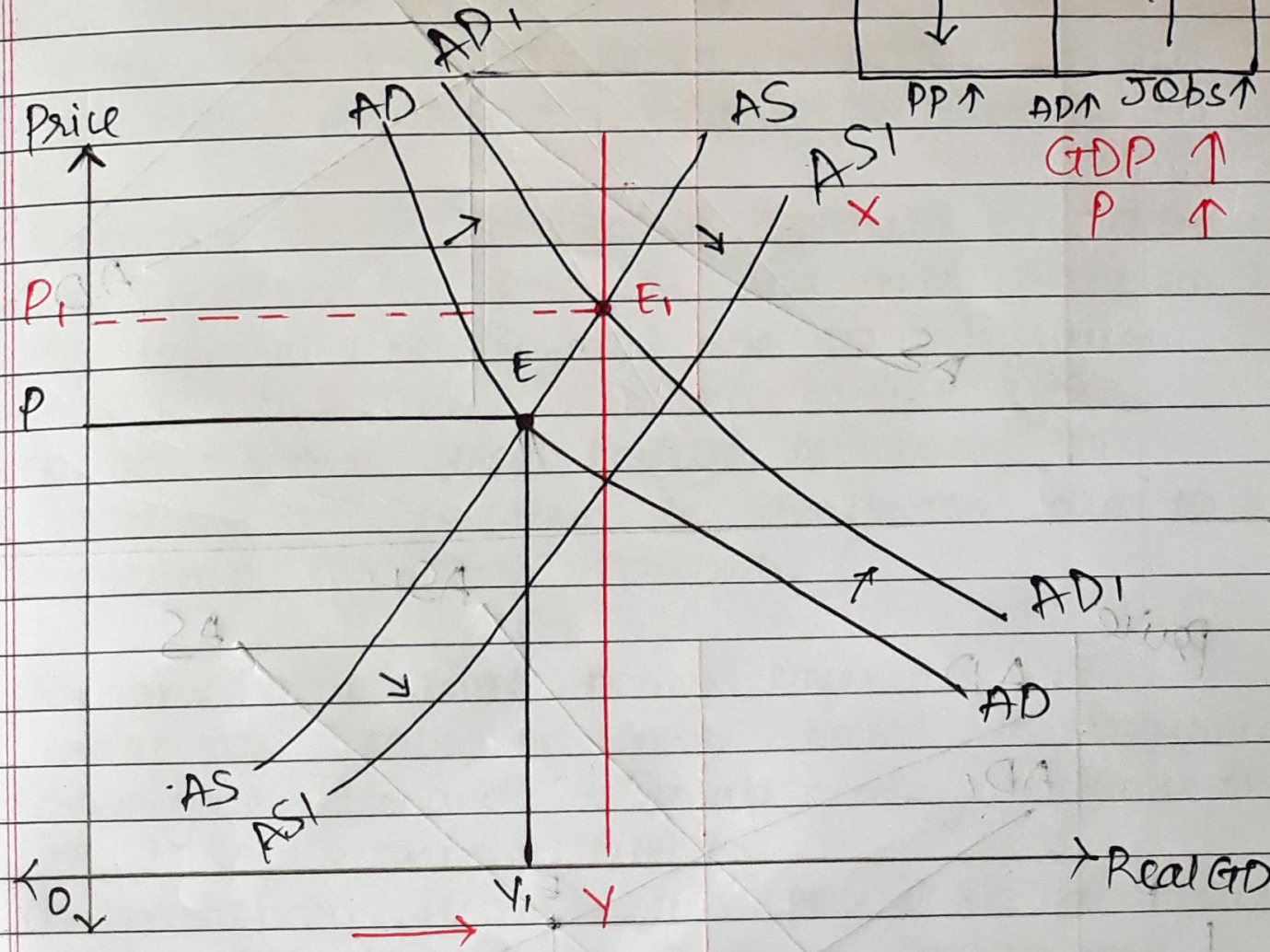
1. Public Revenue
   - DT
   - IDT
2. Public Exp.
   - Pump Priming.
   - Compensatory Spending.
3. Public Debt
   - Internal
   - External
4) Budget
   - BB
   - SB
   - DB.

Non discretionary fiscal Policy. (OB)
Automatic Stabilizers. pg 369.

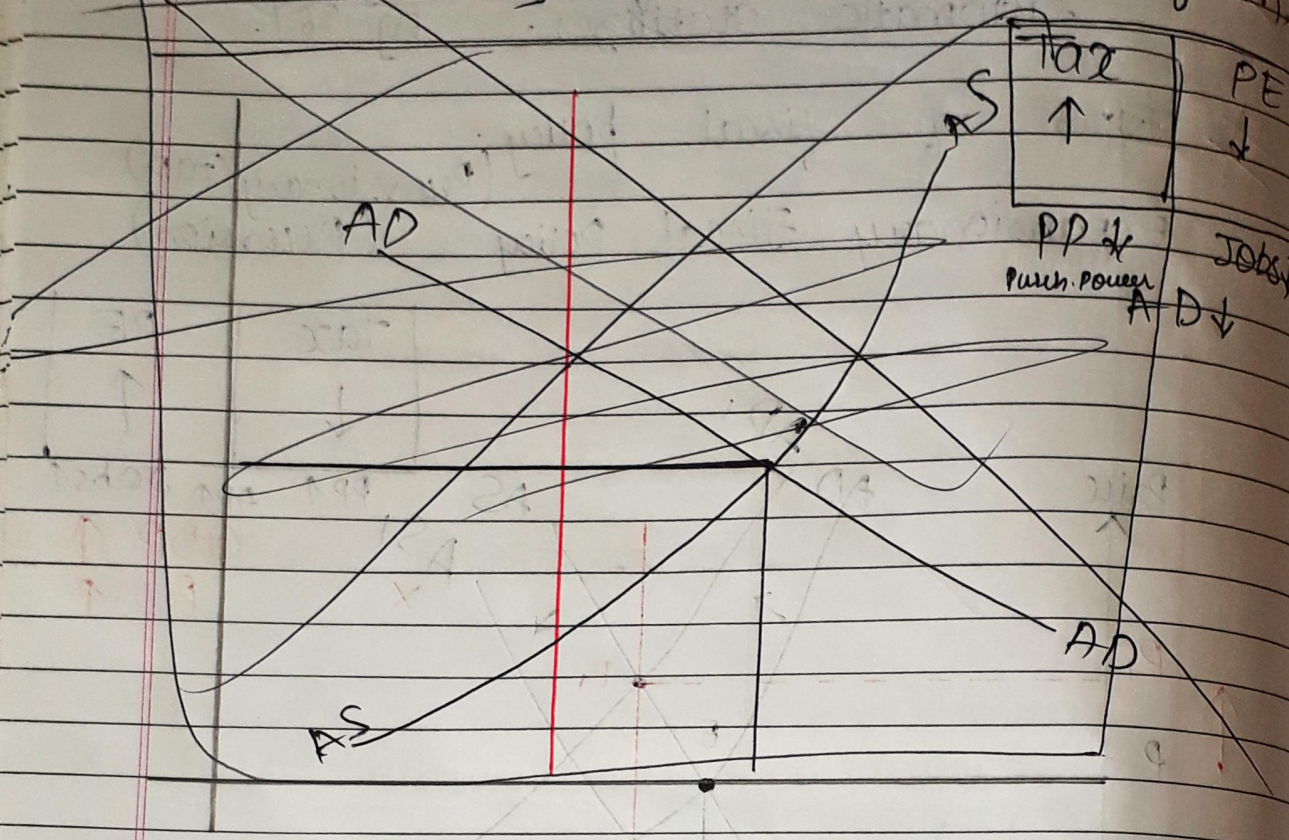
Types of fiscal policy:
(Recessionary GAP)
Expansionary Fiscal Policy (Recession)

Tax	PE
↓	↑

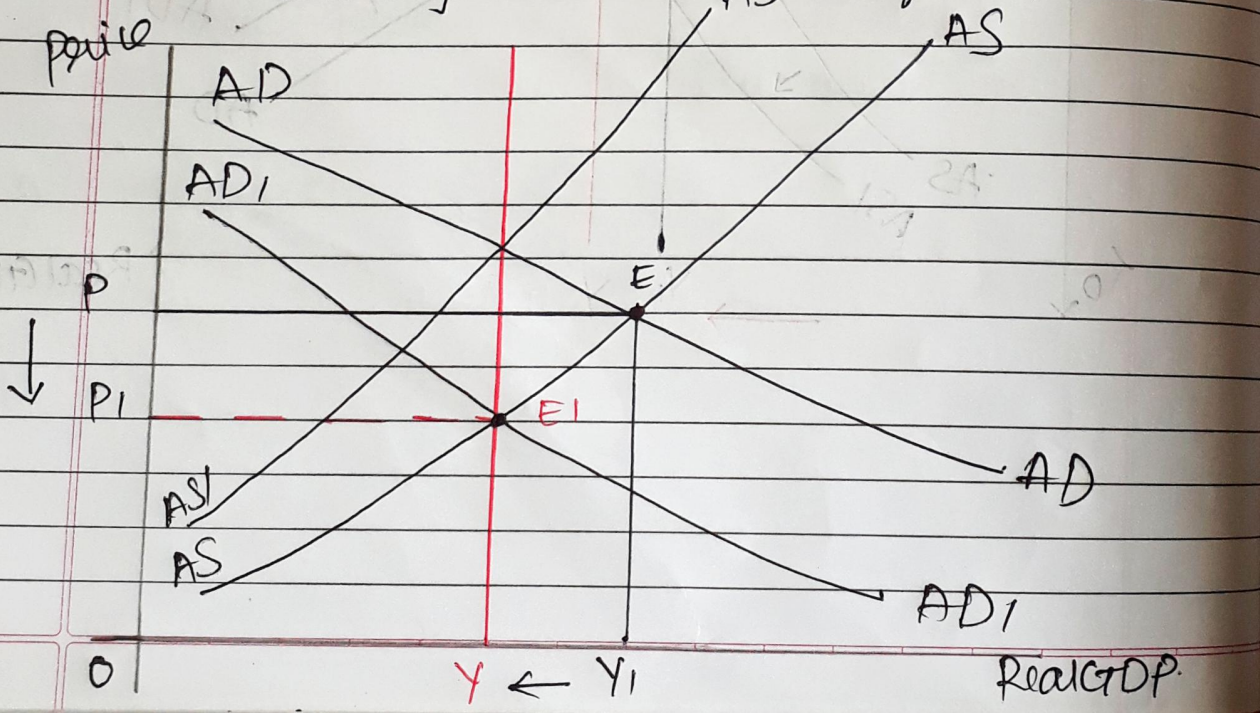
PP↑ ADI↑ JOBS↑
GDP ↑
P ↑



Contractionary Fiscal Policy (Inflation)



Contractionary Fiscal Policy (Inflation)



Distinguish Between Expansionary & Contractionary Fiscal policy.

