Chapter 1 National Income

Topics to Study:-

- Basic Concepts
- Calculation of national income using Income Method
- Calculation of national income using Expenditure Method
- Calculation of national income using Value Added Method
- Precautions of calculating national income using (3 methods)
- Steps of calculating national income(3 methods)
- Problem of double counting
- Factor and Transfer Payment
- Real and Nominal GDP
- GDP and Welfare
- Difference between:-
  - Stock and Flow
  - Leakages and Injections
  - Money and Real Flow
  - Final and Intermediate Goods
- Items to be included in National Income
- Items to be included in Domestic Income

(10 M)

NATIONAL INCOME

Basic Concepts

(i) Gross (G) —(−Dep⁻)→ Net (N)
Net (N) —(+Dep⁻)→ Gross (G)

- Depreciation is also known as Consumption of fixed capital and Replacement cost
- Depreciation = Gross − Net

(ii) Domestic (D) —(+NFIFA)→ National (N)
National (N) —(−NFIFA)→ Domestic (D)

If Net Factor Income to Abroad is given then change the sign to make it NFIFA

- NFIFA - Net factor Income from Abroad
- NFIFA = Income from Abroad − Income to Abroad

(iii) Factor Cost (FC) —(+NIT)→ Market Price (MP)
Market Price (MP) —(−NIT)→ Factor Cost (FC)

- NIT - Net Indirect Tax
- NIT = Indirect Tax − Subsidies

Measurement of National Income (NNP_{FC})

- Income Method — NDP_{FC}
- Expenditure Method — GDP_{MP}
- Value Added Method — GDP_{MP} / GVA_{MP}

Income Method (NDP_{FC})

- Compensation of Employee / Labour Income
  - Wages and Salaries (Cash and Kind)
  - Employer's contribution to social security scheme
- Operating Surplus or Capital Income
  - Rent
  - Royalty
  - Profit
    - Undistributed Profit or Net Retained Earning
    - Corporation Tax
    - Dividend
- Mixed Income by self employed person

Expenditure Method (GDPMP / NDPMP)

- Consumption Final Expenditure
  - Private Final Consumption Expenditure
  - Government Final Consumption Expenditure
- Net/Gross Domestic Capital Formation or Net/Gross Investment
  - Gross/Net Domestic fixed capital formation
    - Gross Residential Construction Investment
    - \+ Gross Business fixed Investment
    - \+ Gross Public Investment
  - \+ Inventory Investment or change in stock (Closing stock − opening stock)
- Net Exports (Export − Import)
  - If Net Import is given then change sign to make it net Export

Note:- In second Element if Gross values are given then the result of Expenditure method will be GDPMP and if Net values are given then the result will be NDPMP

Value Added Method or Production Method (GDPMP or GVAMP)

Step 1 :-

Value of Output (VO) = Sales + change in stock

Step 2 :-

GDPMP or GVAMP or Gross Value Addition = Value of Output − Intermediate cost (IC)

Note :-

- Sales = Price × Quantity.
- Sales = Domestic Sales + Export
- IC includes only Raw material, spares etc not fixed assets.
- IC = Purchase of Raw material from Domestic market + Import

Theory of National Income

Definitions for different aggregates can be formed.

→ Starting :- Money value of all the final goods and services produced

→ In case of National :- by the residents of the country in an accounting year
→ In case of Domestic :- within the domestic territory of the country in an accounting year

→ In case of MP :- Valued at Market price
→ In case of FC :- Valued at Factor cost

→ In case of gross :- Inclusive of depreciation
→ In case of Net :- Exclusive of depreciation

Domestic Income (NDP$_{FC}$) :- It is the money value of all the final goods and services produced within the domestic territory of the country in an accounting year valued at factor cost and Exclusive of depreciation.

National Income (NNP$_{FC}$) :- It is the money value of all the final goods and services produced by the residents of the country in an accounting year valued at factor cost and exclusive of depreciation.

Income Method or Factor Payment Method :-

National Income can be defined as the sum total of factor incomes earned by the normal residents of the country during an accounting year.

Imp Precautions regarding Income Method :-

(i) Transfer payments are not included :- Transfer payments like old-age pensions, scholarships, charity, grants etc should be ignored as it doesnot contributes to any production activity.

(ii) Illegal Incomes are not included :- Income from illegal activities like smuggling, theft, gambling and black money should not be included.

(iii) Commission on sale and purchase of second hand goods :- Although sale and purchase of second hand goods are not included in national income under production method but commission paid on sale and purchase of these goods should be included as this is reward for factor services of agent.

(iv) Brokerage paid on sale and purchase of shares/bonds :- Any income arising out of sale of shares, bonds etc is not included in national income but any commission or brokerage charged by agent is considered as productive income and hence it is included in national income.

(v) Capital Gain :- Any capital gain arising from the sale of fixed assets like house building etc. should not be included because the value of such asset has already been taken into account.

(vi) Income from windfall gain :- Income from windfall gain like lotteries should be avoided as such income doesnot leads to any production activity.

Expenditure Method (GDPmp)

National Income can be defined as the sum total of expenditure on the purchase of final goods and services produced by residents in the economy during an accounting year.

Precautions regarding Expenditure Method :-

(i) Intermediate Expenditure :- It will not be included as in the national income, it is already included as final expenditure, if intermediate Expenditures are included then it will lead to double counting of expenditure which may result in overestimation of national income.

(ii) Second Hand goods :- Expenditure made on second hand goods should not be included in the national income of current year as it has already been included in the national income of that year in which they were purchased.

(iii) Imputed Expenditure :- Own account production should be included such as production for self consumption, self consumed services of owner etc.

(iv) Expenditure on transfer payments :- This should be excluded as they are unilateral transfers against which no good and services is provided in return.

(v) Expenditure on shares / bonds :- Expenditure on buying and selling of these only leads to transfer of money from one person/institution to another so these expenditure should be excluded.

(vi) Expenditure on final goods :- Expenditure made on final Goods should only be included this will help to solve problem of Double counting.

Value Added Method / Production Method (GDPMP)

National income can be defined as the market value of final goods and services produced by the residents of the country during an accounting year. Under this method, national income is estimated by measuring the contribution of each producing unit

Precautions regarding Value Added Method :-

(i) Value of Final Output :- In order to avoid the problem of double - counting only the value of final output should be taken.

(ii) Second hand goods :— Value of sale and purchase of second hand goods is not included, but commission earned on sale & purchase is included.

(iii) Imputed values of goods & services :— Imputed value of production of goods for self consumption is included but the imputed value of production of services for self consumption is not included as it is not possible to estimate the value of such services.

(iv) Imputed Rent :— Imputed rent of owner occupied houses should be included as all houses have rental value.

(v) Value of Intermediate goods :— It is not included in the estimation of value added because value of intermediate goods is reflected in the value of final goods.

(vi) Commission and brokerage :— Commission and brokerage earned on sale and purchase of second hand goods and property becomes the part of national income because it is a factor income.

Problem of Double Counting

- Counting the value of a product more than once in the measurement or estimation of national income is called double counting.
- As the original good goes into different processes and passes through many stages so there is always a danger that its value may be included at every stage and result may be double, triple or manifold counting.

- To avoid double counting, two methods are adopted:-

(a) Final Product Method:- According to this method, value of only final goods and services have to be considered while estimating the GDP.

(b) Value Added Method:- According to this method, sum total of value added by each firm should be taken while estimating GDP.

Example:-

Transaction	Value of Output	Value of Input	Value Added
Farmers sells to Flour Mill	Rs 5000	—	Rs 5000
Flour Mill sells to Baker	Rs 8000	Rs 5000	Rs 3000
Baker sells to Consumers	Rs 12000	Rs 8000	Rs 4000
Total value Added.			Rs 12000

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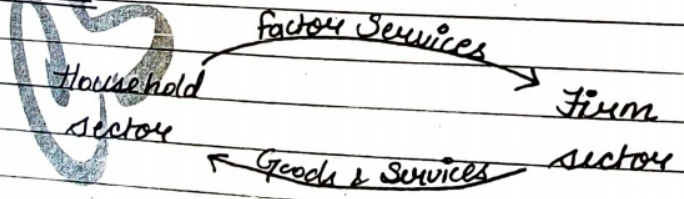
Circular Flow

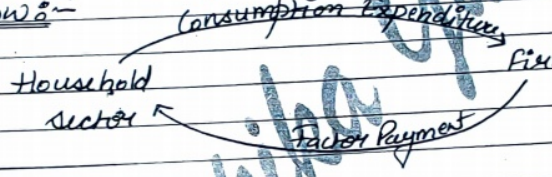
Money Flow — Real Flow

= Real Flow



- The flow of factor services (Land, Labour, capital, Enterprise) from households to firms and corresponding flow of goods and services from firms to households is known as real flow.
- It is also known as product flow or physical flow.
- Here medium of Exchange is goods (Barter system)

Money Flow :-



- It refers to flow of monetary payment from firms to households for their factor services and in return monetary payments from households to firm against their goods and services.
- It is also known as Nominal flow.
- Here medium of Exchange is money.

Difference between Stock and Flow

Basis	Stock	Flow
1. Meaning	Any economic variable which is calculated at a particular	Any economic variable which is calculated during a period

Basis	Stock	Flow
	point of time	of time
2. Nature	Static concept	Dynamic concept
3. Time Dimension	There is no time Dimension	There is time Dimension
4. Examples	Amount of money, Water in tank etc.	Spending of money, water in river etc.

Difference between Leakages and Injections

Basis	Leakages	Injections
1. Meaning	These are those flow variables which have a negative impact on the process of production or income generation	These are those flow variables which cause an increase in the process of production or income generation
2. Cash Flow	It is withdrawls of money from the circular flow of income	It is addition of money to the circular flow of income
3. Example	Savings, Imports, Taxes etc.	Investment, Exports, Government Expenditure etc.

