

KENDRIYA VIDYALAYA SANGATHAN

Jaipur Region

XII-ECONOMICS STUDY MATERIAL



- Macroeconomics
- Indian Economic Development

SESSION 2023-24

*Happiness
means study
economics*



Mr. B. L. Morodia
Deputy Commissioner
Kendriya Vidyalaya Sangathan
RO, Jaipur (Rajasthan)

Mr. D. R. MEENA
Assistant Commissioner
Kendriya Vidyalaya Sangathan
RO, Jaipur (Rajasthan)



Mr. Madho Singh
Assistant Commissioner
Kendriya Vidyalaya Sangathan
RO, Jaipur (Rajasthan)



Mr. Uma Shankar Vijay
Course Director
District KV, Jaipur



Mr. Mahipal Singh
Co-Course Director
District KV, Jaipur

| Economics syllabus XII (2023-24) | |
|---|-----------|
| MACROECONOMICS (PART-A) | Marks |
| <p>National Income and Related Aggregates: What is Macroeconomics? Basic concepts in macroeconomics: consumption goods, capital goods, final goods, intermediate goods; stocks and flows; gross investment and depreciation. Circular flow of income (two sector model); Methods of calculating National Income: Value Added or Product method, Expenditure method, Income method. Aggregates related to National Income: GNP, NNP,GDP,NDP - at MP and FC; Real and Nominal GDP,GDP Deflator, GDP and Welfare</p> | 10 |
| <p>Money and banking: Money - Meaning and functions, supply of money - Currency held by the public and net demand deposits held by commercial banks. Money creation by the commercial banking system. Central bank and its functions (example of the Reserve Bank of India): Bank of issue, Govt. Bank, Banker's Bank, Control of Credit through Bank Rate, CRR, SLR, Repo Rate and Reverse Repo Rate, Open Market Operations, Margin requirement.</p> | 6 |
| <p>Determination of Income and Employment: Aggregate demand and its components. Propensity to consume and propensity to save (average and marginal), Short-run equilibrium output; investment multiplier and its mechanism. Meaning of full employment and involuntary unemployment.Problems of excess demand and deficient demand; measures to correct them - changes in government spending, taxes and money supply.</p> | 12 |
| <p>Government Budget and the Economy: Government budget - meaning, objectives and components. Classification of receipts: revenue receipts and capital receipts. Classification of expenditure – revenue expenditure and capital expenditure. Balanced, Surplus and Deficit Budget: measures of government deficit.</p> | 6 |
| <p>Balance of Payments: BOP account - meaning and components. BOP: Surplus and Deficit, Foreign exchange rate - meaning of fixed and flexible rates and managed floating. Determination of exchange rate in a free market, Merits and demerits of flexible and fixed exchange rate, Managed Floating exchange rate system</p> | 6 |
| Indian economy development (PART-B) | |
| <p>Development Experience (1947-90) and Economic Reforms since 1991: A brief introduction of the state of Indian economy on the eve of independence. Indian economic system and common goals of Five-Year Plans. Development Experience (1947-90) and Economic Reforms since 1991: Main features, problems and policies of agriculture (institutional aspects and new agricultural strategy), industry (IPR 1956; SSI – role & importance) and foreign trade, Economic Reforms since 1991: Features and appraisals of liberalisation, globalisation and privatization (LPG Policy),Concepts of demonetization and GST.</p> | 12 |
| <p>Current challenges facing Indian Economy: Human Capital Formation: How people become resource; Role of human capital in economic development; Growth of Education Sector in India Rural development: Key issues - credit and marketing - role of cooperatives; agricultural diversification; alternative farming - organic farming Employment: Growth and changes in work force participation rate in formal and informal sectors; problems and policies Sustainable Economic Development: Meaning, Effects of Economic Development on Resources and Environment, including global warming</p> | 20 |
| <p>Development Experience of India: A comparison with neighbors, India and Pakistan, India and China Issues: economic growth, population, sectoral development and other Human Development Indicators</p> | 8 |

UNIT –1 (10 Marks)

NATIONAL INCOME AND RELATED AGGREGATES

Macro Economics studies economic problems at the level of an economy as a whole. It deals with aggregate economic units Like - National Income, Aggregate Demand, General price level, GDP, Government Budget etc.