1. Expansionary fiscal policy is defined as increase in Govt Exp. or decrease in taxes that causes Govt. Budget deficit to increase or its budget Surplus to decrease.
Contractionary Fiscal policy is defined as decrease in Govt. exp. or increase in taxes that causes Govt. budget deficit to decrease or its budget Surplus to increase

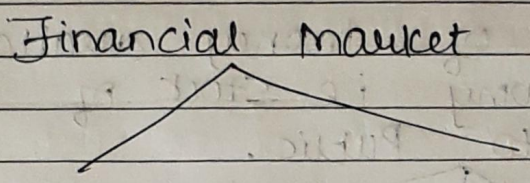
2. Expansionary fiscal policy is used to address the problem of Recession and the problem of General unemployment due to Business cycle
Contractionary fiscal policy is used to address the problem of Inflation due to extreme high GDP Growth.

3. Expansionary fiscal policy refers to the deliberate policy of Govt. applied to increase aggregate demand & Simultaneously increase the level of economic activity.
Contractionary fiscal policy refers to deliberate policy of Govt to reduce aggregate demand and Simultaneously reduce the level of economic activity.

4. Expansionary fiscal policy is aimed at eliminating Recessionary Gap.
Contractionary fiscal policy is aimed at eliminating inflationary Gap.

5. Draw diagram of both the aspects.

Chapter 3 Money market



[market for short term instrument 1 year]

[market for long term instrument > 1 year]

Money market

Functions of Money

- Medium of Exchange
- Measure of Value ≠ $
- Standard of deferred Payment
- Store of Value

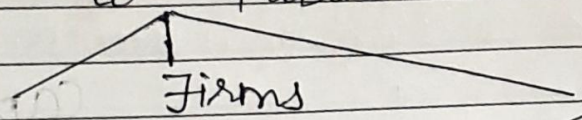
How to Remember →

→ Money is a matter of function 4
A medium, A measure, A Standard, A Store

for Banks its 364 days in a year.

Unit 2 Money Supply

Total qty. of money available to people in an economy i.e stock of money available to Public.



Except Govt & Central Bank (RBI)

1977 Monetary aggregate (RBI Working Group).

M_1 M_2 M_3 M_4

M_1 = Currency + Coins with Public + Demand deposits (CASA) + Other deposits with R.B.I — Narrow money.

M_2 = M_1 + Post office Savings deposit

M_3 = M_1 + Time deposits (FD/RD) with public. — Broad money.

M_4 = M_3 + Total Post office deposits - NSC (National Savings certificates.)

1998: RBI Working Group.

New Monetary aggregates.

NM_1 = Currency & coins with Public + Demand deposits + other deposits with RBI.

NM_2 = NM_1 + Time liabilities portion of Saving (CDs) + Certificate of deposit. + Term (FD/RD) deposits deposits maturing within one year (→ FCNR(B) deposits Foreign Currency Non Residential (Bank) ←

FD/RD.

NM_3 = NM_2 + Term deposits maturing over oneyear + Call Borrowings of Banking System.

Reserve money / High Powered money

Monetary Base.

(1) RM = Currency in Circulation
+
Bankers deposit with RBI
+
Other deposits with RBI.

(2) RM = Net RBI credit to Govt.
+ (loan)
RBI credit to commercial Sector
+
RBI claim on Banks.
+ RBI Net Foreign assets.
+ Govt. currency liability to Public

(-) RBI Net Non monetary liability

Liquidity aggregates ⟶ NBFC

L1 = NM3 + All deposits with the Post Office Savings bank – NSC.

L2 = L1 + Term deposits with term lending institutions or FI's (FD) → NBFC
+ Term borrowing by FI's +
certificate of deposit by FI's.

L3 = L2 + Public deposits of NBFC

Sums.

Q: Calculate

(i) Narrow money.
(ii) Net time deposits with bank

(1) Long term deposits 848.15
(2) Demand deposits with bank 163,374.5
(3) RBI Claim on bank 4,16,025
(4) Other deposits of RBI 756.1.
(5) Currency with Public 215,342
(6) M3 = 517990.

→ Narrow money = 215342 + 163,374.5 + 756.1.
= 379,472.6

M3 = M1 + Net time deposit with bank/pay

517990 = 379472.6 + Net time deposits.

= 138517.4 Cr.

Q: Calculate High Powered Money.

RBI monetary liability	780
Currency in circulation	15230.40
Shot term deposits	8924.
Bankers deposit with RBI	3618.18
Other Deposit with RBI	653.30.
Long term deposits.	4300.

RM = 15230.40 + 3618.18 + 653.30.

= ₹ 19,501.88

Money Multiplier

Milton Friedman — Anna Schwartz. 1963

Money Multiplier = $\frac{\text{Money Supply}}{\text{Monetary Base}}$

Definition: " Money Multiplier is defined as a ratio that relates to changes in money Supply to given change in Monetary Base.

High Powered Money
- Currency with Public [will not lead to deposit expansion]
- Bank deposit [will lead to deposit expansion]

Working of Multiplier.

Assume that Reserve Ratio in India is 10%.
Suppose you deposit 1000/- in HDFC Bank

↓

1000 × 10% = 100.

↓

Bank will lend 900/- to Mr 'A'

↓

Mr A will deposit 900/- in his bank (Axis.
900 × 10 = 90/-

Axis Bank will lend 810 to Mr 'B' .....

S.I Suppose initial deposit = ₹ 5,200
Req. Res. Ratio

(i) Calculate credit multiplier if RRR = 0.015

(ii) Calculate credit creation if RRR = 0.06.

→ (i) Credit multiplier = $\frac{1}{RRR} = \frac{1}{0.015}$ = 666 times

(ii) Credit creation = $5200 \times \frac{1}{0.06} = 86,666$

S.II) Calculate credit multiplier as well as total credit created if RRR = 0.02
initial deposit = ₹4000.

→ Credit multiplier = $\frac{1}{RRR} = \frac{1}{0.02}$ = 50 times

Credit created = $4000 \times \frac{1}{0.02} = 2,00,000$

Unit 3 : Monetary Policy

→ RBI

- Money Management Policy
- Credit Policy.
  - { Demand & Supply of Money }.

* Availability of money.
* Cost of money
* Use of money.

* Objectives of Money Policy.

1. GDP Growth. (GOVT)
2. Price Stability (RBI) < Inflation, Deflation
3. Exchange rate Stability
4. Equal distribution of income to weaker section
5. Encourage investment in Govt. Securities.
   - long term (Bonds (10 yrs, 15 yrs))

Operating Procedures & Instruments

↓

(RBI primary) Operating target → (Inflation.)

(Govt primary) → Intermediate target → (Economic growth & Stability)

Instruments of Monetary Policy.

1.) CRR → fraction of → NDTL (CASA + FD + RD) → Net demand & Time liability
2.) SLR
3.) Liquidity adjustment facility (LAF) → 2000

Benchmark interest rates ← Repo auction

Reverse repo auction

4.) Marginal standing facility (MSF) (Emergency Window)
5.) Market stabilization Scheme (MSS) → 2004
6.) Bank Rate
7.) Open market operation.

As per April 2021

CRR = 3%.
SLR = 18%.
Reporate = 4%.
Reverse reporate = 3.35%.
Bank rate = 4.25
MSF = 4.25%.

Monetary transmission mechanism.

- Interest rate Channel
- Exchange rate Channel
- Asset price channel
- Quantum Channel.

Interest Rate Channel.

Monetary policy.	Interest Rate	Impact
Contractionary Monetary Policy.	ROI ↑ (Borrowings will fall)	Decline in AD and fall in Investment, output Employment.
Expansionary Monetary Policy.	ROI. ↓ (Borrowings will rise)	Rise in AD and rise in Investment, output & Employment.

Exchange Rate Channel:

Exchange Rate	Impact on Export & import	Impact on Economy.
1$ = 60 → 1$ = 55 {Appreciation of ₹}	Import ↑ Export ↓ [Domestic goods will become expensive for foreigners]	Fall in domestic output & Employment.

1$=60 → 1$=65 {Dep^n of ₹}	Import ↓ Export ↑ {Domestic goods will be cheaper for foreigners}	Domestic output will rise & also employment.

Asset price channel:

* Asset Price respond to monetary policy changes and consequently affect output employment & inflation.

* With raise in interest rates, investments in debt instruments become attractive and hence investment in Equity tends to fall.

* This causes fall in Equity Prices and thereby leads to reduction in household financial wealth.
{ultimately leads to fall in consumption, output & employment}.

Quantum Channel

- Bank lending channel.
- Balance Sheet channel.

Unit 1 : Demand for Money

Classical approach.
↓
Cash transactions approach.
↓
Qty theory of money.
↓
Irving Fisher (Yale University)
↓
1911 { Purchasing power of money }
{ use of money only as a medium of exchange }

Equation of Exchange

$$MV = PT$$

M = money Supply.
V = Velocity in circulation of money
P = Price level
T Volume of transactions.

MV = Supply of money.
PT = Demand of money

Extended Version of Equation.

$$MV + M_1V_1 = PT$$

M_1 = Total qty of credit money. (CASA)

V_1 = Velocity in circulation of credit money

Neo - classical approach.

↓

Cash balance approach.

↓

Pigou / Marshall [Cambrige approach].

↓

1917.

↓

{ Use of Money only as a Store of Value }

↓ (Save)

Equation of Exchange

$$M^d = kPy$$

M^d = Demand of money
y = Real National income
P = Price Level (inflation)
PY = Nominal National income
k = Portion of National income people want to hold as Cash.

Factors determining individual for holding cash.

1.) Prevailing interest rates. (FD)

2.) Wealth owned by individuals

3.) Expectation about future Price.

* The Neo - classical theory of demand for money is put forward by Cambridge Economist Marshall & Pigou

* The Neo classical approach of demand for money is ~~other~~ also called as Cash balance approach.

* The Cash balance theory of demand for money emphasis on store of value function of money.

* The Cambridge Version holds that money gives utility in two ways.

1.) Possibility of Split up of Sale & Purchase (Transaction motive but in future.)

2.) money acts as a hedge against uncertainty

According to marshall Demand for money depends partly on income and partly on other factors of which important

Keynesian approach.

↓

Liquidity Preferance approach.

↓

JM Keynes 1936

↓

(GTEIM)

General Theory of Employment Interest money.

{ Demand of money both as a Medium of exchange & Store of Value }

Keynes approach.