Difference Between Factor Income and Transfer Income

Basis	Factor Income	Transfer Income
1. Meaning	It refers to factor income received by factors of production for rendering factor services or selling a product.	It is the income received without rendering any service or selling any product.
2. Inclusion	It is included in the calculation of national Income.	It is not included in the calculation of national Income.
3. Concept	It is earning concept	It is receipt concept.
4. Other name	It is also known as bilateral Income	It is also known as unilateral Income
5. Example	Rent, profit, wages etc.	Old age pension, charity, grants etc.

Difference between real and nominal GDP/ GDP at constant and current prices

Basis	Real GDP	Nominal GDP
1. Meaning	It is the value of current output at base year prices.	It is the value of current output at current year prices.
2. Alternative Name	It is also known as GDP at Constant Prices	It is also known as GDP at current prices.

Basis	Real GDP	Nominal GDP
3. Change	It will increase only when output of goods and services increases	It will increase either when output increase or current price rise.
4. Reliable Index	It is considered as reliable index of economic growth and welfare.	It is not reliable index of economic growth and welfare.
5. Effect of Inflation	It is not influenced by inflation	It is influenced by inflation.

Conversion :-

- Real GDP = $\frac{\text{Nominal GDP}}{\text{Current Year Index}} \times 100$
- Nominal GDP = $\frac{\text{Real GDP}}{100} \times \text{Current Year Index}$

GDP Deflator :-

It shows change in GDP due to change in price level. GDP deflator shows effect of inflation on GDP over a period of time. GDP deflator is equal to current year index.

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

Relationship between GDP and welfare :-

Often GDP is considered as an index of social welfare. Generally an increase in GDP implies increase in the level of social welfare of people. But it is not always true. There are exceptions to this :-

(a) Distribution of GDP :- If the income within the country is unequally distributed i.e. few person holding the maximum resources then social living of common persons will not improve with increase in GDP. The gap between haves and have nots may expand.

(b) Composition of GDP :- If the increase in GDP is due to production of socially unwanted products like defence Equipments, arms, liquors etc. then such increase in GDP is not the indicator of welfare.

(c) Non Monetary Exchange :- In Indian economy, non-monetary exchanges are still prevailing in rural areas and unorganised markets, where the payments are made in kind but these are not recorded so GDP remains underestimated. Hence GDP doesn't serves as a proper index of welfare.

(d) Ecological Degradation :- With rise in GDP, there will be rise in industrialization and urbanization. This will raise pollution, with rise in GDP, there will be ecological degradation which will reduce welfare of the people.

(e) Externalities :~ It refers to the benefits a firm or an individual causes to another without any price or it can also be referred to as bad impact of an activity without any penalty. Impact of externalities is not accounted in the index of social welfare in terms of GDP. Externalities do not have any market in which they can be bought or sold.

Positive Externalities
- GDP will underestimate the actual welfare of country
- Example :- Use of Public parks

Negative Externalities
- GDP will neglect these harms
- Example :- pollution created by smoking.

Difference between Final Goods and Intermediate Goods

Basis	Final Goods	Intermediate Goods
1. Meaning	All goods which are used for final consumption or for final investment.	All goods which are used either for further production or for resale in the same year.
2. Production Process	Final goods do not pass through production process	Intermediate goods pass through production process

Basis	Final Goods	Intermediate Goods
3. Further Use	They are used for final consumption	They are used for further production.
4. Inclusion in NNPFC	They are included in estimation of national income	They are not included in estimation of national income.
5. Examples	Purchase of rice, milk by the consumers, machine purchased by producer for its own use.	Purchase of milk by restaurant, machine purchased by firm for re-sale.

Domestic territory of an economy

It includes:-

(a) Political frontiers of a country including water boundaries.

(b) Embassies and army establishments of the country situated abroad whereas foreign embassies and army establishments located in that country are excluded.

(c) Moving objects like aircrafts, ships etc., which are operated by residents.

(d) Fishing vessels, oil and natural gas rigs and floating platform situated in international water and operated by residents.

Resident of a country

A resident of a country does not always mean the citizen of that country. A resident is said to be a person who ordinarily resides in a country

and whose centre of economic interest lies in that country. Generally a cut-off of one year is taken for the purpose of examining residential status of a person.

This rule of 1 year does not applies to the following person

(a) Government Employees
(b) Companies Operating out of the country in which it is registered.
(c) U.N and related organisations like IMF, WTO, Etc.
(d) Employees of U.N. and Related Organisation.

Chapter 2 Money and Banking

Topics to Study:-

- Barter System and its Drawbacks
- Meaning of Money
- Functions of Money(3m/4m)
- How money overcome the limitations of Barter System
- Commercial and Central Bank
- Functions of Central Bank(3m/4m)
- Credit Creation Process(4m)
- Monetary Policy

(6 M)

MACRO ECONOMICS

MONEY AND BANKING

I Money

Topics to study :-
- Meaning of money
- Barter system
- Drawbacks of Barter system
- Functions of money (3/4 marks)
- Money supply (1 mark)

Meaning of Money :-
Money is anything which has common acceptability as a means of exchange. OR Money is what money does. OR It is an instrument that serves as a medium of exchange, store of value, a measure of value and a standard for deferred payments.

Barter System :- (C - C - Economy)
It is a system in which goods are exchanged for goods. It is also known as commodity for commodity exchange economy (C-C Economy).

Drawbacks of Barter System

(i) Double Coincidence of Wants :- This was an inherent difficulty faced in this system. It require both the parties in the process of exchange to have a common need for each others good. But it is not always so simple. For Example :- It is not so simple to find a person who wants your mobile and at the same time has a watch that you want to buy.

(ii) Lack of a common unit of value :- In barter exchange, there is no common unit in which all the goods can be measured, without common measurement unit it become very difficult to determine that in what proportion two goods have to be exchanged.

(iii) Difficulty in future Payments :- Future Payment or Deferred Payment become very difficult under barter system of exchange. In barter system the payment which is to be made in future will be in terms of goods only and the quality of goods may not remain the same at the time of repayment.

(iv) Difficulty of storage and Transfer of wealth :- In Barter exchange system storage of goods become very difficult and it involves risk. Shifting of purchasing power for future use in the form of goods and services is very difficult. Transfer in terms of goods and services become very expensive and can also affect the quality.

Functions of Money

(i) Medium of exchange :-

- Money act as intermediary for exchange of goods and services. Money as a medium of Exchange separated the act of purchase and sale.
- With the help of money a person can sell his goods and then he/she can use this money to purchase another commodity.
- Money removed the problem of Double coincidence of wants and reduced the time and efforts spent in barter.

- This function of money is essential for conducting transactions in a market economy.

(ii) Measure of value :~

- Money as a unit of account or measure of value means that money act as a standard unit for quoting prices.
- This function makes money a powerful medium of comparing prices of good and services.
- This function of money makes possible the keeping of business accounts. It would be impossible to keep the business accounts unless all business transactions are expressed in money.

(iii) Standard of deferred Payment :~

- Deferred payments refers to those payments which are to be made in future. Money act as a standard for those payments which are to be made in future.
- In modern era, borrowing and lending are possible only due to this function of money.
- It has led to the creation of financial institutions.
- Money is accepted as standard for deferred payment as its value remain stable, it is generaly accepted and it is durable as compared to any other goods.

(iv) Store of value :-

- Money as a store of value means that money is an asset and can be stored for use in future.
- Money can be easily stored as it comes in convenient denominations.
- Money can be easily exchanged for goods at all times.
- Store of value helps in shifting the purchasing power from the present to future.
- Money serves as a convenient mode of the transfer of value because of its general acceptability, stable value and non perishable nature.

Supply of Money :-

It means the total stock of all the forms of money (paper money, coins, demand deposits) which are held by the public at any particular point of time.

Measures of Money Supply

M_1 = C + DD + OD
C - Currency held by public
DD - Demand deposit
OD - Other deposit

M_2 = M_1 + Savings deposit with post office saving bank

M_3 = M_1 + Net time deposits with Banks

M_4 = M_3 + Total deposits with the Post office saving organization

II BANKING

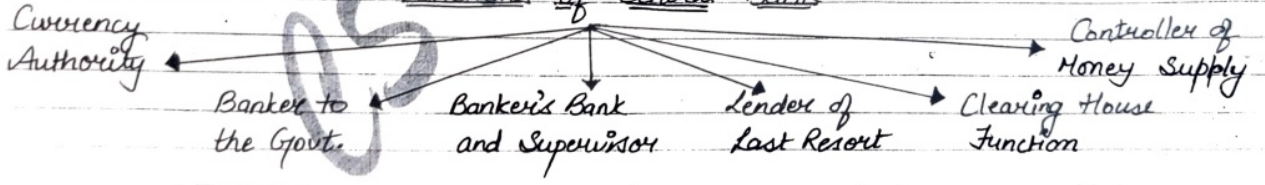
Topics to study:-

- Central Bank
- Functions of Central Bank (3/4 m)
- Monetary Policy
- Commercial Banks
- Credit Creation Process. (6M)

Central Bank:-

It is an apex institution which operates, controls, directs and regulates the monetary and banking structure of a country. Its main responsibility is to design and control country's monetary policy.
India's central bank is Reserve Bank of India.

Functions of Central Bank



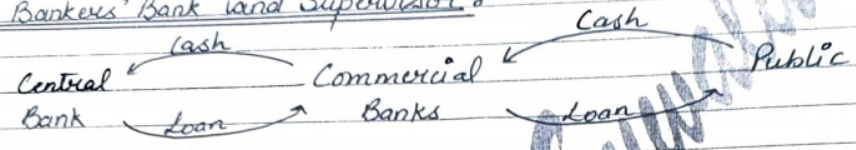
(i) Currency Authority :- (3/4 marks)

- The central bank has the sole monopoly to issue currency in India. Currency notes and coins issued by the RBI are the legal tender money.
- Legal tender money means that money which every individual is bound to accept by law in exchange for goods and services.
- In India one rupee notes and coins are issued by the Government and all other notes are issued by the RBI.
- Due to this monopoly right, RBI can restrict or expand the supply of the money according to the requirements of the economy.