Difference between Consumption goods and Capital goods

| Consumption Goods | Capital Goods |
|---|---|
| 1. Used by consumer | 1. Used by producer. |
| 2. Used for Consumer satisfaction. | 2. Used for profit generation |
| 3. Example: Durable like Car used by household, Non-durable Like Clothes etc. | 3. Example: machines, road, bridge, Car used as taxi. |

Difference between Final goods and Intermediate goods

| Intermediate Goods | Final Goods |
|---|--|
| 1. Remain within the boundary line of production. | Outside the boundary line of production |
| 2. Not ready for use by their final users. | Ready for use by their final users. |
| 3. Goods that can be resold . | Goods which cannot be resold . |
| 4. Value addition is possible | Value addition is not possible. |
| 5. NOT included in the estimation of NI. | Included in the estimation of NI. |
| 6. Example-Milk used by tea seller. | Example-Milk used by household. |

Difference between Stocks and Flows.

| Stock Variable | Flow Variable |
|---|---|
| 1. Measured at a point of time . | Measured during a period of time . Like per hour, per day, per year. |
| 2. Static concept. | Dynamic concept. |
| 3. Example: Wealth, capital, Money Supply | Example: Investment, Income, |

Investment is Increase in the stock of capital in a year.

Depreciation/Consumption of fixed capital/Capital consumption allowance/Current replacement cost Means Fall in the value of fixed assets due to wear and tear, accidental damage and expected obsolescence.

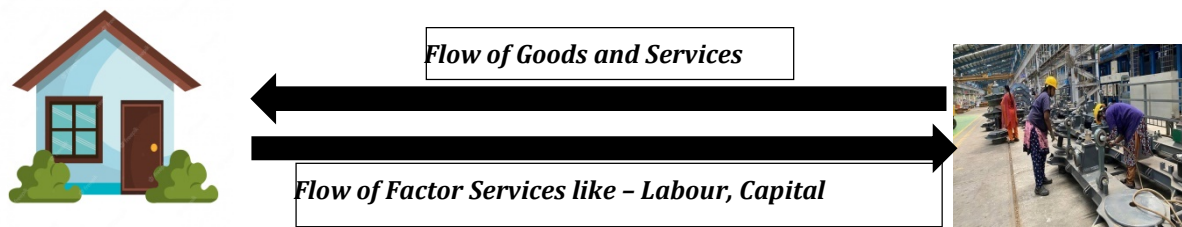
Gross Investment and Net Investment

$$\text{Gross investment} = \text{Net investment} + \text{Depreciation}$$

$$\text{Net investment} = \text{Gross investment} - \text{Depreciation}$$

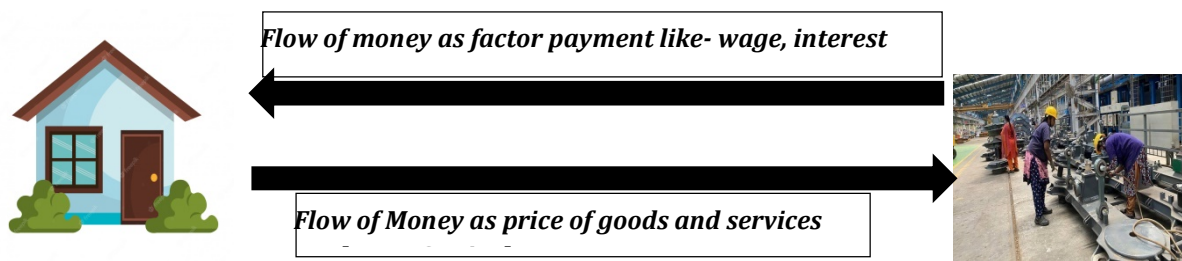
Circular Flow of Income in Two Sector Economy refers to flow of income in different sectors (Primary, Secondary, Service) of the economy.

Real Flow means *Flow of goods and services* from producer sector to household sector and *factor services* from household sector to producer sector. Explanation through flow chart-



Money/Monetary Flow

Flow of money from household sector to producing sector as *price of goods and services* and producing sector to household sector *as factor payment*. Explanation through flow chart-



Concept of Domestic (Economic) Territory

Domestic territory is a geographical territory administered by a government within which persons, goods, services and capital circulate freely. It includes-

1. Political frontiers including territorial waters and air space.
2. Embassies, consulates, military bases etc. located abroad but including those located within the political frontier.
3. Ships, aircrafts etc., operated by the residents between two or more countries.
4. Fishing vessels, oil and natural gas rigs etc. operated by the residents in the international waters over which the country enjoys the exclusive rights or jurisdiction.