Transaction motive

Precaussionary motive (Cash in hand - savings)

Speculative motive. (Star market, Bonds, Def)

Level of income
Time interval
Price level

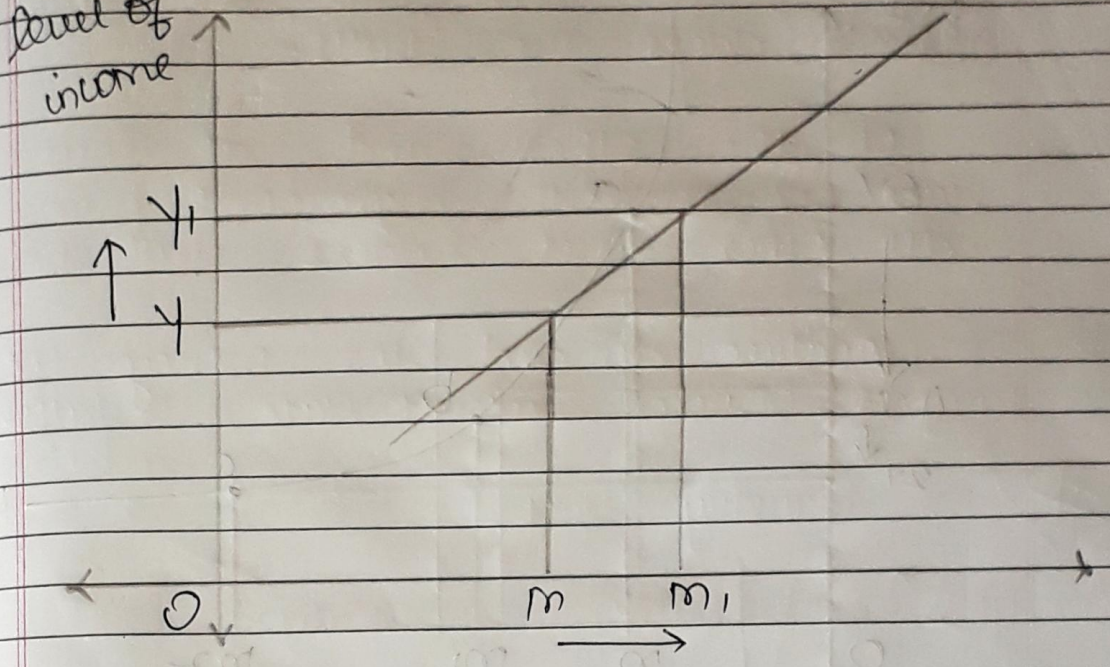
Income motive (Salaried people)

Business motive (Business men)

NOTE The below diagrams are common for both Transaction & precausionary So if either of is asked in Exam dont write both the words T&P

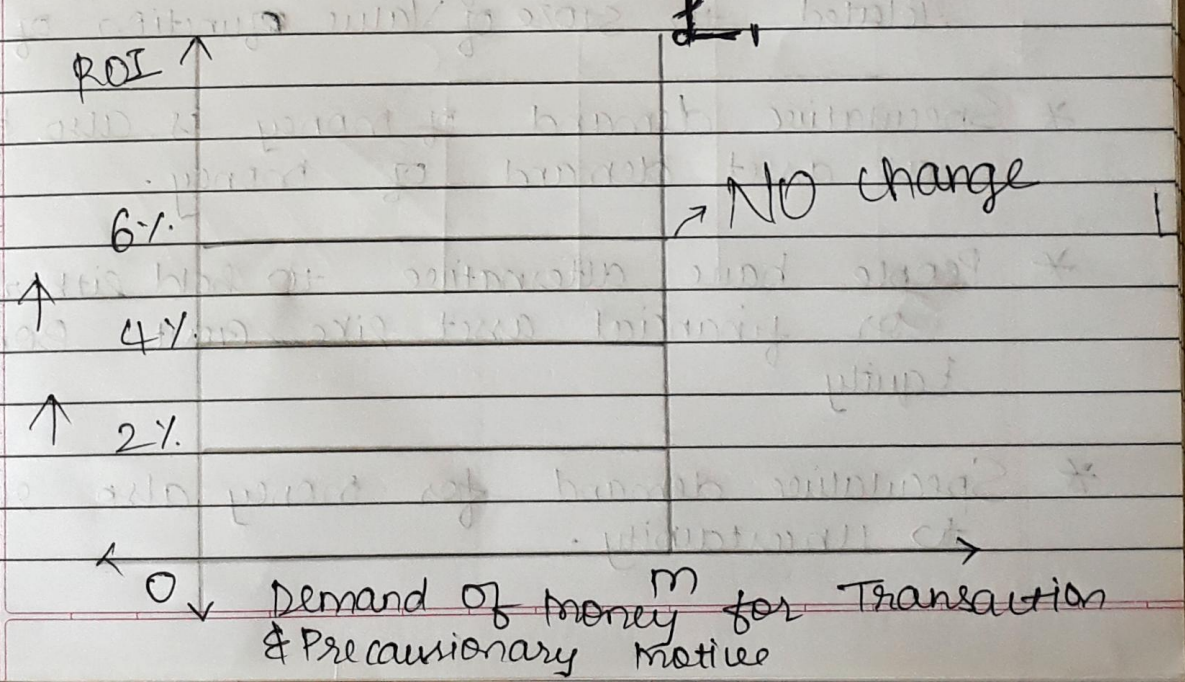
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Income Elastic. (Dependent on income) $L_1 = f(Y)$

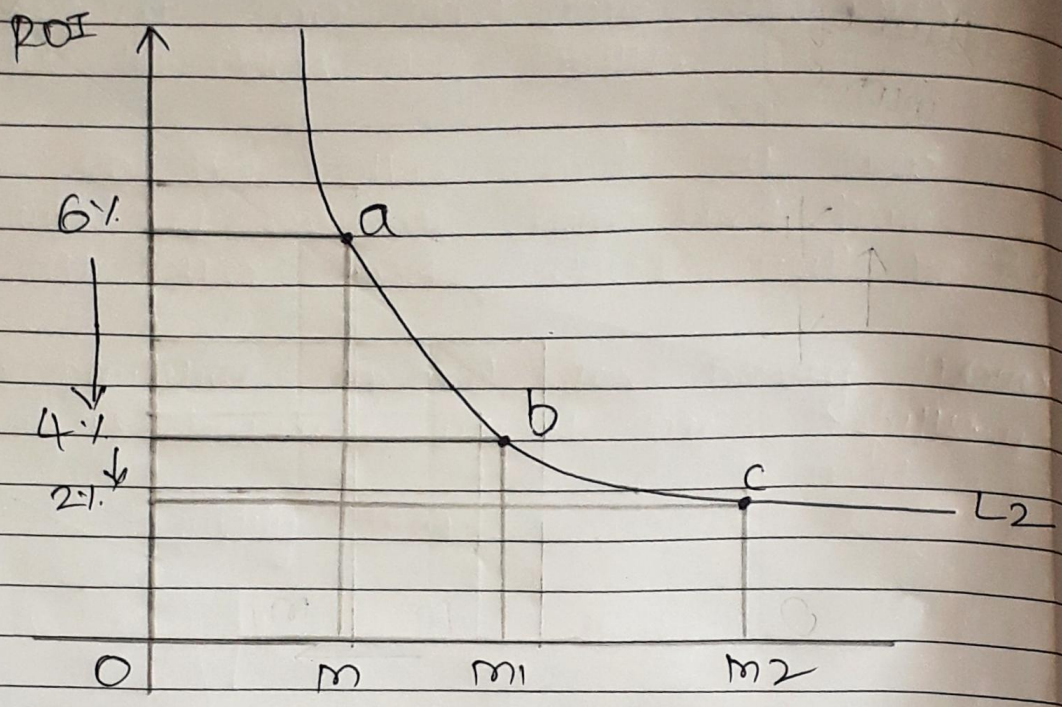


Demand for money for transaction & Precausionary motive.

Income Inelastic (Not dependent.



Speculative Motive.



Demand of money.

* Demand of money for Speculative motive is related to store of value function of money.
* Speculative demand of money is also known as asset demand of money.
* People have alternative to hold either cash or financial asset like Govt. Bonds or Equity
* Speculative demand for money also relates to Uncertainity.

* The Cash held under this motive is used to make Speculative gains by dealing in bonds.

* If bonds prices are expected to fall ~~business~~ businessman will sell bonds & if bond prices are expected to rise businessman will buy Bonds.

* However Market interest rate is expected to fall businessman will buy Bonds & if interest rates are Expected to rise then they will sell bonds.

This implies that bond price & market rate of interest are inversly related to each other.

Bonds	MRI
1000 X 5%.	10%.
= 50/-	8.5%.
	7%.
	6%.
	5.5%.
	500 X 10%.
	= 50/-

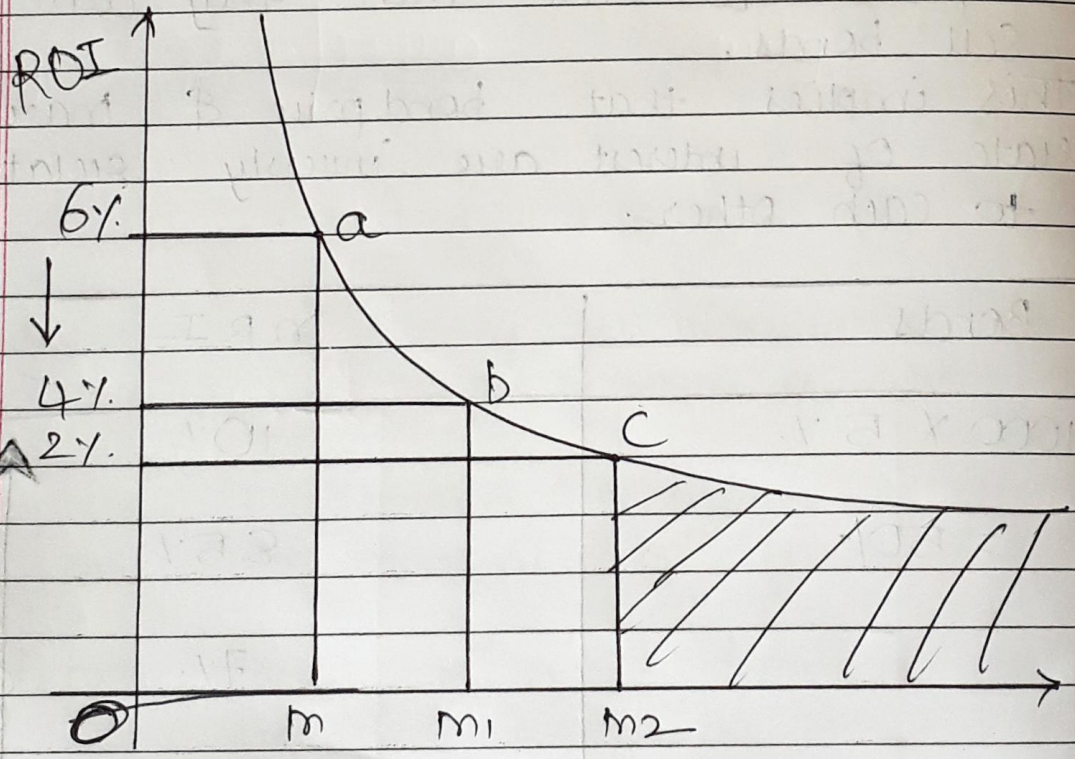
R.R. Repo Rate

* Keynes assumes that at high rate of interest low bond price, all other assets holders are 'Bulls'.

On the other hand at low rate of interest, high bond price, all other asset holders will be 'Bears'.

Speculative demand for money increases as market interest rate falls.