(ii) Banker to the Government (Banker, agent and advisor) :- (3/4 marks)

- Central bank acts as a banker, agent and financial advisor of the government like commercial banks are to the public.
- As a banker to the government, RBI receives deposits, provides cash, makes payments, advances short term loans to the government.
- As a Agent, it manages public debt, collect tax and make other Payments.
- As Advisor, it advice the government on all financial and economic matters such as deficit financing, trade policy etc.

(iii) Bankers' Bank and Supervisor :-



- Commercial banks are required by law to deposit a fixed percentage of their deposits with the Central Bank. Central Bank act as a custodian of Commercial Bank's cash resources.
- As bankers to the banks, the central bank acts as the lender of the last resort, in case the commercial banks fail to meet their financial requirements from other sources, they can, as a last resort, approach to the central bank for loans and advances.
- The central bank is the bank of central clearance, settlements and transfers.
- The central bank supervises, regulates and controls commercial banks. The control is exercised by periodic inspection of banks and the returns filed by them.

(iv) Lender of Last Resort :-

- When commercial banks fail to meet obligations of their depositors, the central banks comes to their rescue.

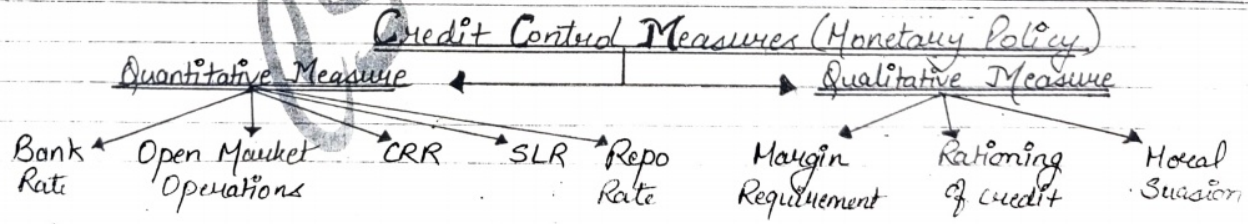
- As the lender of the last resort, the central bank assumes the responsibility of meeting all demands under emergency conditions.
- The commercial bank can borrow from central bank against their eligible securities.

(v) Clearing House Function:-

- All the commercial Banks have their account with central Bank, so central Bank act as a intermediary for those transactions which involve two or more banks.
- The Central Bank act as clearing house for the commercial banks as it holds cash reserves of the commercial banks.
- The Central Bank can easily settle the claims of various banks against each other simply by book entries.

(vi) Controller of Money Supply and Credit:-

Central bank can control inflationary and deflationary situation in the economy through Monetary policy.



A. Quantitative Measures

These are meant to regulate the overall volume of credit in the economy through commercial banks. Following are its instruments :-

(i) Bank Rate

It is the rate of interest at which central bank lends to commercial banks without any collateral.

Cases

Inflation

Money supply ↑ (which is to be ↓)

↓

Bank Rate ↑

↓

Borrowings for commercial banks become costly

↓

Loan creation ↓

↓

Money Supply ↓

Deflation

Money Supply ↓ (which is to be ↑)

↓

Bank Rate ↓

↓

Borrowings for Commercial banks become cheap.

↓

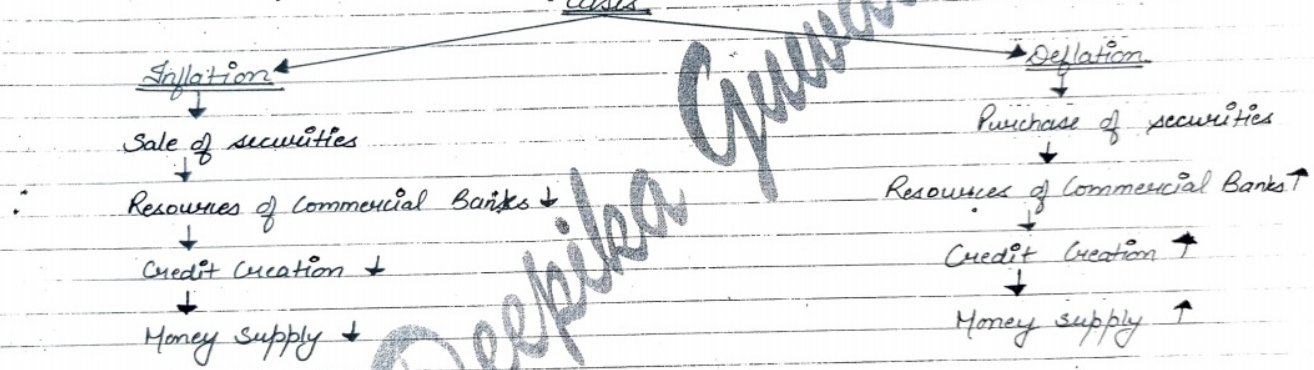
Loan creation ↑

↓

Money Supply ↑

(ii) Open Market Operations :-

It refers to the buying and selling of government securities and bonds by the central bank from and to the general public and banks.



(iii) Cash Reserve Ratio (CRR)

- It refers to the minimum percentage of a bank's total deposits, which it is required to keep with Central Bank.
- For Example If CRR is 10%, Total deposits of bank is Rs 100, then it will have to keep Rs 10 as CRR with Central Bank and rest Rs 90 can be used to grant loans.

Cases

- Inflation → Money Supply ↑ (which is to be reduced) → CRR ↑ → Less funds with Commercial Banks → Loan ↓
- Deflation → Money Supply ↓ (which is to be increased) → CRR ↓ → More funds with Commercial Banks → Loan ↑

(iv) Statutory Liquidity Ratio (SLR) :~

Banks are required to maintain a specified (fixed) percentage of their net total deposits in the form of cash or other liquid assets with themselves.

Cases

- Inflation → Money Supply ↑ (which is to be reduced) → SLR ↑ → Less funds with Commercial Banks → Loan ↓
- Deflation → Money Supply ↓ (which is to be increased) → SLR ↓ → More funds with Commercial Banks → Loan ↑

(v) Repo Rate :-

Repo Rate is the rate at which commercial banks borrow money from the central bank for short period by selling their financial securities to

the central bank.

Cases
- Inflation → Repo rate ↑ → Commercial Bank will not Borrow → Loan ↓ → Money supply ↓
- Deflation → Repo rate ↓ → Commercial Bank will no Borrow → Loan ↑ → Money supply ↑

Reverse Repo Rate :- It is the rate at which the RBI borrows money from commercial bank.

Cases
- Inflation → Reverse Repo Rate ↑ → Commercial bank give their funds to RBI → Earn higher Interest → Loan ↓
- Deflation → Reverse Repo Rate ↓ → Commercial bank Keep their funds → Increase their Lending Power → Loan ↑

B. Qualitative Measures

It aims at controlling specific types of credit. Following are its instruments :-

(i) Margin Requirements :-

A margin is the difference between the amount of loan and market value of

security offered by the borrowers against the loan. RBI has the right to fix this margin rate.

Cases:
- Inflation → Margin Requirement ↑ → People get less credit → Money supply ↓
- Deflation → Margin Requirement ↓ → People get more credit → Money supply ↑

(ii) Rationing of Credit :-

- It refers to fixation of credit quotas for different sectors of the economy.

Cases:
- Inflation → RBI introduces Rationing of credit in order to prevent excessive flow of credit.
- Deflation → RBI withdraws Rationing of credit and make efforts to encourage credit.

(iii) Moral Suasion :-

It involves request, advice and suggestions by the RBI to commercial banks to cooperate with general monetary policy.

Cases:
- Inflation → RBI appeals for credit contraction.
- Deflation → RBI appeals for credit expansion.

Commercial Bank

It is a financial institution which performs the functions of accepting deposits from the public and granting loans, with the motive of earning profit.

Credit Creation Process

- Commercial banks accept deposits from the public. The depositors can withdraw from their deposits by writing cheques. The bank uses the money in these deposits to grant loans. This function of the commercial banks are the basis of deposit creation.

- Let us assume that the entire commercial banking system is one unit, all receipts and payments in the economy are through banks only. One who makes payment does it by writing cheque. The one who receives payment, deposits the same in his account.
- Suppose, people deposit Rs 1000. It is legally compulsory for the banks to keep a certain minimum % of these deposits as cash with themselves and give certain minimum % of these deposits to RBI. Together they both constitute Legal Reserve Ratio (LRR) which is fixed by RBI.

- Suppose the LRR is 10%, the bank will keep Rs 100 (10% of Rs 1000) as LRR and lent (give loan) remaining Rs 900.
- Those who borrow use their money for making payments. As assumed those who receive payments put the money back in the banks. In this way bank receive fresh deposits of Rs 900.
- The Bank again keep 10% of this deposit i.e Rs 90 (10% of 900) as LRR. and lend Rs 810. The money again comes back to the bank leading to a fresh deposit of Rs 810.
- In this money goes on multiplying and ultimately total money creation will be :-

$$\text{Money creation} = \text{Initial deposit} \times \frac{1}{\text{LRR}}$$

$$= \text{Rs } 1000 \times \frac{1}{10\%} = \text{Rs } 10,000$$

- When the primary cash deposit in the banking system leads to multiple expansion in the total deposits, it is known as credit multiplier.