Normal Resident of a country

Normal resident is a person or an institution who ordinarily resides in that country and whose *center of economic interest lies in that country*.

The Centre of economic interest implies: -

1. The resident lives or is located within the economic territory.
2. The resident carries out the basic economic activities of earnings, spending and accumulation from that location.

Relationship between Domestic Product and National Product?

| Domestic Product | National Product |
|---|---|
| Domestic product concept is based on the production units located within domestic (economic) territory, operated both by residents and non-residents. | National product concept based on resident and includes their contribution to production both within and outside the domestic (economic) territory. |

Difference between Domestic Income and National Income?

| Domestic Income | National Income |
|---|--|
| 1. It is the sum total of factors income generated within the domestic territory of a country by residents and non-Residents (foreigners) both. | 1. It is the sum total of factor incomes generated by residents of a country within the domestic territory and rest of the world |
| 2. It does not include NFIA (Net factor income from abroad) | 2. It includes NFIA (Net factor income from abroad) |

Difference between Factor Income and Transfer Income.

| Factor Income | Transfer Income |
|---|---|
| 1. It is earned by factors of production (land, labor, capital etc.). | 1. It is only transfer of money from one person to another person without performing any productive activity. |

| | |
|--|---|
| 2.It is included in national income. | 2. It is not included in national income |
| 3.Eg. Rent, interest, profit, wages, Retirement pension etc. | 3. Eg. Scholarship, gifts, grants, donations, aid Old age pension etc . |

Gross Domestic Product is the Monetary value of all Final goods and services produced in an economy during an accounting year within the domestic territory of a country.

Difference between Nominal GDP and Real GDP.

| Basis for Comparison | Nominal GDP | Real GDP |
|-------------------------------|---|--|
| Meaning | GDP on current year prices | GDP on Base year prices. |
| How does inflation affect it? | The nominal GDP does not take inflation into account. | The real GDP takes inflation into account. It is called inflation-adjusted GDP. |
| Growth of the economy | we cannot analyze economic growth because it is based on change in prices and production both | we can measure economic growth because it is only based on change in production. |

| Key Components of National Income | | |
|--|---|---|
| Gross and Net | Domestic Income and National Income (DI & NI) | Factor cost and Market Price (FC and MP) |
| Gross = Net + Depreciation Net = Gross - Depreciation | NI = DI + NFIA DI = NI – NFIA Note: NFIA = FIFA - FITA | MP=FC + Net Indirect taxes (NIT) FC = MP - Net Indirect taxes (NIT) Note: NIT= Indirect Tax - Subsidy |

Indirect Tax

tax burden that can be shifted on another person. Incidence of tax and Impact of tax both are having different persons, it is levied by the producers on goods and services purchased by the customers. These are extra addition on the prices of goods that leads to increase in price of goods and services.

Subsidy

It is also known as negative tax. Expenditure incurred by the government for providing financial aid to the producers and consumers.

Different aggregates of National Income

- Gross Domestic Product at Market Price (GDP_{MP}):** GDP_{MP} is defined as the gross market value of the final goods and services produced within the domestic territory of a country during an accounting year by all production units.
- Gross Domestic Product at Factor Cost (GDP_{FC}):** GDP_{FC} is defined as the gross factor value of the final goods and services produced within the domestic territory of a country during an accounting year by all production units excluding Net Indirect Tax. **GDP_{FC} = GDP_{MP} – Net Indirect Taxes**
- Net Domestic Product at Market Price (NDP_{MP}):** NDP_{MP} is defined as the net market value of all the final goods and services produced within the domestic territory of a country by its normal residents and non-residents during an accounting year. **NDP_{MP} = GDP_{MP} – Depreciation**

4. **Net Domestic Product at Factor Cost (NDP_{FC}).** NDP_{FC} refers to total factor income earned by the factors of production within the domestic territory of a country during an accounting year.

$$\text{NDP}_{FC} = \text{GDP}_{MP} - \text{Depreciation} - \text{Net Indirect Taxes}$$

NDP_{FC} is also known as Domestic Income or Domestic factor income.

5. **Gross National Product at Market Price (GNP_{MP}).** GNP_{MP} refers to market value of all the final goods and services produced by the normal residents of a country during an accounting year.

$$\text{GNP}_{MP} = \text{GDP}_{MP} + \text{Net factor income from abroad}$$

GDP It must be noted that GNP_{MP} can be less than GDP_{MP} when NFIA is negative. However, GNP_{MP} will be more than GDP_{MP} when NFIA is positive.