Liquidity Trap.



Post Keynesian approach.

* Milton Friedman theory.
* Inventory approach.
* Behaviour towards Risk.

Post Keynesian approach. → Chicago School of Economics

↓

Friedman Qty theory of money

↓

Restatement theory.

↓

money is an asset.

↓

Role of money → creating asset → Knowenas Capital theory.

General Portfolio of Asset → Human wealth, Non human wealth, money (Cash), Equity, Bonds. → Returns.

$$m^d = F(\text{Wealth})$$

Not so important

Baumol & Tobin

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Inventory Approach

Behaviour towards Risk

Permanent income.

Monetary Asset

Currency

CASA | FD | RD

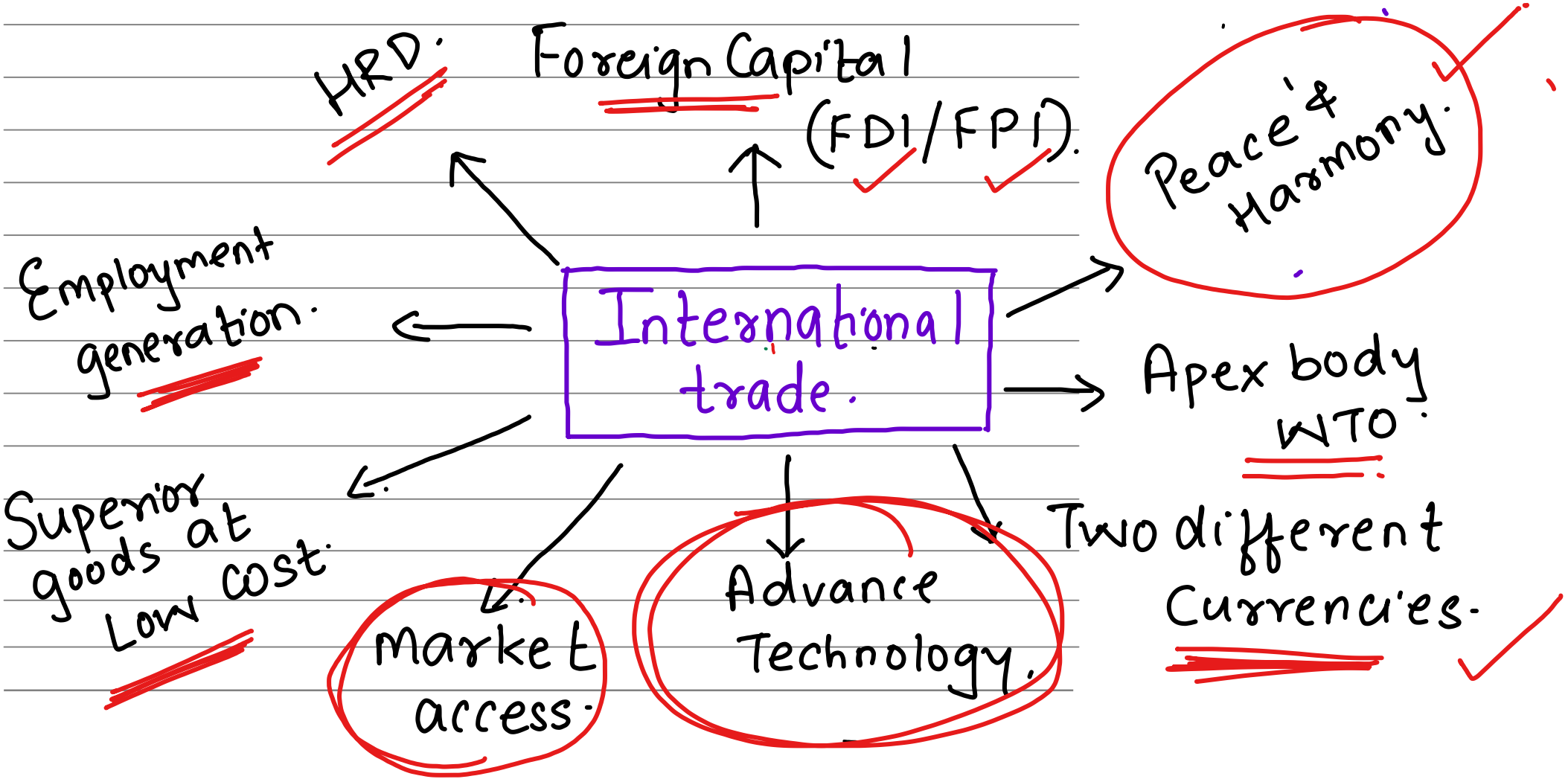
Non monetary asset

Equity

Bonds

Chap 4: International trade.

unit 1: Theories of international trade.



J.K. SHAH ONLINE

Cost.

China = 7/-

India = 10/-

China = 10/-

India = 7/-

9/-

11/-

9/-

11/-

J.K. SHAH ONLINE

unit 1.

Merits of international trade.

1.) International trade provides Stimulas to economic efficiency and Contributes to economic growth and development.

2.) International trade enhances Mechanization, Specalization, automation and greater investment in R&D.

3.) It stimulates growth by creating Jobs which will reduce Poverty and unemployment.

4.) It encourages FDI & FPI improvement in Quality of Output of goods & Services.

5.) International trade provides Peace & Harmony among Nations.

Demerits of International trade.

1.) Possibility of Negative Labour Market Outcome, Less demand for unskilled Labour.

2.) Economic exploitation of underdeveloped Countries due to growing Political Power of MNC's

3.) Substantial environmental damage & exploitation of Natural resources.

4.) Welfare of People may be ignored due to Sake of Profits.

5.) Shift in Consumer Culture in Favour of Foreign goods which may have adverse effect on domestic industries.

J.K. SHAH ONLINE

Explain Absolute Cost theory & Comparative Cost theory.

Absolute Cost theory → Adam Smith.

Comparative Cost theory → David Ricardo.

{ International trade is Not a "ZERO - SUM GAME" } :

Assumptions:

1) 2 Country, 2 Commodity and 1 Factor theory.

[2-2-1 Model]

2.) Cost of Production is measured in Labour days.

3.) Same Currency is used in both the Countries

4.) Trade is Free From Restriction.

Absolute Cost theory.

	Canada	India.	Cost Ratio.
Wheat	10 ✓	20 ✓	0.50 (10/20).
Jute.	20 ✓	10 ✓	2.00 (20/10).

Comparative cost theory.

	Canada	India	Cost Ratio.
Wheat	10	15	10/15 = 0.66
Jute.	20	25	20/25 = 0.80.

0.34.

0:20

India { Wheat : 1.50 (15/10).
Jute : 1.25 (25/20).

Heckscher - Ohlin theory.

- Factor Endowment theory
  FOP.
- Modern theory.

[Also known as Heckscher - Ohlin Samuelson theory].

Assumptions:

1) 2 country, 2 Commodity, 2 Factor
[2-2-2 model].

2) Other assumptions are Same as Classical theory.

Country differs in Factor endowments

Country 1 → Capital abundant. US.

Country 2 → Labour abundant India.

Commodity 'A' uses 3 units of Capital and 1 unit of Labour.

Commodity 'B' uses 1 unit of Capital and 5 units of Labour.

J.K. SHAH ONLINE

Commodity 'A'

↓

Uses Capital intensive techniques

→ Country 1

[Capital abundant Country]

Commodity 'B'

↓

Uses Labour intensive techniques

Country 2

[Labour abundant country].

Reward for Capital (interest) $\underline{P}$

$P_1 \rightarrow$ Country 1

$P_2 \rightarrow$ Country 2.

Reward for Labour (wages) $\underline{W}$.

$W_1 \rightarrow$ Country 1

$W_2 \rightarrow$ Country 2.

Before trade.

$P_1 < P_2$.

$W_1 > W_2$.

unit 2 Instruments of Trade Policy.

- Tariffs
  - Financial tax
  - import duty
  - Custom duty.
- Non-tariffs.

Unit 2. Instruments of Trade Policy.

"Trade policy are those instrumenth. which will either encourage import. and export or discourage import and. export."

Trade policy.

- Tariffs
  - Customduty.
    - Tax
    - import duty.
- Non-tariffs.

Types of Tariffs.

1) Specific tariff.

It is an import duty that assign a fixed Monetary tax on per Physical unit of the Commodity imported. Calculated on the Basis of unit per measure

e.g: ₹ 2000 tariff charged on import of each Laptop [per Qty].

2.) Advalorem tariff.

This tariff is Levied as a Constant percentage of Monetary value of imported goods

eg: MRP of Laptop ₹ 50,000

tariff 10% i-e 5000/-

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3.) Mixed tariff

Mixed tariff is charged either on value of imported goods or on the basis of per Physical unit either Specific tariff or advalorem tariff whichever is higher.

4) Compound tariff. It is a combination of advalorem tariff and specific tariff This tariff is calculated on the basis of both the value of imported goods and unit of measure.
Specific tariff + Advalorem tariff.

5> Technical tariff.

Technical tariff is calculated on the basis of specific contents, Components, Spareparts, imported from abroad along with the main product. but seperately.

Eg: Rs 3000/- tariff Charged on import of solar panel and ₹500 for the battery.

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ROQ.

6.) Tariff rate Quotas

Tariff rate Quotas combine two policy instruments Quotas and tariff import above Quota limit higher tariff will be Charged. and imports upto Quota limit Lower tariff will be Charged.

7:> Variable tariff.

Variable tariff is Charged to keep the Price of imported goods at a higher Level in Order to Protect domestic industries.

8:> MFN tariff. [Most Favoured Nation tariff].

It is a tariff without discrimination., MFN tariffs

are what Countries promise. to impose on imports of Other Countries, MFN tariffs are highest and Most Restrictive in Case of Non-Member Countries, applicable. only to 164 Member Countries.

9.) Preferential tariff.

Nearly all Countries are part of one Preferential trade agreement where they charge very Low. tariff

on other countries product-wise within the group eg: SAARC / NAFTA etc.

10.) Bound tariff:

Bound tariff is a tariff which WTO Members binds itself with a Legal Commitment not to Raise it above a Certain Level. They are Specific to individual products. Helps to bring Transperancy

among Countries.

11.) Escalated tariff.

It is that tariff where higher tariff is charged when country imports manufactured goods and lower tariff is charged when country imports R.M.

12.) Applied tariff.

Applied tariff is a duty which is actually charged on the imports of Most Favoured Nation.

13.) Prohibitive tariff

A prohibitive tariff is that tariff which is set so high that no imports shall enter

736%

the country.

14) Tariff as Response. / Tigger price Mechanism.

Anti dumping duty

Countervailing duty.