Deposit Creation by Commercial Banks

	Deposits	Loans	Cash Reserves
Initial	1000	900	100
Round I	900	810	90
Round II	810	729	81
⋮	⋮	⋮	⋮
Total	10,000	9000	1,000

Chapter 3 AD and AS

Topics to Study:-

- AD and its Components(4m)
- Consumption function
- Saving Function
- APC and APS
- MPC and MPS
- AS and its Components
- Investment
- Investment Multiplier(6m)
- AD and AS approach of Equilibrium
- S and I approach of Equilibrium
- Ex-ante saving and Investment
- Ex-post saving and Investment
- Excess Demand and Deficient Demand
- Inflationary Gap and Deflationary Gap
- Full Employment and Underemployment Equilibrium
- Fiscal and Monetary Measures to correct Excess and Deficient Demand
- Parametric Shift
- Paradox to thrift
- Numerical Questions(6m/4m)

(12 M)

Aggregate Demand and Aggregate Supply

Aggregate Demand (Total Expenditure) :-

It refers to Demand for goods and services in an economy by all the consumers in an accounting year. There are four components of Aggregate Demand :-

(i) Private Final Consumption Expenditure (C) :- It refers to the expenditure made by household on purchase of durable and non durable goods in an accounting year.

(ii) Private Investment Expenditure (I) :- It refers to the expenditure made by private investors on purchase of capital goods and services in an accounting year.

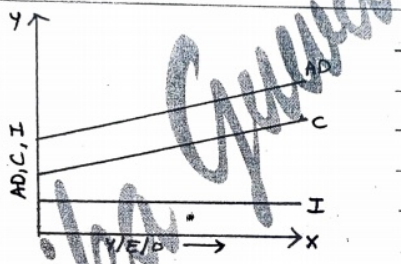
(iii) Government Final Expenditure (G) :- It refers to the expenditure made by the government on purchase of consumer as well as capital goods for social welfare in an accounting year.

(iv) Net Exports (X-M) :-
It refers to difference between export and Import of goods and services in an accounting year.

$AD = C + I + G + X - M$ (Open Economy)

$AD = C + I$ (Closed Economy)

Y	C	I	AD
0	50	100	150
100	100	100	200
200	150	100	250
300	200	100	300
400	250	100	350



Imp AD starts from 0 level of Income as the demand is always there in an economy even if Income is zero.

Consumption Function

It is functional relationship between Income and consumption

$C = f(Y)$

According to psychological law given by Keynes, If Income Increases then consumption also Increases but the rate of Increase of Income is faster than rate of Increase of consumption. There is linear consumption equation, i.e,

$$C = \bar{C} + MPC(Y)$$

$\bar{C}$ – Autonomous consumption :- At zero level of income, minimum consumption is there for survival of human being.

MPC – Marginal Propensity to Consume :- It refers to ratio between change in consumption to the change in income.

$$MPC = \frac{\Delta C}{\Delta Y}$$

Imp
- MPC can't be greater than 1 because the rate of increase of income is faster than rate of increase in consumption. It means ΔY will always be more than ΔC.

$$\Delta Y > \Delta C \Rightarrow \frac{\Delta C}{\Delta Y} < 1$$

APC – Average Propensity to Consume

It refers to the ratio between total consumption and total income.

$$APC = \frac{C}{Y}$$

Imp
- APC can be greater than 1 because at initial stage of income consumption is more than income.
- when $Y \uparrow$ APC $\downarrow$

Investment (I)

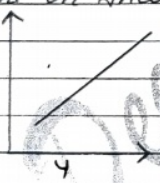
It means increase in the stock of capital. It is the planned expenditure by producers to acquire new capital goods.

Investment

Induced Investment

- It is made by private owners.
- It is dependent on Income.

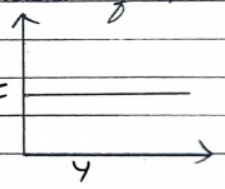
Y	I
100	50
200	100
300	150



Autonomous Investment

- It is made by Government
- It is independent of Income.

Y	I
100	100
200	100
300	100



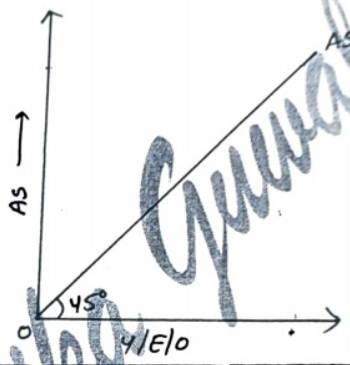
Aggregate Supply (Total Income) :~ AS = Y

It refers to flow of goods and services in an economy by all the producer during an accounting year. It is also known as income generated.
There are two components of aggregate supply :~

(a) Consumption
(b) Saving

The line of AS is formed at 45° because supply and income increases equally.

Y	C	S	AS
0	50	-50	0
100	100	0	100
200	150	50	200
300	200	100	300
400	250	150	400



Saving Function ✓

It is functional relationship between saving and income.

$$S = f(Y)$$

Linear saving Equation :-

$$S = -\bar{C} + MPS(Y)$$

MPS - Marginal Propensity to save :~ It refers to the ratio between change in saving to the change in income.

$$MPS = \frac{\Delta S}{\Delta Y}$$

MPS can't be negative as change in savings can't be negative.

APS - Average Propensity to Save

It refers to the ratio between total saving and total income.

$$APS = \frac{S}{Y}$$

APS can be negative because at initial stage of income consumption is more than income.

$$MPS + MPC = 1$$

$$\frac{\Delta S}{\Delta Y} + \frac{\Delta C}{\Delta Y} = 1$$

$$\frac{\Delta S + \Delta C}{\Delta Y} = 1$$

$$\frac{\Delta Y}{\Delta Y} = 1$$

$$1 = 1$$

$\therefore \Delta Y = \Delta C + \Delta S$

$$APC + APS = 1$$

$$\frac{C}{Y} + \frac{S}{Y} = 1$$

$$\frac{C+S}{Y} = 1$$

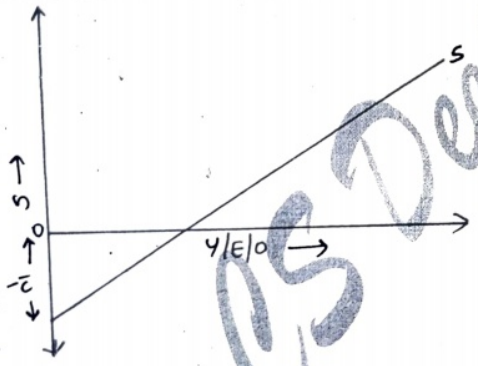
$$\frac{Y}{Y} = 1$$

$$1 = 1$$

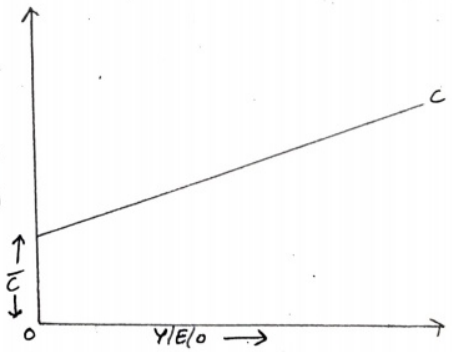
$\therefore Y = C + S$

Y	C	S	APS	APC	MPS	MPC
0	10	−10	$-10/0 = \infty$	$10/0 = \infty$	–	–
10	15	−5	$-5/10 = -0.5$	$15/10 = 1.5$	$5/10 = 0.5$	$5/10 = 0.5$
20	20	0	$0/20 = 0$	$20/20 = 1$	$5/10 = 0.5$	$5/10 = 0.5$
30	25	5	$5/30 = 0.17$	$25/30 = 0.83$	$5/10 = 0.5$	$5/10 = 0.5$
40	30	10	$10/40 = 0.25$	$30/40 = .75$	$5/10 = 0.5$	$5/10 = 0.5$
50	35	15	$15/50 = 0.3$	$35/50 = 0.7$	$5/10 = 0.5$	$5/10 = 0.5$
60	40	20	$20/60 = 0.33$	$40/60 = .67$	$5/10 = 0.5$	$5/10 = 0.5$

Saving Curve :-



Consumption Curve :-



Imp.

Derivation of saving function from consumption function

- Saving function is closely related with consumption function. Autonomous consumption at zero income will be equal to the negative saving at zero income.

$$\bar{C} = (-)\bar{S} \quad , \quad C = Y \Rightarrow S = 0$$

Derivation of saving function from consumption function involves following steps :-

(i) Plot given consumption curve i.e.,

$$C = \bar{C} + MPC(Y)$$

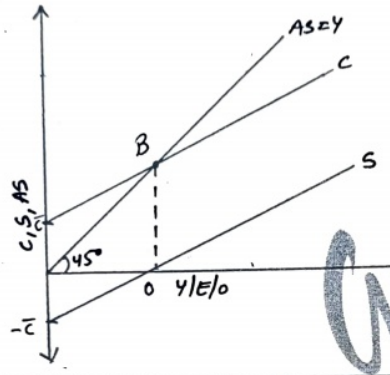
(ii) Draw a 45° line passing from the origin which is also known as income line, wherever it intersects consumption curve, mark that point as B.

(iii) Whatever is the distance between O and $\bar{C}$, the same distance has to be cut below on Y axis and mark that point as $-\bar{C}$.

(iv) From B point, we will draw a straight line towards x axis, wherever it intersect it, mark that point as O.

(v) With the help of 2 points, i.e., $-\bar{C}$ & O draw a straight line This line is saving curve, i.e.,

$$S = -\bar{C} + MPS(Y)$$



Derivation of consumption curve from saving curve

- Consumption function is closely related with saving function. Autonomous saving at zero level of income ($-\bar{S}$) is equal to Autonomous consumption at zero level of income ($\bar{C}$).

If $S = 0$, $\Rightarrow Y = C$, $\bar{C} = (-)\bar{S}$.