6. **Gross National Product at Factor Cost (GNP_{FC}) or Gross National Income:** GNP_{FC} refers to gross factor value of all the final goods and services produced by the normal residents of a country during an accounting year. $\text{GNP}_{FC} = \text{GNP}_{MP} - \text{Net Indirect Taxes}$

7. **Net National Product at Market Price (NNP_{MP}).** NNP_{MP} refers to net market value of all the final goods and services produced by the Normal residents of a country during an accounting year.

$$\text{NNP}_{MP} = \text{GNP}_{MP} - \text{Depreciation}$$

8. **Net National Product at Factor Cost (NNP_{FC}).** NNP_{FC} refers to total factor income earned by the factors of production during an accounting year. $\text{NNP}_{FC} = \text{GNP}_{MP} - \text{Depreciation} - \text{Net Indirect Taxes}$

Note: National Income = NNP_{FC}

Outlines of the Product/ Value added method.

| Sr. no. | Steps |
|---------|--|
| 1 | Gross Value added/GDP _{mp} = Value of Output – Intermediate Consumption |
| 2. | Value of Output = Sales + Change in Stock |
| 3. | Sale = Domestic Sales + Exports. |
| 4. | Change in stock = Closing stock – Opening stock |
| 5. | National Income/ NNP _{FC} = GDP _{mp} – Dep. + NFIA - NIT |

Precautions to be taken while calculating national income by product method

- Avoid double counting of goods.
- Include the output produced for self-consumption.
- Avoid the sale and purchase of second-hand goods.
- Exclude the value of intermediate consumption.
- Include the value of services rendered in sales.

Outlines of Income Method.

| Sr. No. | Steps | Calculation |
|---------|---------------------------------|--|
| 1. | Compensation of employees (COE) | Wages and salaries in cash + allowances by employer + Employer's contribution in social security scheme + Retirement pension |
| 2. | Operating surplus (OS) | Income from Property + income from entrepreneurship |
| | | <i>Income from property</i> = Rent + Royalty + Interest |
| | | <i>Income from entrepreneurship</i> = Profit |
| | | <i>Profit</i> = Corporate tax + Corporate savings / Net retained earnings / Undistributed profit + Dividend |
| 3 | Mixed Income (MI) | Income of the self employed |
| | | NDP_{FC} = COE + OS + MI |
| | | NNP_{FC} = NDP_{FC} + NFIA |

Precautions to be taken while calculating national income by income method

- Avoid double counting of income.

- Avoid transfer payments.
- Income from owner occupied house to be included.
- Commission Earned should be Included.
- Avoid illegal income.
- Contribution to social security scheme by employees must be avoided
- Income from windfall gains (like from lotteries) must be avoided as it is not a factor income

Outline of Expenditure method to calculate National Income.

| Sr.N | Steps | |
|---|--|-------|
| 1 | Private final consumption expenditure | (C) |
| 2 | Government final consumption expenditure | (G) |
| 3 | Gross Domestic Capital Formation (GDCF) <i>GDCF = Gross Domestic Fixed Capital Formation (GDFCF) + Change in Stock/ Inventory Investment</i> | (I) |
| 4 | Net Exports [EXPORTS – IMPORTS] | (X-M) |
| GDP_{MP} = C+ I+ G + (X-M) | | |
| NNP_{FC} = GDP_{MP}- Depreciation + Net factor income from abroad - Net indirect taxes | | |

Precautions to be taken while calculating national income by expenditure method

- Avoid double counting of expenditure by not including expenditure on intermediate goods.
- Expenditure on Transfer Payment must be avoided.
- Expenditure on the purchase of second-hand goods must be avoided.
- Expenditure on non-productive activity (like expenditure on shares and bonds) must be avoided.

How to avoid double counting of National Income

Double counting can be avoided with the use of :
Final output method and Value added method.

GDP Deflator and its formula

GDP Deflator is a tool to measures price change over time. It is an indicator of the impact of inflation on GDP in an economy. It provides real economic growth of a country.

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

“GDP is a good Indicator of Economic Welfare”

Economic Welfare is positively related with the increase in GDP. Increase in GDP will provide more resources to government in order to ensure better social services to the people. But we cannot state that GDP is an adequate indicator because of the following reasons-

- Non-monetary Exchanges- because not a part of GDP.
- Unequal distribution of GDP
- Composition of GDP
- Use of GDP

Externalities- Activities resulting in benefits and welfare are called **positive externalities**

Whereas activities resulting in adverse effects accompanied by decreasing welfare are called **negative externalities** . GDP does not consider such externalities.