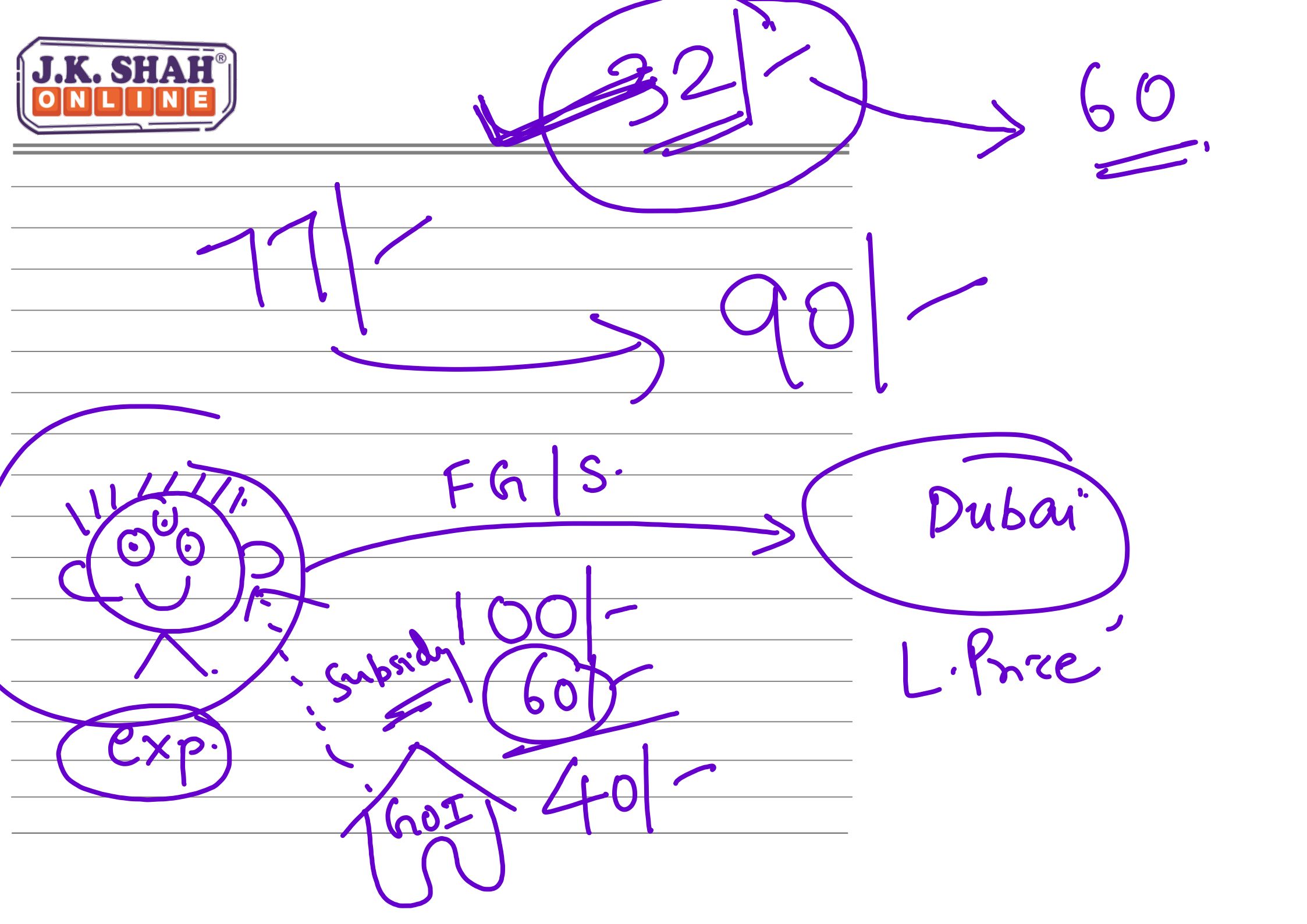
China.

89

Bata.

2012-13

125


J.K. SHAH ONLINE
32/-
60
77/-
90/-
FG/S.
Dubai
L. Price
Exp.
Subsidy
100/-
60/-
GOI
40/-

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Antidumping duty.

Dumping occurs when Foreign Country Sells a product at higher price in its home Market & Same products are Sold at Lower price in Foreign Market. So in Order to protect domestic Market antidumping is charged.

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Countervailing duty.

It is a tariff which aims to OFF-set artifical Low price Charged by exporters who enjoys export subsidy and tax Concessions offered by Govt in home Market.

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★★★.

Effects of tariffs

1> Tariff Barriers create obstacles to trade decrease the volume of import and export and affect international trade.

2> By Making imported goods more expensive tariff discourage. domestic Consumers from Consuming. imported foreign goods.

3.) Producers in importing country experience an increase in well-being due to tariff.

4.) Tariff increases Govt revenue of importing country.

5.) Tariff discourage efficient production in Rest of the World

and encourage inefficient production in Home Country.

Non-tariffs.

- Technical measures
  - Sanitary & Phytosanitary measures.
  - Technical Barriers to trade.
- Non-technical measures.

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Unit 3 Chap 4.

World trade Organisation.

- Head Office — Geneva.
- Prior it was GATT.
- Multilateral trade agreements.
- 1st Jan 1995.

164 members → 117 are developing

countries.

[WTO accounts for 95% of World trade].

Objectives of WTO.

1.) Raising the Standard of Living

2.) Full Employment & increase in. National income

3.) Optimum utilization of World. Resources.

Ngozi - Okonjo- Iweala.

Structure of WTO.

WTO activities are Supported by Secretariat headed by Director General.

Three tier System under WTO.

Level 1 : Ministerial Conferance.

They are Responsible for decision Making Related to all Multilateral trade agreements.

Level 2 : General Council.

They are Responsible For trade, policy Review and act as a dispute Settlement Body.

Level 3 : Goods Council / Service Council / intellectual Property Council.

Responsible for implementation of all trade agreements.

Guiding Principles of WTO.

1.) Trade without discrimination.

2.) National treatment Principle.

3.) Freer trade.

4.) Predictability.

5) Principle of General prohibition of Quota.

6) Greater Competitiveness.

7) Tariff as a Measure to Protect domestic Market.

8) Transparency in decision making.

9) Progressive Liberalization.

10) Market access.

11.) Special Benefits to Less developed Countries.

12.) Protection of Health and Environment.

13.) Transparent dispute settlement.

Explain WTO Challenges and Concerns.

1.) Progress on Multilateral Negotiation. on trade is very slow, Members act as a Constrain and Creates Rigidity in the System.

2.) Regional agreements are Complex and Creates Uncertainity

3.) Doha development round have run into problem and Success is doubtful.

4) Developing Countries are facing number of issues in implemening present agreements.

5.) Developing Countries face exceptionally high tariff on Selected goods which affects their export eg: Textile.

6.) Developing Countries Feel that there is Lack of Willingness to Provide access among developed countries.

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Short note GATT.

- GATT was a Multilateral instrument which governed international trade.

- Referred as Provisional agreement. along with IMF & World Bank.

- GATT provided rules for

International trade for 47 years. (1948-1994).

Types of RTA's [Regional trade agreements]

1.) Unilateral trade agreements.

2.) Bilateral agreements.

3.) Regional Preferential trade agreement.

4.) Trading Bloc.

5.) Free trade area.

6.) Customs union.

7.) Economic and Monetary Union.

Doha Round

* Officially Launched at WTO's 4th Ministeral Conference in Doha. Nov 2001.

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* Ninth WTO round since the 2nd World War.

* Formally known as Doha development Round.

* Aims to accomplish Lower trade barriers and revised trade rules.

* Most Controversial topic is yet to Conclude Doha Agenda has

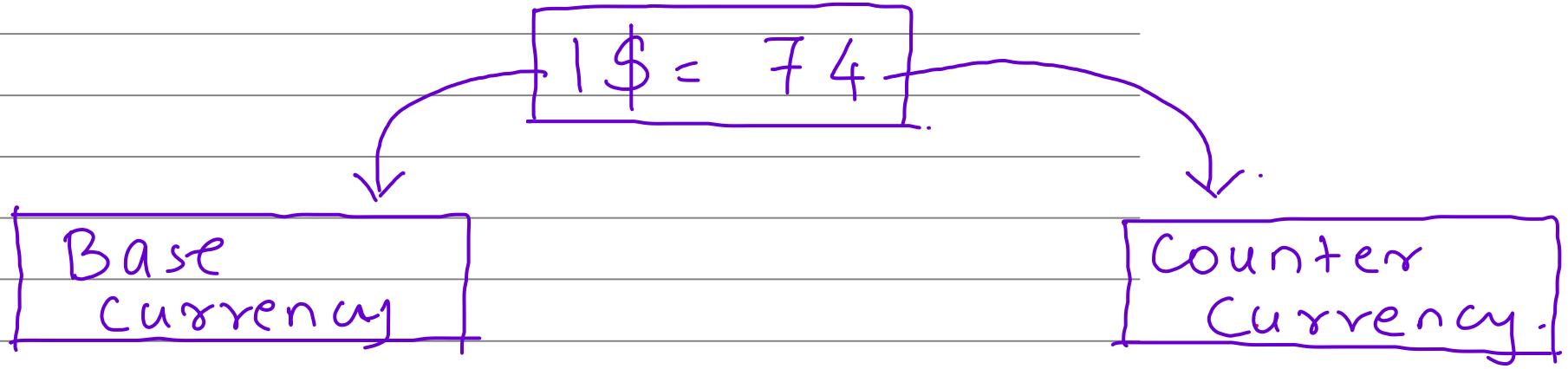
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been Agriculture trade.

Chap 4.

Unit 4. : Exchange Rate.

" Foreign Exchange Refers to a Money denominated in a Currency other than domestic Currency



Base Currency : It is a Currency Considered as base While Quoting exchange Rate.

Counter Currency : It is a Currency used as

the referance or Seond Currency

Nominal exchange rate.

Direct Quote

↓

European Currency Quotation.

↓

1$ = 66.

Indirect Quote.

↓

American Currency Quotation

↓

1rupee = 0.015$.

CROSS Rates.

The Cross rate refers to exchange Rate between two Currencies, each of which has a exchange rate Quoted against a Common Currency.

Pair 1	Pair 2.
X, Y	X, Z

When we Calculate For Y & Z.

USD/JPY | USD/AUD.

When JPY/AUD is calculated.

Foreign exchange Market-

1.) It is Market where Currency trade. takes place

2.) It is an Organisational and.

institutional setting which Facilitates buying and selling of currencies.

3.) It Operates World wide and by Far one of the Largest Market in the World.

4.) It is Over the Counter Market. Decentralised Market having no Physical Place.

5.) It operates Round the Clock due to different time Zones.

6.) Participants in Foreign exchange Market

Central Bank, Commercial bank, NBFC, MNC's, AMC, Insurance Company, Foreign exchange dealers, Speculators, households, Arbitragures.

Functions of Foreign exchange Market.

1.) Transfer of Purchasing Power.

2.) Credit Function.

3.) Hedging.

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Fixed exchange Rate.

or

Pegged exchange Rate.

- Soft Peg.
- Hard Peg.