Derivation of consumption curve from saving curve involves following steps:-

(i) Plot given saving curve i.e,

$S = -\bar{C} + MPS(Y)$

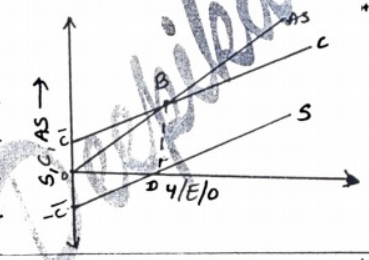
(ii) Draw a 45° line passing from the origin which is also known as income line.

(iii) Whatever is the distance between 0 and $-\bar{c}$, the same distance has to be cut above the y axis and mark that point as $\bar{c}$.

(iv) Wherever the saving curve intersect x axis, mark it as D point. From that draw a straight line upward and wherever it intersect the income line, mark it as B point.

(v) With the help of two points $\bar{c}$ and B draw a line which is known as consumption line i.e.,

$$C = \bar{c} + MPC(Y)$$



Relationship between consumption and Income.

(i) If Income increases, consumption also increases but the rate of increase of income is faster than consumption.

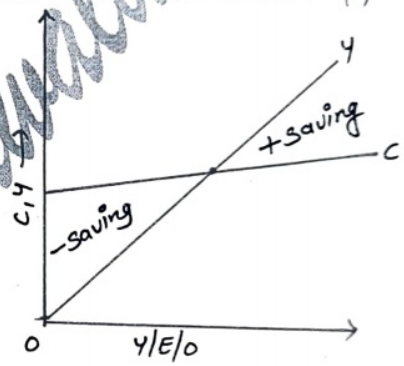
(ii) When consumption is more than income, it means people are spending from their past savings. Therefore, the area is denoted by (−)saving

(iii) When Income is equal to consumption that point is known as Break Even point and at that point saving is zero.

(iv) When Income is more than consumption then people start saving. Therefore, the area is denoted by (+) saving

Y	C	S
0	100	-100
100	150	-50
200	200	0
300	250	50

Diagram



Ex-ante Saving

It means what the saver in the economy is planning to save at the beginning of the year.

Ex-post Investment

It means what the investor in the economy is investing at the end of the year.

Ex-ante Investment

It means what the investor in the economy is planning to invest at the beginning of the year.

Ex-post saving

It means what the saver in the economy is actually saving at the end of the year.

Investment Multiplier (K)

$$K = \frac{\Delta Y}{\Delta I} = \frac{\text{change in Income}}{\text{change in Investment}}$$

$$K = \frac{1}{1-MPC} \quad \text{or} \quad K = \frac{1}{MPS}$$

Imp
- There is positive relation between MPC and K
- The value of K lies between 1 and ∞

Working of Investment multiplier

$$\Delta I \longrightarrow \Delta Y \longrightarrow \Delta C \longrightarrow \Delta Y \longrightarrow \Delta C \longrightarrow \Delta Y \ldots\ldots$$

The working of investment multiplier is based on the assumption that change in (ΔI) Investment lead to change in (ΔY) Income, change in Income lead to change in (ΔC) consumption.

The consumption expenditure of one person is income of another person. Let us suppose, Government has increased investment by Rs 100 crore, it will lead to change in income of 1st person by Rs 100 crore. If MPC of an economy is 0.5, then 1st person will consume goods worth Rs 50 crore and rest will be saved. The consumption of Rs 50 crore will lead to increase in income of 2nd person by Rs 50 crore. The 2nd person will also consume goods worth Rs 25 crore and save the rest, which will increase the income of 3rd person by Rs 25 crore. In this way, the process of income generation will go on and on till total change in income is upto Rs 200 crore.

Round	ΔI	ΔY	ΔC	ΔS
1	100	100	50	50
2	-	50	25	25
3	-	25	12.5	12.5
⋮	⋮	⋮	⋮	⋮
	100	200	100	100

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

$$K = \frac{200}{100}$$

$$K = 2$$

Two actions of Multiplier

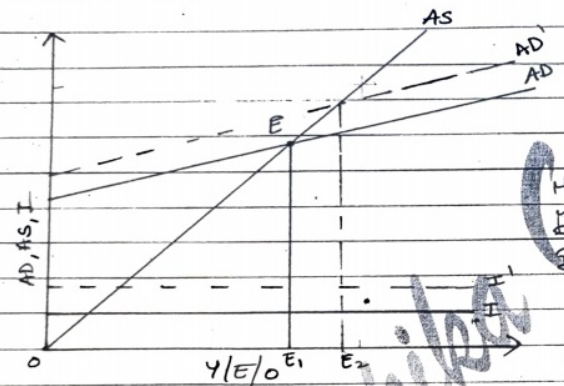
Forward Action

$\Delta I \uparrow \longrightarrow \Delta Y \uparrow$

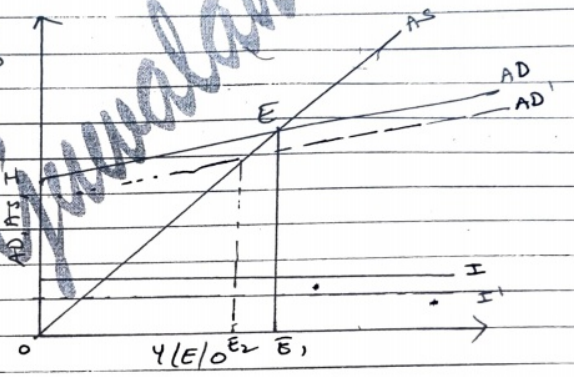
Backward Action

$\Delta I \downarrow \longrightarrow \Delta Y \downarrow$

Forward



Backward



Determination of Equilibrium level of Income/ Output/ Employment

AD & AS Approach ⇓ AD = AS

S & I Approach ⇓ S = I

AD and AS Approach

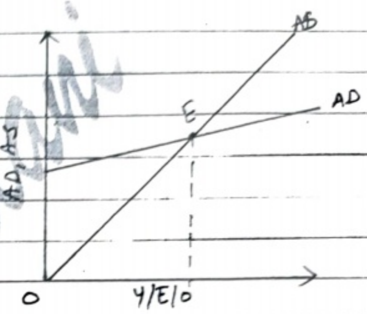
Equilibrium level of national Income/ Output/ Employment is determined by interaction of Aggregate demand and Aggregate supply, it means when AD = AS

Y	C	S	I	AD	AS
0	100	-100	100	200	0
100	150	-50	100	250	100
200	200	0	100	300	200
300	250	50	100	350	300
400	300	100	100	400	400
500	350	150	100	450	500
600	400	200	100	500	600

AD > AS
Excess demand

Equilibrium

AD < AS
Excess Supply



- Equilibrium level is attained when Income is Rs 400 as at this level AD = AS = 400. When AD is 300 and AS is 200, it means there is excess demand of 100 units in the economy. Whenever there is excess demand in economy, producer will increase production to cope up excess demand which will increase AS, At last AD = AS. Finally the economy will be at equilibrium.

When AD is 450 and AS is 500 units, it means there is excess supply of 50 units, whenever there is excess supply producer will decrease production to cope up with this situation, thus Income will decrease, AS will decrease, At last AD = AS. Finally the economy will be at equilibrium.

Restoration of Equilibrium in case of AD and AS Approach

AD > AS

↓

Desired stock > Available stock

↓

Excess demand

↓

Production ↑

↓

Y = AS ↑

↓

AD = AS

AD < AS

↓

Desired stock < Available stock

↓

Excess supply

↓

Production ↓

↓

Y = AS ↓

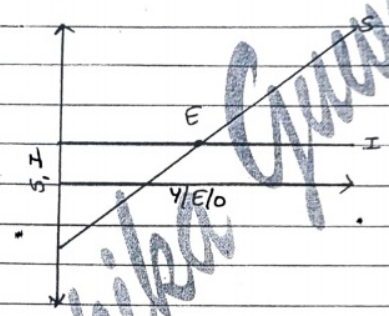
↓

AD = AS

Saving and Investment Approach

Equilibrium level of Income/Employment/Output is determined by Interaction of saving and Investment, where saving = Investment. This situation is attained when Income is Rs 400 Let us suppose when Income is 200 then Investment is 100 and saving is 0, It means Desired stock is more than Available stock, producer will increase the production, Income will increase and hence saving will also Increase till S = I

Let us suppose when Investment is 100 units and saving is 200 units. It means there is excess supply of 100 in the economy so the producer will decrease production which will lead to decrease in Income and saving. This process will continue till S=I



Restoration of Equilibrium in case of S and I Approach

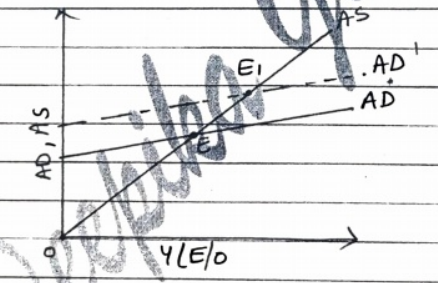
I > S
Excess demand
Producer will
Increase production
Income ↑
Saving ↑
S = I

I < S
Excess Supply
Producer will
decrease production
Income ↓
Saving ↓
S = I

Excess Demand

When actual demand is more than anticipated demand from the point of full employment is known as excess demand.

Inflationary Gap:- The vertical distance between actual demand and anticipated demand is known as Inflationary Gap.



Causes of Excess Demand

- C ↑
- I ↑
- G ↑
- X ↑
- M ↓

Implication of Excess Demand

- Income: No change
- Employment: No change
- Output: No change
- Prices: Increase

Measures to correct excess demand

Fiscal Measures
- Expenditure ↓
- Tax ↑
- Subsidy ↓

Monetary Measures

Quantitative Measures
- Bank Rate ↑
- Open Market operation
  - ↳ Sale of Securities
- SLR ↑
- CRR ↑

Qualitative Measures
- Margin Requirement ↑
- Regulation of credit
  - ↳ EMI ↑, Time Period ↓
- Moral Suasion :- RBI directs commercial Bank to decrease loans.