UNIT-2 (4 Marks)

MONEY AND SUPPLY OF MONEY

BARTER SYSTEM

The direct exchange of goods for other goods is called barter system. It is called commodity for commodity economy. (C-C Economy)

Problems (Limitations) of Barter system: -

1. Absence of common measure of value: -
2. Lack of divisibility: -
3. Problem of storing wealth: -
4. Lack of a system of deferred payments: -
5. Problems of double coincidence of wants: -

Meaning of money: - Money is anything that can be accepted as a medium of exchange.

FUNCTIONS OF MONEY

1. Medium of exchange:

- It means that money acts as an *intermediary for exchange* of goods and services.
- Medium of exchange function removes problem of double coincidence of wants in barter system.
- *Money separates the act of sales and purchase of goods and services.*
- Money as a medium of exchange saves time as well as labour, facilitates multilateral trade, expands size of market and promotes competition in it.

2. Measure of value or unit of account:

- Money is a **single unit of account**. All the values of goods and services (price) are expressed in terms of money.
- It acts as a yardstick of **standard measure of value** to which all other things can be compared.
- It provides a **basis for bookkeeping**, estimating national income, cost, revenue, profit and losses.

3. Standard of deferred payment: -

- Deferred payment means those **payments which are to be made in future**.
- Deferred payments like loans, wages and salaries, cheques are measured in terms of money and are paid in money.
- Sale and purchase of shares and other credit instrument further help in capital formation and economic development of an economy.

4. Store of value:

- Store of value means shifting of **purchasing power from its present to future use**.
- Money provides security to individual to meet unpredictable emergencies and to pay debts.
- Therefore because of its **general acceptability, stable value, easy storage and low storage cost**, money performs a function of store of value

5. Transfer of value:

- Transfer of value means *transferring value* of durable and immovable goods *from one place to other*.
- Money, being most liquid and generally acceptable agent, performs this function most effectively.
- Anyone can sell his/her fixed property and capital with money at any particular place and can purchase another property and capital at another place.

SUPPLY OF MONEY: -

Supply of money is a stock concept. It refers to total stock of money held by the people in form of cash, coins and demand deposits with banking system of a country at a point of time.

Demand deposits = saving account deposits + current account deposits

RBI maintains a minimum reserve of Rs. 200 crores comprising foreign currencies, gold coin and gold bullion (minimum of Rs 115 crore in the form of gold). This is called Minimum Reserve System.

MEASURES OF MONEY SUPPLY: -

$M_1 = C + DD + OD$

Where: - C-Currency held by public in cash.

DD- Demand deposits of public with banks.

OD- Other deposit with RBI.

- Demand deposit of public financial institution,
- Demand deposits of foreign banks and foreign govt.
- Demand deposits of international financial institution (IMF and World bank)

M1 is called narrow money.

FORMS OF MONEY: -

- Fiat Money: - is that money which is issued by order/ authority of the government. eg. Paper
- Paper Notes and coins.
- Fiduciary Money: - is that money which is accepted as a medium of exchange because of the trust between the payer and payee. E.g. cheques, drafts etc.
- Full bodied Money: - refers to when commodity value of a money equal to money value of money.
- Credit Money: - refers to when commodity value of a money is less than money value of money.

High Powered Money: -

It is the sum total of :- (a) currency held by people, (b) Vault cash of the commercial banks, (c) cash reserve of the commercial banks with RBI. It is also called monetary base.

Money/credit creation by the commercial banking system

Commercial banks cannot print money, but they influence the money supply through the process of credit creation using demand deposits.

The power of commercial banks which enables them to expand their deposits through loans is called Credit creation. It results in multiple expansion of banks demand deposits.

Money creation by the bank is determined through-

1. The amount of initial deposit.
2. Legal Reserve ratio or Reserve Ratio.

Why deposits are kept as Cash Reserves

Commercial banks accept deposits. They give interest on these deposits. Deposits held by banks are used for giving loan. They lend money and earn interest for making interest payments of deposits and meeting their expenses; after that whatever is left is their profit.

Banks do not use the whole of deposit for lending. They keep a certain fraction of their deposits as Reserves. This fraction is called 'The Reserve Ratio' or 'Legal Reserve Ratio'.