Flexible exchange Rate

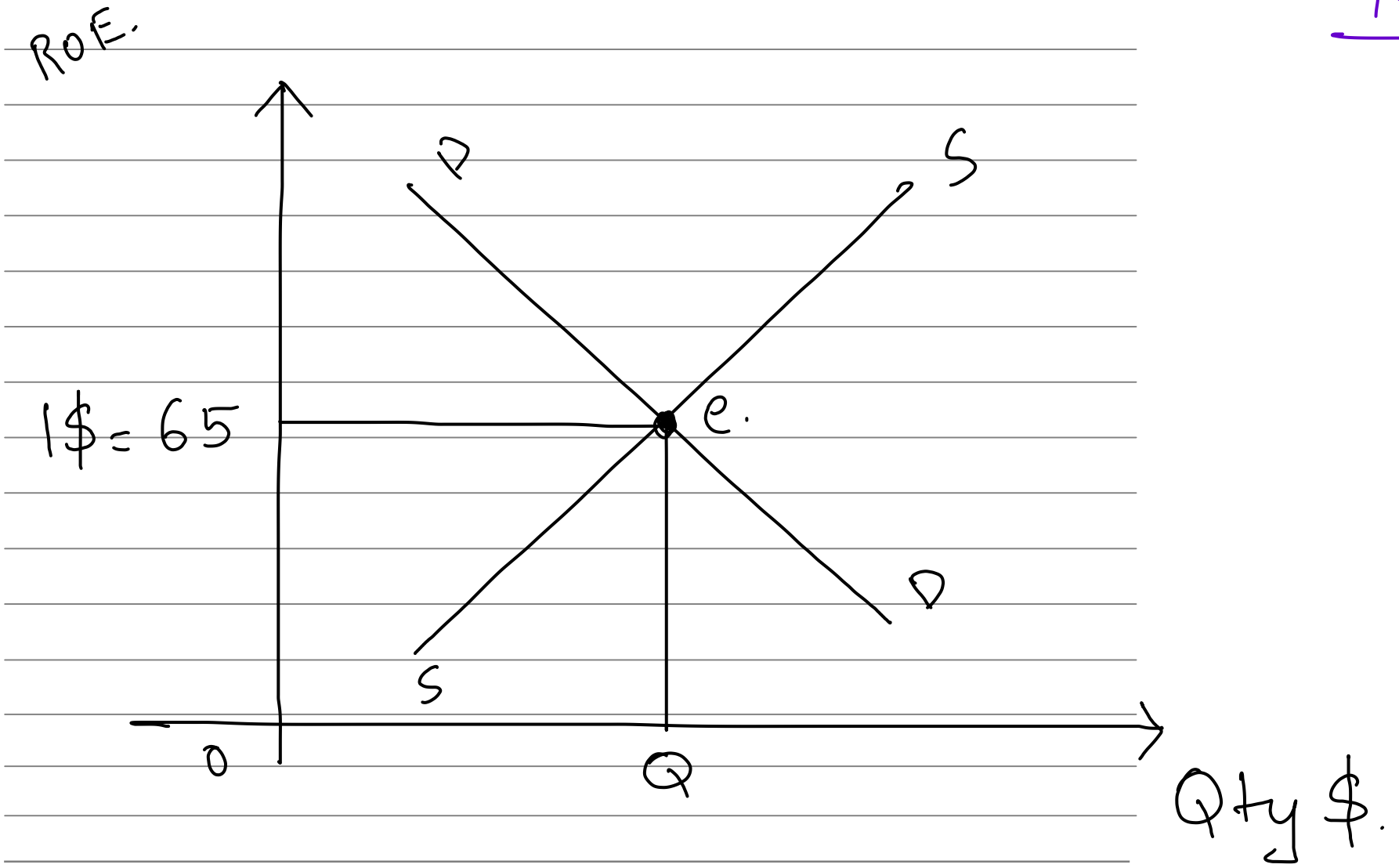
or

Floating exchange Rate.

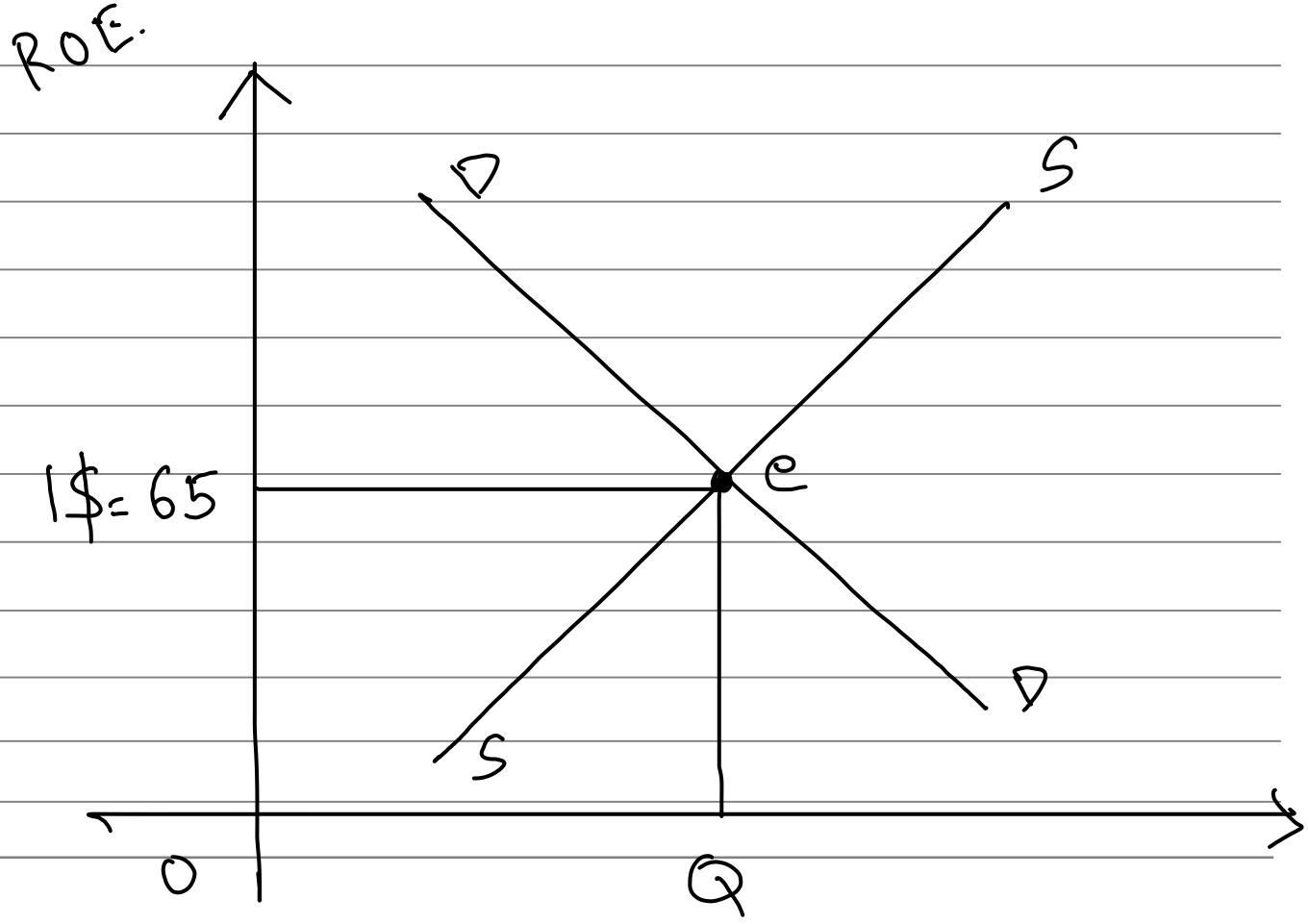
Determination of Nominal exchange Rate.

Demand For $	Supply of $.
Imports of goods	Export of goods.
Import of Services	Export of Services.
Unilateral payments	Unilateral Receipts.
Investment abroad.	FDI / FPI.

Equilibrium Level of Exchange Rate.



Depreciation of home Currency under Floating rate.

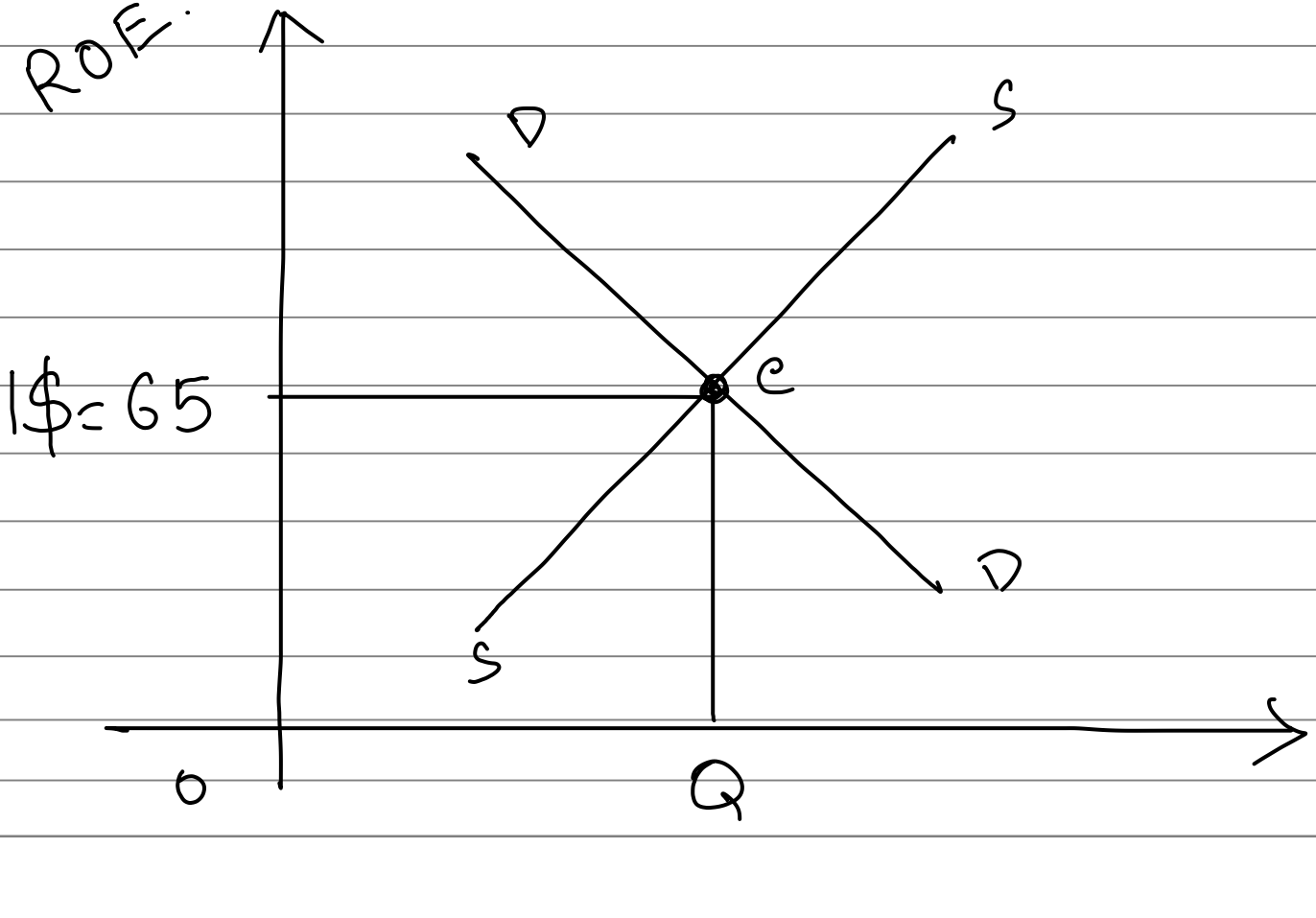


Demand For $ ↑

Supply Constant.