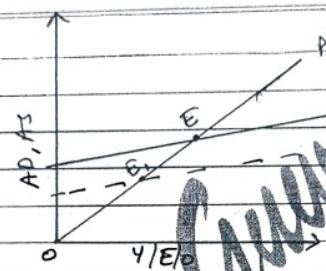
Deficient Demand

When actual demand is less than anticipated demand from the point of full employment, it is known as deficient demand.

Deflationary Gap :- The gap between actual demand and anticipated demand is known as Deflationary Gap.

Causes of Deficient demand

C ↓ | I ↓ | G ↓ | X ↓ | M ↑



Implications of Deficient Demand

- Income Decrease
- Employment Decrease
- Output Decrease
- Prices Decrease

Measures to Correct Deficient Demand

Fiscal Measures
- Expenditure ↑
- Tax ↓
- Subsidy ↑

Monetary Measures

Quantitative Measures
- Bank Rate ↓
- Open Market Operation
  - ↳ Purchase of securities
- CRR ↓
- SLR ↓

Qualitative Measures
- Margin Requirement ↓
- Regulation of credit
  - ↳ EMI ↓, Time Period ↑
- Moral suasion :- RBI directs Commercial Banks to Increase loans.

Full Employment Equilibrium :-

- It refers to the situation where aggregate demand = aggregate supply and all those who are able to work and willing to work get work.
- It doesnot mean zero unemployment as those who are not willing or not able to work may remain unemployed.
- At full Employment level there may exist following three types of unemployment :-

(a) Frictional unemployment :- It is the temporary unemployment which is caused due to strikes or lockouts, change in jobs etc. This is uncontrollable so it is ignored in the calculation of full employment level.

(b) Voluntary unemployment :- It occurs when people are not willing to work at all or they are not willing to work at the existing wage rate.

(c) Structural unemployment :- If labours doesn't change with the structural changes then they will not be able to get employment. Such unemployment is known as structural unemployment.

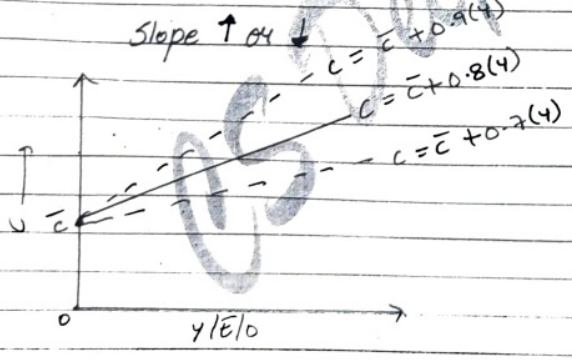
- Full employment equilibrium corresponds to the highest possible level of output in the economy under the given circumstances.
- Attempt to increase production beyond full employment equilibrium causes inflationary gap.

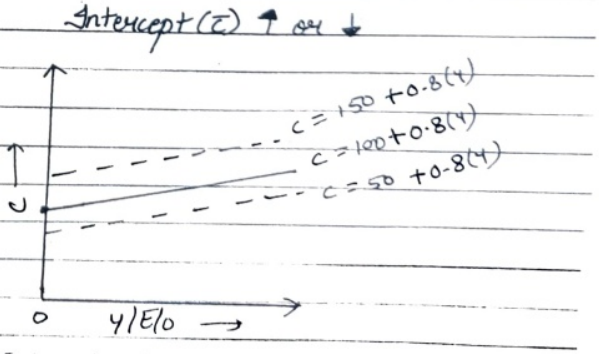
Underemployment Equilibrium :-

- Underemployment Equilibrium refers to the situation where AD = AS but all those who are willing and able to work do not get work.
- It does not correspond to the highest possible level of output in the economy
- Attempt to increase production beyond this equilibrium does not cause inflationary gap.

Paramatric Shift :-

When there is change in paramatric values like autonomous consumption ($\bar{c}$) and MPC, due to that consumption curve changes, it is known as paramatric shift.





Paradox of Thrift

It means when people save more in relation to income or when people become more thrifty, then total saving in the economy remain same or decrease.

Planning to Save ↑
↓
MPS ↑
↓
MPC ↓
↓
Consumption Expenses ↓
↓
AD ↓
↓
Equilibrium level of Income ↓
↓
Actual Savings ↓

Chapter 4 Government Budget

Topics to Study:-

- Meaning of Government Budget
- Objectives of Government Budget(4m)
- Capital Budget (Receipts and Expenditure)
- Revenue Budget (Receipts and Expenditure)
- Deficit budget and its Consequences(imp)

1. Revenue Deficit
2. Fiscal Deficit
3. Primary Deficit

(6 M)

GOVERNMENT BUDGET

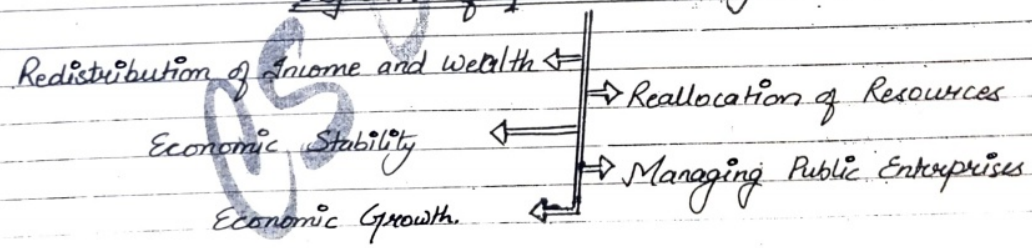
Topics to study :-

- Meaning of Government Budget
- Objectives of Government Budget (4 marks)
- Capital Budget (Receipts and Expenditure)
- Revenue Budget (Receipts and Expenditure)
- Deficit budget and its consequences
  - → Revenue Deficit
  - → Fiscal Deficit
  - → Primary Deficit

Meaning of Government Budget

Government budget is an annual financial statement of the estimated receipts and expenditure of the government over the fiscal year, i.e 1st April to 31st March.

Objectives of Government Budget



(i) Redistribution of Income and Wealth :~

- Inequalities of income and wealth reflect a section of society being deprived of even basic necessities. Government uses fiscal instrument of taxation and subsidies with a view of improving the distribution of income and wealth in the economy.
- Government reduces the inequality by imposing taxes on the rich and giving subsidies to the poor. Tax on rich reduces their income and subsidies to poor raises the living standard thus leads to equitable distribution
- Expenditure on special anti-poverty and employment schemes will be increased, Public Distribution system will be improved and inequalities will reduce.
- Equitable distribution of income and wealth is a sign of social justice which is the principal objective of any welfare state in India.

(ii) Reallocation of Resources :~

- Reallocation of Resources is done so that the goals of social welfare and profit maximisation are balanced.
- Private enterprises always want to maximise their profit but there are some enterprises which may not promote social welfare.
- Production of goods which are injurious to health (cigarettes, whisky etc.) is discouraged through heavy taxation. on the other hand, production of socially useful goods (electricity, khadi) is encouraged through subsidies.

- There are certain goods and services in which the private sector shows little interest due to huge investment requirement and lower profits, Government can undertake the production of these goods and services and it can also encourage private sector by giving tax concessions and subsidies.

(iii) Economic Stability :-

- Free play of market forces (demand and supply) are bound to generate fluctuations which needs to be stabalised
- The government plays a very important role in saving the economy from business cycles. Budget is used as an important policy instrument to solve the situation of inflation and deflation.
- Government can use the taxation and subsidies policy to influence disposable income and bring down stability in the country.
- Economic stability leads to more investment and increases the rate of growth and development.

(iv) Managing Public enterprises :-

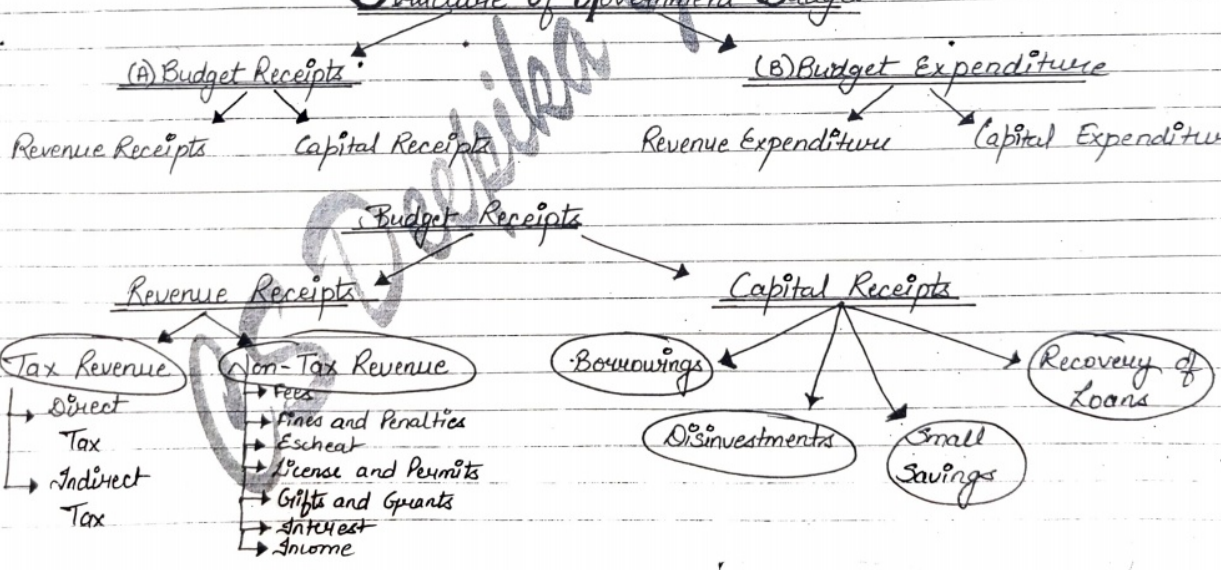
- Government undertakes commercial activities (Railways), which are established and managed for social welfare of the public.
- A natural monopoly is a situation where there are economies of scale over a large range of output.