Bank keep a fraction of deposit, Because Banks know two things by his experience

1. All the depositors do not approach the banks for withdrawal of money at the same time.
2. There is a constant flow of new deposits into the banks.

$$\text{Total credit creation} = \frac{1}{\text{Legal Reserve Ratio}} \times \text{Initial Deposit}$$

Role of money Multiplier in determining Credit creation

The credit creation depends on Money Multiplier. There is direct relationship between money multiplier and credit creation. Lower the money multiplier, lesser will be credit creation and higher the multiplier more will be credit creation

Process of Credit Creation through an Example:

Suppose initial deposit in banks is ₹10,000 and LRR is 20%. As required, the banks keep 20%, i.e., ₹2000 as cash. Suppose the banks lend the remaining ₹8000 to the borrowers, which become secondary deposits. The Bank again keep 20%, i.e., ₹1600 as cash and lend ₹6400, which is also 80% of the last deposit the money, again comes back to the bank leading to a fresh deposit.

| Rounds | Deposits | Loans | Legal Reserve Ratio |
|-----------------|-----------------|--------------|----------------------------|
| Initial Deposit | 10,000 | 8000 | 2000 |
| 1 | 8000 | 6400 | 1600 |

| | | | |
|-------|--------|--------|--------|
| 2 | 6400 | 5120 | 1280 |
| - | - | - | - |
| - | - | - | - |
| Total | 50,000 | 40,000 | 10,000 |

$$\text{Credit multiplier} = \frac{1}{\text{Legal Reserve Ratio}}$$

$$= \frac{1}{20} \times 100 = 5$$

$$\text{Total credit creation} = \frac{1}{\text{Legal Reserve Ratio}} \times \text{Initial Deposit}$$

$$= \frac{1}{20\%} \times 10000$$

$$= \frac{1}{0.2} \times 10000 = 50000$$

The money goes on multiplying in this way, and ultimately total money creation is ₹50,000. i.e., five times the initial deposit.

CENTRAL BANK: -

MEANING: An apex body that controls, operates, regulates and directs the entire banking and monetary structure of the country.

FUNCTIONS OF CENTRAL BANK:

- 1) **Currency authority or bank of issue:** Central bank is a sole authority to issue currency in the country. Central Bank is obliged to back the currency with assets of equal value (usually gold coins, gold bullions, foreign securities etc.) Advantages of sole authority of note issue:
 - a) Uniformity in currency circulation
 - b) Better supervision and control
 - c) It is easy to control credit
 - d) Ensures public faith
 - e) Stabilization of internal and external value of currency

- 2) **Banker to the Government:** As a banker it carries out all banking business of the Government and maintains account for keeping cash balances of the government. Accepts receipts and makes payments for the government. It also gives loans and Advances to the government.

- 3) **Banker's bank and supervisor:** Acts as a banker to other banks in the country—
 - a) Custodian of cash reserves: - Commercial banks must keep a certain proportion of cash reserves with the central bank (CRR)
 - b) Clearing house: - Since the Central Bank holds the cash reserves of commercial banks it is easier and more convenient to act as clearing house of commercial banks.

- 4) **Lender of last resort:** - When commercial banks fail to need their financial requirements from other sources, they approach Central Bank which gives loans and advances

- 5) **Custodian of foreign exchange reserves.**
 Another important function of Central Bank is the custodian of foreign exchange reserves. Central Bank acts as custodian of country's stock of gold and foreign exchange reserves. It helps in stabilizing the external value of money and maintaining favorable balance of payments in the economy.

- 6) **Controller of money supply and credit:** - Central Bank or RBI plays an important role during the times of economic fluctuations. It influences the money supply through quantitative and qualitative instruments. Former refers to the volume of credit and the latter refers to regulate the direction of credit.

QUANTITATIVE INSTRUMENTS:

- a) **Bank Rate:** - It refers to the rate of interest at which the central bank lends money to commercial banks for long term. It is also known as the rediscount rate on first series commercial bills.
Central Bank increases the bank rate during inflation (excess demand) and reduces the same in times of deflation (deficient demand)
- b) **Open Market Operations:** It refers to the buying and selling of securities by the Central Bank from/ to the public and commercial banks. It sells government securities during inflation/excess demand and buys the securities during deflation/deficient demand.
- c) **Legal Reserve Ratio (LRR):** R.B.I. can influence the credit creation power of commercial banks by making changes in CRR and SLR
- d) **Cash Reserve Ratio (CRR):** It refers to the minimum percentage of net demand and time liabilities to be kept by commercial banks with central bank in the form of cash.
- e) **Reserve Bank increases CRR during inflation and decreases the same during deflation**
- f) **Statutory Liquidity Ratio (SLR):** It refers to minimum percentage of net demand and time liabilities which commercial banks required to maintain with themselves in the form of liquid assets. (Currency, Gold, Bonds). **SLR is increased during inflation or excess demand and decreased during deflation or deficient demand.**

QUALITATIVE INSTRUMENTS:

Margin Requirements: It is the difference between the amount of loan and market value of the security offered by the borrower against the loan. Margin requirements are increased during inflation and decreased during deflation.