Appreciation of home Currency

[Supply of $ ↑
demand
constant.]



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Devaluation | Depreciation.

1$ = 65 ⟶ 1$ = 70.

Revaluation / Appreciation.

1$ = 65 ⟶ 1$ = 60.

Devaluation.: The deliberate downward adjustment in the official exchange rate reduces the currency's value.

Revaluation : It is an upward change in the Currency value.

Devaluation (Revaluation)	Depreciation (Appreciation)
• Deliberate downward (upward) adjustment in the value of Currency	It is decrease (increase) in Currency's value due to Market Forces.
• It is Followed under Fixed exchange rate	It takes place under Flexible exchange

Regime rate regime

- It involves Govt / Central Bank's intervention.

It does not involve. central bank / Govt. intervention.

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Equal Qty.

Iso-quant

- Equal Product Curve ★
- Iso-product Curve. ★
- Production indifference Curve ★.

1000 units.

Statement: Various combinations of two variable inputs that gives same Level of Output.

Assumptions:

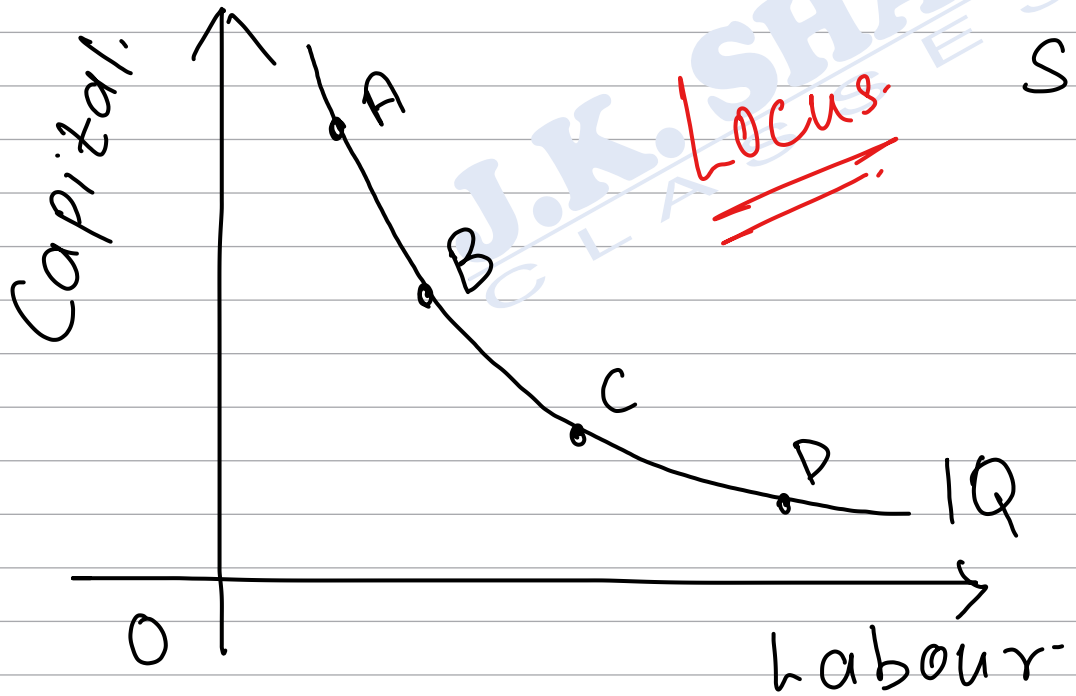
1.> Two inputs (Labour / Capital). ✓ ✓

L K.

2.> Diminishing Marginal Rate of Technical Substitution.

MRS DMRTS.

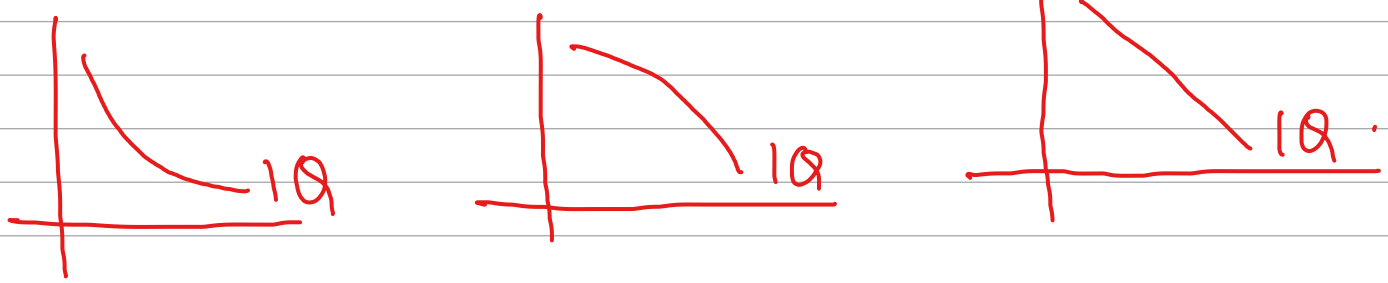
Combinations	Labour	Capital	DMRTS (L,K)
A	1	12	—
B	2	6	6
C	3	4	2
D	4	3	1



Locus.

Slope of IQ

$\frac{MPL}{MPK}$

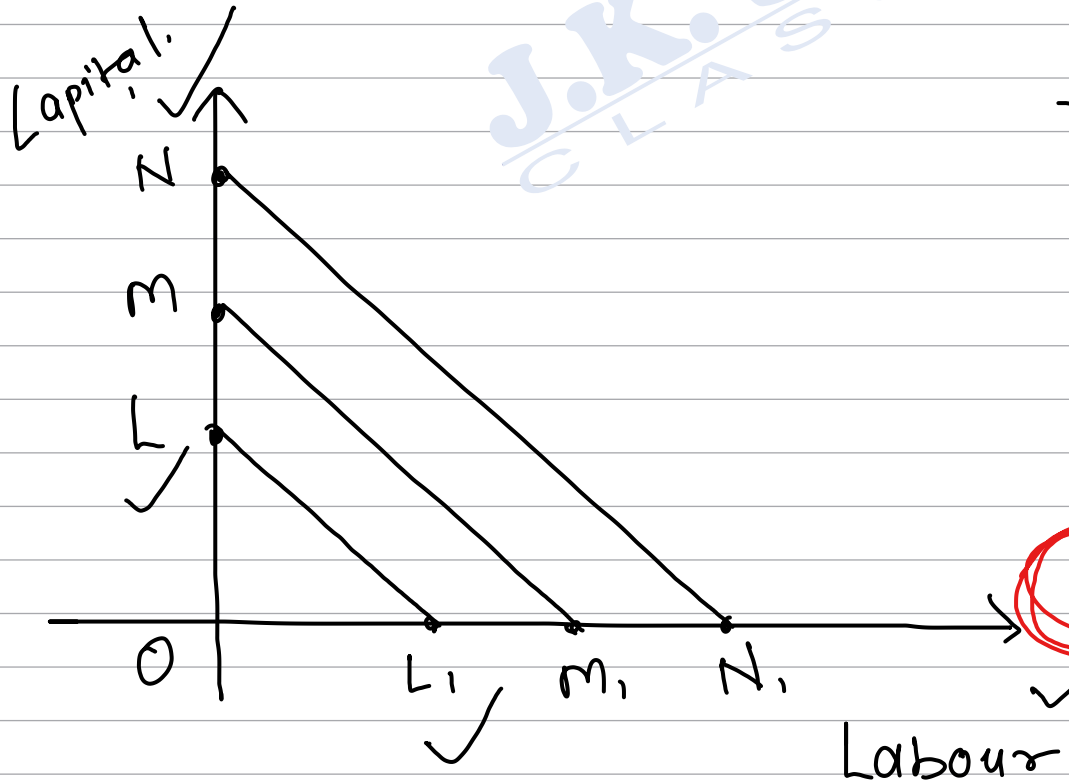


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Iso-Cost line or Equal Cost line.

[Price line / Outlay line / Factor Price line]

"Various Combinations of two inputs which the Firm can purchase with a given Outlay (i.e budget) and at given Prices of two inputs.



Slope of Iso-cost $= \frac{W}{r}$

20 days

AP = 70,000

NP = 50,000

LP = 35000

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Producer's Equilibrium.

or

Product Optimization.

or

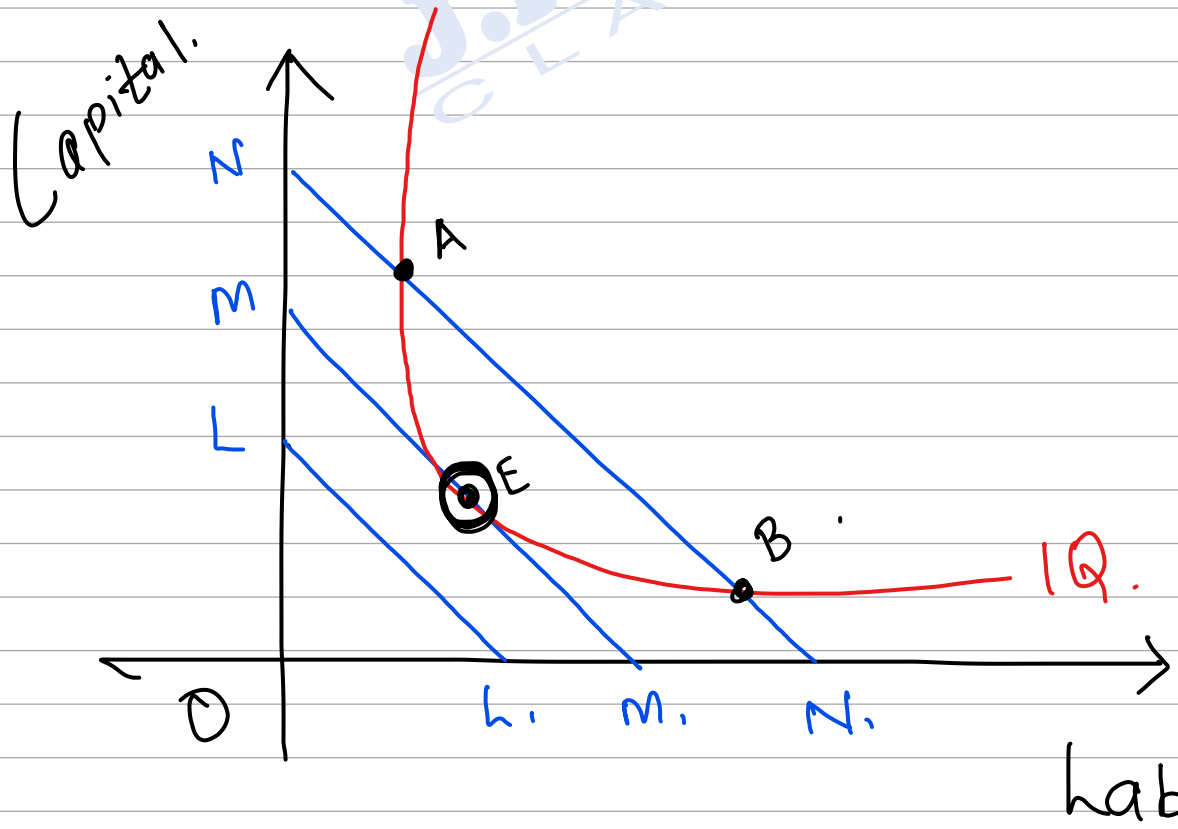
Least Cost Combination.

or

Cost Minimization

Iso-quant

ISO-cost lines.



$$DMRTS_{(L,K)} = \frac{MPL}{MPK} = \frac{W}{r}$$

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unit 5 International Capital Movements

FDI [Foreign direct investment]

i) Investment 10% & above.

ii) Long term investments.

iii) Employment generation.

iv) Technology transfer

v) Creation of Physical assets

vi) Difficult to withdraw.

vii) No Speculation

viii) Management Voice.