- In the budget Government can make various provisions to manage these industries.

(V) Economic Growth :~

- 'Economic Growth' refers to a increase in real GDP of the economy.
- Net increase in the total volume of goods and services produced by an economy.
- It can be achieved by providing tax rebates, infrastructural stimulation etc.

Structure of Government Budget



Budget Receipts

(A) Budget Receipts

It refers to estimated receipts of the Government from various sources during a fiscal year.

(I) Revenue Receipts:- Those receipts which neither create a liability nor reduces any asset. Revenue receipts are classified into two:-

(a) Tax Revenue:- Tax is a compulsory payment to Government without expectations of direct benefit to the tax payers. Tax are of two types Direct Tax and Indirect Tax.

Basis	Direct Tax	Indirect Tax
1. Meaning	Impact of the tax is on the same person who is paying the tax	Impact of the tax and liability are on different person.
2. Scope	Imposed on property and Income	Imposed on production and sale
3. Shift of Burden	Burden of tax cannot be shifted	Burden can be shifted through increase in price
4. Nature	Progressive in nature	Proportional in nature
5. Example	Income tax, wealth tax etc	GST, excise duty etc

(b) Non Tax Revenue:- It refers to government revenue from all sources other than taxes. These are incomes, which the government gets by way of sale of goods and services rendered by different government departments.

Non tax revenue includes the following:~

(i) Fee:- It refers to a payment made to the government for the services that it provides to the citizens. Eg:- passport fees, court fees etc.

(ii) Fines and penalties:- They are imposed on law breakers for breaking a law.

(iii) Escheat:~ It refers to the claim of the government on the property of a person who dies without having any legal heir or without leaving a will.

(iv) License and Permits:- These are paid by those to whom Government grants the permission of doing certain things or activities.

(v) Gifts and Grants:- Voluntary contributions which are received by the Government from Abroad, international organisations and citizens of the country.

(vi) Interest:~ Interest earned by government on various loans given to local and state Government, private enterprises and general public.

(vii) Income from Public Enterprises:~ Revenue received by the government by selling the goods and services produced by government agencies.

(II) Capital Receipts:~ Those receipts that either creates liabilities or reduces assets. It includes non repetitive and non-routine items.

(a) Borrowings:~ (Creates Liability)

Borrowings are made to meet the financial requirement of the country. A government can borrow money from Rest of the world, General Public & International Institutions.

(b) Recovery of Loans and Advances :- (Reduces Assets)
Recovery of loans and advances offered to state Government, foreign Government, private companies etc. When government grant loans it is treated as assets but when loan is recovered it will reduces the asset.

(c) Disinvestment :- (Reduces Assets)
It means selling of the shares of the public sector enterprises to private sector. By selling shares government will receives money that is why it is receipts and on the other hand asset will reduces that is why it is treated as Capital Receipts.

(d) Small Savings :- (Creates Liability)
It includes small savings like post office deposits, Kisan Vikas Patra etc.

(B) Budget Expenditure
It refers to the estimated expenditure to be incurred by Government during a given fiscal year.

(I) Revenue Expenditure :- Those expenditure which neither creates assets nor reduces any liability. It is of recurrent nature which is done year after year.
Examples :- Salaries, pensions, Interest payments, subsidies, grants to the Government etc.

(II) Capital Expenditure :- Those expenditure that either create assets or reduces liability. It is non recurring type of expenditure.

Examples:- Construction of roads, purchase of land and building, shares, repayment of loans etc.

(III) Other types of Expenditure

Planned Expenditure	Non planned Expenditure	Development Expenditure	Non-Developmental Expenditure
Incurred by the govt. to fulfill its planned development programmes. Example:- Expenditure on public utilities, health and education etc.	All Expenditures which are beyond the scope of planned development programmes. Example:- Interest Payments, subsidies etc.	Expenditure on activities which are directly related to economic and social development of country. Example:- Expenditure on health, education, industries, agriculture etc.	Expenditure on providing essential services by the Government. Example:- Collection of Tax, defence, Interest on loan etc.

Types of Budget

(Receipts = Expenditure) Balanced Budget

(Receipts ≠ Expenditure) Unbalanced Budget

Deficit Budget (R<E)

Surplus Budget (R>E)

Revenue Deficit

Fiscal Deficit

Primary Deficit

(Imp)

Budget Deficit

When Budget Expenditure are greater than budget receipts. It is of three types:-

Revenue Deficit

It refers to the excess of revenue expenditure of the government over its revenue receipts.
⇒ Total Revenue Expenditure − Total Revenue Receipts

Implications :-

(i) It indicates dissavings on government account, it means government is spending more than its current income.
(ii) It implies that Govt. has to cover this gap from capital receipts (Borrowings).
(iii) Borrowings by govt. will lead to inflationary situation.
(iv) Large Borrowing will result in increased revenue Expenditure (Interest Payments)

Fiscal Deficit

It is defined as excess of total expenditure over total receipts excluding borrowing.
Borrowing = Fiscal Deficit
⇒ Total Expenditure − Total Receipts other than Borrowings.

Implications :-

(i) Causes Inflation :- Government Borrowing includes borrowing from RBI which will result in deficit financing. It increases money circulation and causes inflation.
(ii) Increase foreign dependence :- Govt. also borrows from rest of the world which increases the dependence on other countries.
(iii) Financial Burden for Future Generations :- The financial burden of Borrowings like repayment, interest etc. will be on future generations which will impact future growth and development of the country.

Primary Deficit

It is the difference between fiscal deficit and interest payments.
⇒ Fiscal Deficit − Interest Payments.

Implications :-

- It shows how much Borrowings by the Government are required to meet its existing expenses other than interest payment of previous loans.

Zero primary deficit :- It means that the Government has to

Measures to Reduce Revenue Deficit :-

(i) Borrowings

(ii) ~~Disinvestment~~

(iii) Cut in Expenditure

(iv) Debt Trap (Deficit Multiply Borrowings) :-

Fiscal deficit ↑ → Borrowings ↑ → Future Liability ↑ (Interest) → Revenue Expt ↑ → Interest Payment ↑ → Borrowings ↑ → Revenue Deficit ↑

Debt Trap

(v) Erosion of Government Credibility :- High fiscal deficit erodes credibility of the govt. in domestic as well as international market.

resort to borrowings only to meet its interest payment on public debt. It is not adding to the existing loans.

Revenue Deficit

Revenue Expenditure (—) Revenue Receipts

Fiscal Deficit (—) Interest Payments = Primary Deficit

[Revenue Expenditure + Capital Expenditure] (—) [Revenue Receipts + Capital Receipts] (—) Borrowings

⇓ Budget Expenditure

⇓ Budget Receipts

Chapter 5 Balance of Payment and Forex

Topics to Study:-

- Meaning of Government BOP
- Capital and Current Account of BOP
- BOP and BOT
- Autonomous and Accommodating Items
- Foreign Exchange meaning
- Foreign Exchange Rate
- Types of Foreign Exchange(fixed and Floating)
- Managed Floating System
- Devaluation and Revaluation of currency
- Depreciation and Appreciation of Currency
- Determination of Equilibrium exchange rate

(6 M)

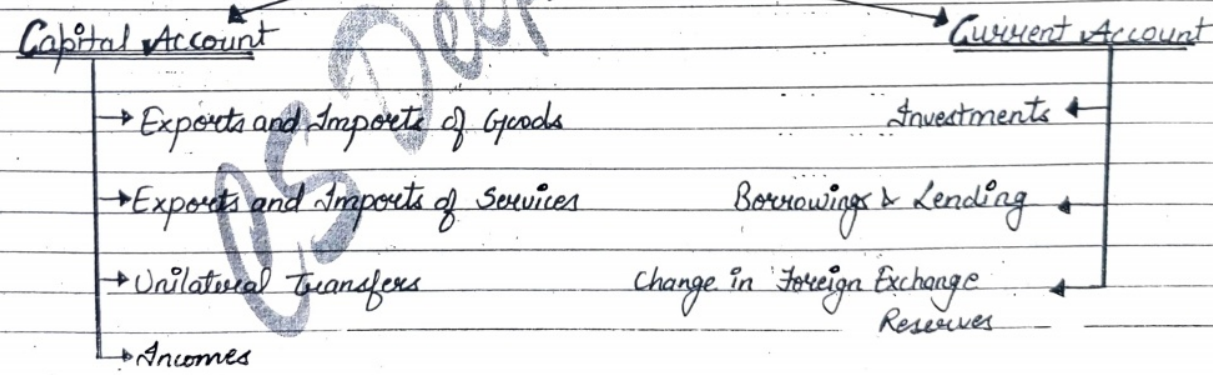
BALANCE OF Payment

Topics to Study :-
- Meaning of BOP
- Structure of BOP
- BOP and BOT
- Autonomous and Accommodating Items
- Deficit in BOP

Meaning of Balance of Payment

The BOP is a systematic record of all economic transactions between residents of a country and rest of the world during a given period of time.

Structure of BOP



I. Current Account :~

It records exports and Imports of goods and services and unilateral transfers during a given period of time. The main components of Current Account are :~

(i) Exports and Imports of Goods (Visible Trade / Balance of Trade) :~

It records all types of physical goods imported and exported, A major part of transactions in foreign trade is in the form of export and import of visible items.

- Payment of Import → Debit side → Negative items
- Receipt from Export → Credit side → Positive items

] Balance ⇒ Balance of Trade

(ii) Exports and Imports of Services (Invisible Trade)

It includes a large variety of non-factor services sold and purchased by the residents of a country to and from the rest of the world. It includes all types of services (like Shipping, Banking, Insurance etc.