Rise in Margin Requirement → Fall in demand for credit → Fall in supply of money by commercial banks → Fall in Money supply → Inflation is controlled

During inflation-Rise in bank rate/ Repo Rate/ Reverse Repo Rate/ Cash Reserve Ratio /Statutory Liquidity Ratio

Rise in Market Rate of Interest → Rise in Cost of Credit → Fall in demand for Credit → Fall in Supply of Money → Inflation is controlled

During deflation-Fall in bank rate/ Repo Rate/ Reverse Repo Rate/ Cash Reserve Ratio /Statutory Liquidity Ratio

Fall in Market Rate of Interest → Fall in Cost of Credit → Rise in demand for Credit → Rise in Supply of Money → deflation is controlled

Unit-3 (12 Marks)

Determination income and employment

Aggregate demand (AD): Meaning:

Aggregate Demand may be defined as the sum total of expenditure on the domestically produced goods and services during the period of an accounting year.

Components of AD:

Thus, the main components of aggregate demand in a four sector economy are:

1. Household (or private) consumption demand. (C)
2. Private investment demand. (I)
3. Government final expenditure. (G)
4. Net export demand. (X-M)

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

1. **Household (Private) Consumption Demand (C):** It is defined as 'Value of goods and services that households are able and willing to buy.'

2. **Private Investment Demand (I):** This refers to planned (ex-ante) expenditure on creation of new capital assets by private entrepreneurs.
3. **Government final expenditure (G):** It refers to government planned (ex-ante) expenditure on purchase of consumer and capital goods.
4. **Net Exports (Exports-Imports) Demand:** Net export is the difference between export of goods and services and import of goods and services.

Determination of income (output) and employment in two sector (Household and Firm) economy, includes only two broad components of Aggregate demand(AD) which are consumption demand (C) and investment demand (I).

$$AD = C + I$$

AGGREGATE DEMAND (AD) = CONSUMPTION(C) + INVESTMENT (I)

Consumption Expenditure(C):-

- it refers to ex-ante (planned) consumption expenditure to be incurred by all households on purchase of goods and services during an accounting year
- It depends on the level of disposable income of the households called personal disposable income
- Higher the level of personal disposable income, higher is private consumption expenditure, and vice versa

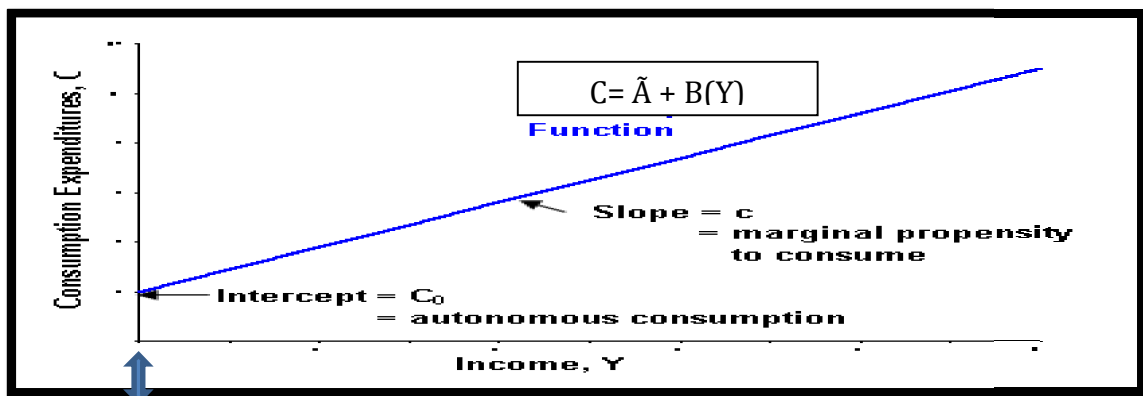
Consumption function- it refers to functional relationship between consumption and national income.