ECB

IKEA

MCD-

1994-96-

Feb 2018

Components of FDI

1) Equity Capital

2) Reinvested earnings

3) Direct Capital

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Categories of FDI

1.) Horizontal FDI
2.) Vertical FDI
3.) Conglomerate.
4.) Greenfield FDI
5.) Brownfield FDI.

Reasons for FDI

1.) Expectation of higher Returns than home country.

2.) Internationalization of Production and Investment by MNC's

3.) To hold direct Control of Knowledge regarding Production and Complete Control over trade Patents.

4.) Desire to acquire Promising Foreign Firm so as to avoid Future

Competition.

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5.) Risk diversification So that economic downturns will have Reduced impact.

6.) Existence of Relative Low Wages in the host Country. india.

7.) Lower Environmental Standards and Stable Political Environment.

8.) Overall Favourable investment Climate & better infrastructure.

Merits of FDI

1.) Stimulates Competition and creates Competitive environmental resulting into Lower Cost.

2.) FDI brings in Foreign Capital ($), technology, Management and

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Marketing Skills.

3.) FDI helps to generate Direct employment Opportunities

4.) FDI is likely to result in Relatively higher Wages For Skilled Labour.

5.) Favourable impact on BOP. (+) and better international relations.

E↑ I↓

Demerits.

1.) FDI tends to implement Capital techniques which will impact our Labour Market

2.) FDI will Lead to Regional disparity and ~~incomplete~~ income. inequality

3.) Exploitation of Natural resources and environmental degradation.

4.) Adverse impact on domestic Firms due to unethical and anti Competitive Practices.

5.) Misuse of excessive Political Power by Few Big MNC's which may Lead to Loss of tax Revenue to the host country.

FPI

→ Investment 10% and below.

→ Transfer of Funds

→ No impact on Employment

→ No technology transfer.

J.K. SHAH® CLASSES → Short term nature

→ Speculative in nature

→ Easy to Withdraw

→ No Management Voice.

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Ch:10 Indian Economy

PAGE NO
DATE / /

Status of Indian Economy : Pre Independence.

1) India has believed to have largest Economy of the Ancient world controlling between 1/3rd and 1/4th of worlds Wealth
2) British ruled from 1757 to 1947 (Rule of East India Company)
3) In British Era collapse of manufacturing sector felt heavily on Agriculture problems like overcrowd -ing of farms (disguised unemployment) sub division and fragmentation of farms. and lower income and poverty.
4) Hindu growth rate i.e lower rate of Economic Growth of India from 1950 to 1980 was around 3.5%.
5) Nehruvian Model Planning Commission of India was established, 5 year plans were developed, rapid industrialization was a central theme of development strategy.
6) MRTP Act (Monopolies & Restrictive Trade Practices) 1969 ↳(Restrictions on Expansion)
   i) To ensure that oppressions of Economic System t doesn't result into concentration of Economic Power in the hands of few.
   ii) To provide far greater control of Monopoly.

Teacher's Signature:.....

DATE

Green Revolution

1) Innovative Farm Technology
2) High Yield Variety Seeds.
3) Intensive use of Water, Fertilizers and Pesticides

British Govt. in India : 1858 – 1947

4) At the end of 19th Century, India's Jute Mill industry was the largest in the world.
5) Just before Great Depression, India was ranked as the 12th Largest Industrialized Country

Indian Economy : Post Independence.

1) Major reforms in 1918 including delicensing of 25 Industries providing broad banding facility and increase MRTP limit from 20 crore to 100 crore ~~on~~
2) 1988 SEBI was established and became Statutory Body in 1992.
3) Introduction of MODVAT (Modified Value Added Tax)
4) Reasons for launching Economic Reforms.
   i) Extremely large Fiscal deficit
   ii) Huge internal & external debt
   iii) Extremely high Interest payment
   iv) All time low Foreign Exchange Reserves
   v) Collapse of Soviet Union
   vi) Tough conditions put by IMF

because of all this New Industrial Policy was announced 24th July 1991

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5) Opening of Private Sector Banks
6) Reduction in CRR & SLR (as per Narsinha Committee Report)
CRR 4% SLR 18.5%
RBI Every Bank
CRR is given once in every 2 fortnight
2 x 14 days = 28 days.
7) Deregulating Interest rates
↳ Every bank is allowed to charge interest rate as per their will → RBI will only give upper and lower limits.
8) As per the New Industrial Policy only 5 Industries are under compulsory licensing
1. Arms & Amunations
2. Atomic Energy
3. Narcotics and Drugs / Hazardous Chemicals.
4. Alcoholic Drinks
5. Cigarettes & Cigars

9) Post 1991 rupee was devalued by 18% against dollar
10) On 1st Jan 2015 Apex Policy making body Planning Commission was replaced by NITI Aayog
11) APEDA (Agriculture Processed Food Export Development Authority)
→ Responsible for Export of Agricultural Products.
12) PMFBY (Pradhan Mantri Fasal Beema Yojana)
13) PKVY (Parampara Gat Krishi Vikas Yojana)
Farmer
14) Sale of Portion of Government Share Holding of Public Sector is called as disinvestment.
15) Institutional Reforms such as Land Reforms, was conducted in India before Green Revolution.

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16) Role of Market v/s State (Prvt & Govt) was discussed in New Economic Policy 1991

17) Industrial Policy 1948

- Expanded Role of Public Sector
- Licensing to Private Sector.

18) FIPB (Foreign Investment Promotion Board) does not exist anymore and got replaced by Foreign Investment facilitation Portel

19) FAME INDIA SCHEME promotion of manufacturing of electric and hybrid vehicles

20) Ease of doing business India ranks 63rd

21) Merchandise (goods) Export from India Scheme got replaced by remission of duties and taxes on Export products in 2021.

22) First wave of liberalization started in India 1980

23) ENAM

→ Setting up PAN INDIA Electronic Trading Portel for APMC (Agriculture Produce Market Company)

→ KISAN RAIL to provide logistic

→ National Agriculture Product for Agriculture Commodity.

24) Indirect Tax for entire country was introduced in 2017 (GST)

25) Service Sector is the largest sector of India and accounts for 53.89% of total GVA → GDP

26) DPIIT (Department for Promotion of Industry and Internal Trade

27) 100% FDI in marketing of Food Products & E-commer

Teacher's Signature:

GVA → Gross Value Added

28) 100% Foreign Participation permitted in tele-communication service.

29) India's Service Exports (Software, Business and Travel Service) 27 billion dollars - Nov '22

30) Industrial Sector contributes 30% to GVA

Post 2015 : Reforms.

1) Reduction in Corporate Tax
2) Make In India
3) Vocal for Local
4) Ease of Doing Business
5) National Single Window System
6) PM GATI SHAKTI PLAN (Transport related)
7) PLI (Production Linked Incentives)
8) Industrial Corridoor Programme
9) FAME INDIA (Electric Vehicles)
10) UDYAMI BHARAT
11) Start Up India
12) Emergency Credit Line Scheme
13) Programme for Public Procurement
14) Foodgrain Production has reached 315.7 million tons in 2021-22

Teacher's Signature:.....

"UNCLE GANG"

1.	Science of wealth	**Adam Smith**
2.	Science which deals with Wealth of Nations	**Adam Smith**
3.	Science which deals with Wealth	**J.B. Say**
4.	Welfare definition / Study of Mankind	**Marshall**
5.	Growth definition	**Samuelson**
6.	Queen of Social Science	**Samuelson**
7.	Cobweb theory	**Nikolas Kaldor**
8.	Effective demand	**J.M. Keynes**
9.	Innovation	**Schumpter**
10.	Money Supply / Monetary phenomenon	**Hawtrey**
11.	Optimism / Pessimism	**AC Pigou**
12.	Strive for Profit	**H.A. Simon**
13.	Sales maximization	**Baumol**
14.	Management is separate from Ownership	**Berle & Means**
15.	Business Economics	**Joel dean**
16.	Delphi Method	**Olaf Helmer**
17.	Income effect & substitution effect	**Hicks and Allen**
18.	Risk & Uncertainty	**F.H. Knight**
19.	Profit Maximization	**Williamson**
20.	Positive science	**Robbins**
21.	Normative science	**Alfred Marshall**
22.	Functional goal production, Inventory sales, Market	**Cyert & March**
23.	Socialist economy	**Karl Marx & Fredric engels**

Leading indicators	Lagging indicators	Coincidental indicators
• Stock price • Profit margin • Manufacturing activity • New order for Plant & Equipment • Slower deliveries • Residential investment	• Unemployment rate • Corporate profits • Interest rates • Commercial Lending activity	• GDP • Inflation • Industrial production • Personal income • retail sales • Financial Markets trends

1. Economics is what economist do and every individual is an economist – Jacob Viner
2. Labour 3/4th contri, Capital-1/4th contri linear homogenous function - Cobb Douglas.
3. Conspicious goods/ prestige goods –

   Thorstein Veblen

4. Aim is to create and retain customer- Peter Drucker
5. Politics to policy relationship, feedback or black box model- David Easton
6. Theory of Marginal Productivity- J.B Clark
7. Study of Population – Malthus
8. Monopolies are sacrifices of the many to the few – James Madison
9. Concept of Pure Monopoly- E.H Chamberlien
10. Management goal of stability and growth-

    R.L Marris

11. Group Behaviour, Difference of Opinion on selling cost, and production cost – Chamberlien

12. Production is the organised activity of transforming resource into finished goods and services and objective of production is to satisfy the demand of such transformed resources-

James Bates and J.R. Parteinson