- Export of services → Credit side → Positive items
- Import of services → Debit side → Negative items

] Balance ⇒ Balance of Services

(iii) Unilateral Transfers (Unrequisted Transfers)

These are one sides transactions which include gifts, donations, personal remittances, aid etc. to and from rest of the world.

- Receipts → Credit side → Positive items
- Payments → Debit side → Negative items

] Balance ⇒ Balance of unilateral Transfers.

(iv) Incomes

It includes Investment income in the form of interest, rent and profits, and compensation of employees in the form of wages and salaries etc.

- Income Received → Credit side → Positive items
- Payments made → Debit side → Negative items

Balance of Current Account = Sum of credits − Sum of debits

II. Capital Account :-

It records all such transactions between the residents of a country and rest of the world which causes change in the assets or liability status of the residents of a country or its government. Its components are :-

(i) Investments :-

- Investments by rest of the world in shares of Indian companies, real estate in India etc. → Credit Side → Positive items
- Investments by Indian residents in shares of foreign companies, real estate abroad etc. → Debit Side → Negative items

Investment to and from abroad

Foreign Direct Investment (FDI)

- It refers to purchase of an asset in rest of the world, such that it gives direct control to the purchaser over the asset. Eg:- Acquisition of a firm, purchase of land etc.

Portfolio Investment

- It refers to the purchase of financial asset by the foreigners that does not gives direct control to the purchaser over the asset. Eg:- purchase of shares, bonds of foreign company etc.

(ii) Borrowings and Lending :-

Private Transactions

- Transactions that affect assets and liabilities of individuals, firms and non government entities.
- Borrowings → Credit side → Positive
- Lending → Debit side → Negative

Official Transactions

- Transactions affecting assets and liabilities by the government and its agencies.
- Borrowings → credit side → Positive
- Lending → Debit side → Negative

(iii) Change in Foreign Exchange Reserves :-

Foreign Exchange reserves are the financial assets of the government held by RBI.

- Withdrawl → Credit side → Positive item

- Addition → Debit side → Negative item.
- Only change in reserves are recorded in BOP account and not "Reserves"

Difference between Current Account and Capital Account.

Basis	Current Account	Capital Account.
1. Meaning	An account which records exports and imports of goods and services and unilateral transfers during a given period of time.	An account which records all such transactions between the residents of a country and rest of the world which causes a change in assets or liability status of residents or its government.
2. Components	It includes Balance of trade, Balance of services and unilateral transfers	It includes Investments, Borrowings & lending and change in FOREX Reserves.
3. Concept	It is a flow concept as it includes all items of flow nature.	It is a stock concept as it includes all items showing change in stock.
4. Example	Purchase and sale of Goods like steel, Sugar etc and services like Banking, Insurance etc.	Purchase of house abroad, purchase of shares in foreign company etc.

Difference between Balance of Trade and Balance of Payment

Basis	Balance of Trade (BOT)	Balance of Payment (BOP)
1. Meaning	Balance of Trade refers to the difference between exports and imports of visible items.	It is an accounting statement that provides a systematic record of all economic transactions, between residents of a country and rest of the world.
2. Components	It includes only visible items.	It includes visible, invisible items and unilateral transfers.
3. Capital transactions	It does not record any transaction of capital nature.	It records all transactions of capital nature.
4. Scope	It is a narrower concept as it is only a part of BOP account	It is a wider concept and it includes BOT.
5. Settlement	Unfavourable BOT can be met out of favourable BOP.	Unfavourable BOP cannot be met out of favourable BOT.

Difference between Autonomous and Accommodating items in BOP

Basis	Autonomous items	Accommodating items
1. Meaning	These items refer to those	These items refer to those transac-

Basis	Autonomous items	Accommodating items.
	transactions which are undertaken for profit motive.	-tions which are undertaken to cover up disequilibrium in BOP
2. Dependency on BOP	These transactions are independent of the BOP state	These transactions are not independe-nt or are dependent on BOP state.
3. Account	It includes both current Account and Capital Account transactions.	It includes only capital Account transactions.
4. Other Name	These are also known as above the line items	These are also known as below the line items.
5. Examples	Exports, Imports, Receipts and Pay--ment of long term loans	Use of foreign exchange reserves, borrowings by the government etc.

Disequilibrium in Balance of Payments

Indicating Deficit

⇓

When our receipts from the foreigners fall below our payment to foreigners

Demand of FOREX > Supply of FOREX

Indicating Surplus

⇓

When our receipts of the country exceed its payment.

Demand of FOREX < Supply of FOREX

FOREIGN EXCHANGE RATE

Topics to Study :-

- Meaning of Foreign Exchange
- Meaning of Foreign Exchange Rate
- System of Exchange Rate
  - Fixed
  - Flexible
- Demand of Foreign Exchange
- Supply of Foreign Exchange
- Determination of Equilibrium
- Depreciation and Appreciation
- Devaluation and Revaluation

Foreign Exchange :-

It means a currency other than the domestic currency. Example :- Dollar, Yen etc.

Foreign Exchange Rate :-

The rate at which one unit of currency of a country can be exchanged with number of units of currency of another country is known as foreign Exchange Rate. Example 1$ = Rs 70.6.

#

Types of Exchange Rate system → Fixed

Types of Exchange Rate system → Flexible

Fixed Exchange rate system

⇒ **Meaning:-** It is the rate officially fixed by the government. Such a rate does not vary with changes in demand and supply of foreign currency.

⇒ **Merits:-**
- Stability of Exchange rate.
- Encourages International Trade (Risk free)
- Formation of Government Policies become easy.
- A check on Inflation

⇒ **Demerits:-**
- Huge Gold reserves are required
- Blockage of Capital
- Discourage venture capital
- Non Equilibrium rate

⇒ **Government Intervention:-** It requires constant intervention of the government, so that currency does not fluctuate and remain stable.

Flexible Exchange rate system

Meaning:- It is the rate which is determined by the forces of demand and supply of foreign exchange. There is no official intervention.

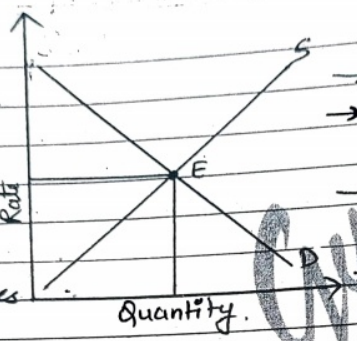
Merits:-
- Gold reserves not required
- International mobility of Capital
- Venture Capital encouraged
- Equilibrium exchange rate.

Demerits:-
- Market Instability
- Risky trade
- Policy formation becomes difficult.

Government Intervention:- There is nil or minimal intervention from the government and there is free movement of Exchange rate

Demand of FOREX :-

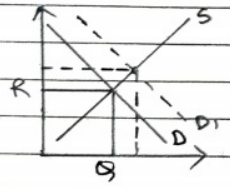
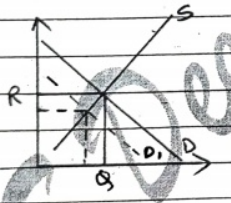
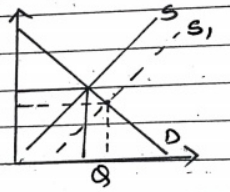
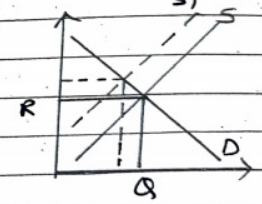
→ Payment of International loan.
→ Gifts, grants and donations to rest of the world.
→ Investment in rest of the world.
→ Purchases of goods & services



Supply of FOREX :-

→ International loan taken
→ Gifts, grants and donations from rest of the world.
→ Investment in domestic territory by rest of the world.
→ Sale of goods & services

Disequilibrium Conditions

Increase in Demand	Decrease in Demand	Increase in supply	Decrease in supply
			
Import ↑	Import ↓	Export ↑	Export ↓
↓	↓	↓	↓
Demand ↑	Demand ↓	Supply ↑	Supply ↓
↓	↓	↓	↓
Quantity & Rate ↑	Quantity & Rate ↓	Quantity ↑ Rate ↓	Quantity ↓ Rate ↑

Appreciation of Domestic Currency

(i) It is a situation of fall in Exchange rate.
(ii) Less rupees are needed to buy one US$
(iii) Cause :~
- Increase in supply of foreign Exchange
- Decrease in Demand of foreign Exchange.

(iv) Affect :~ Exports fall
(v) Example :~ Exchange rate falls from 1 US$ = Rs 60 to 1 US$ = Rs 50

Depreciation of Domestic Currency

It is a situation of rise in Exchange rate. More rupees are needed to buy one US $

Cause :~
- Increase in demand for foreign Exchange
- Decrease in supply of foreign Exchange.

Affect :~ Exports rise.
Example :~ Exchange rate rises from 1US $ = Rs 60 to 1 US $ = Rs 70

Devaluation of Currency :~

It refers to the fall in the value of domestic currency with respect to foreign currency, It is planned and fixed by the government to promote exports and decrease imports.

Revaluation of Currency :~

It refers to the rise in the value of domestic currency with respect to foreign currency, It is planned and fixed by the government to increase imports and decrease exports.

Spot / current market :~ It is that market which handles only spot/current transactions. It is a daily nature market whereby transactions are entered only at spot exchange rate or the rate which prevails in the market at the time when transaction is entered.

Forward market :~ It is that market which handles such transactions which are meant for future delivery. Here transactions are entered at forward exchange rate which means rate of exchange for some future date. It provides opportunity for speculative gain.

Managed floating exchange rate. (Dirty Floating Rate)

- This system has recently emerged. It is termed as managed because the central bank tries to influence the exchange rate by entering the foreign exchange market as a bulk buyer or seller.
- During the period when floating rate is too high, it starts selling foreign exchange from its reserves, so as to bring the rate down.
- When floating rate is too low, it starts buying foreign exchange in order to boost up the rate.
- This is done by central bank in the interest of importers and Exporters.