| | | | | | |
|----------|------------|------------------|------------------------------|----------------------|----------|
| $C=f(Y)$ | $C=a+b(Y)$ | C =Consumption | a = autonomous consumption | Y =National Income | b =MPC |
|----------|------------|------------------|------------------------------|----------------------|----------|

Consumption schedule

| Y(Income) | C (Consumption) | |
|-----------|-----------------|-----------------------------|
| 0 | 10 | Autonomous consumption |
| 20 | 20 | Breakeven point(Y=C) |
| 40 | 30 | |
| 60 | 40 | |
| 80 | 50 | |
| 100 | 60 | |

- There is direct relation between Consumption and Income.
- Consumption never becomes zero. It remains always positive because we have to consume something even at zero level of income.
- Break-even point-It refers to the point at which consumption is equal to the national income. At this point saving is zero (0).
- Psychological law of consumption: It states that there is a common tendency for people to spend more on consumption when income increases, but not to the same extent as the rise in income because a part of the income is also saved.

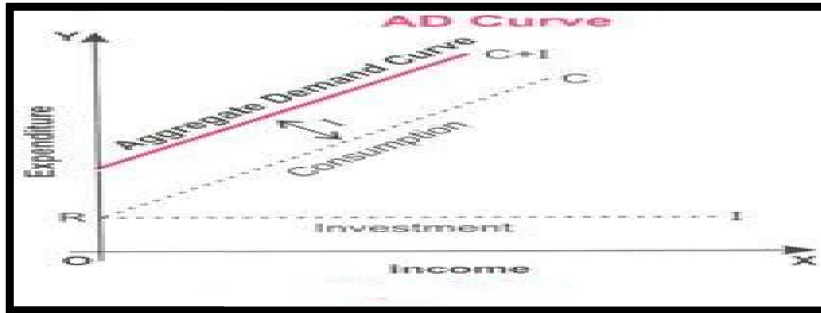


Investment (I):

- Expenditure on purchase of Intermediate goods as well producer goods.
- Investment means increase in the stock of capital goods

AGGREGATE DEMAND:-

| Income(Y) | Consumption(C) | Investment(I) | AD=C+I |
|-----------|----------------|---------------|--------|
| 0 | 100 | 100 | 200 |
| 100 | 150 | 100 | 250 |
| 200 | 200 | 100 | 300 |
| 300 | 250 | 100 | 350 |
| 400 | 300 | 100 | 400 |
| 500 | 350 | 100 | 450 |
| 600 | 400 | 100 | 500 |



Aggregate Supply- It refers to the total value of final goods and services that all the producers are willing to supply in an economy in a given period of time.

(Aggregate Supply and National income are the same thing.)

Components of Aggregate Supply (AS) $AS(Y)=C+S$

- 1- Private Consumption Expenditure (C)
- 2- Savings

Savings:-It refers to that portion of income which is not spent on the purchase of goods and services at the given level of income.

Saving function- it refers to functional relationship between saving and national income.

| | |
|---|--------------------|
| $S = f(Y)$ | $S = -a + (1-b) Y$ |
| Note-There is direct relation between saving and Income | |

| . Y (Income) | C (Consumption) | S (Saving) | Observations |
|-----------------|--------------------|---------------|--|
| 0 | 10 | -10 | Autonomous consumption =(Negativesaving) |
| 20 | 20 | 0 | Breakeven point(Y=C) |
| 40 | 30 | 10 | Positive saving |
| 60 | 40 | 20 | Positive saving |
| 80 | 50 | 30 | Positive saving |
| 100 | 60 | 40 | Positive saving |

Determination of Equilibrium Level of Income & Employment:

An economy is in equilibrium when aggregate demand for goods and services is equal to aggregate supply during a period of time.

So, equilibrium is achieved when:

$$AD = AS \dots (1)$$

We know, AD is the sum total of Consumption (C) and Investment (I):

$$AD = C + I \dots (2)$$

Also, AS is the sum total of consumption (C) and saving (S):

$$AS = C + S \dots (3)$$

Substituting (2) and (3) in (1), we get:

$$C + S = C + I$$

Or,

$$S = I$$

It means, there are Two Approaches for determining the equilibrium level of income and employment in the economy:

Two Approaches for Determination of Equilibrium Level:

The two approaches to determine equilibrium level of income, output and employment in the economy are:

1. Aggregate Demand-Aggregate Supply Approach (AD-AS Approach)
2. Saving-Investment Approach (S-I Approach)

It must be kept in mind that AD, AS, Saving and Investment are all planned or ex- ante variables.

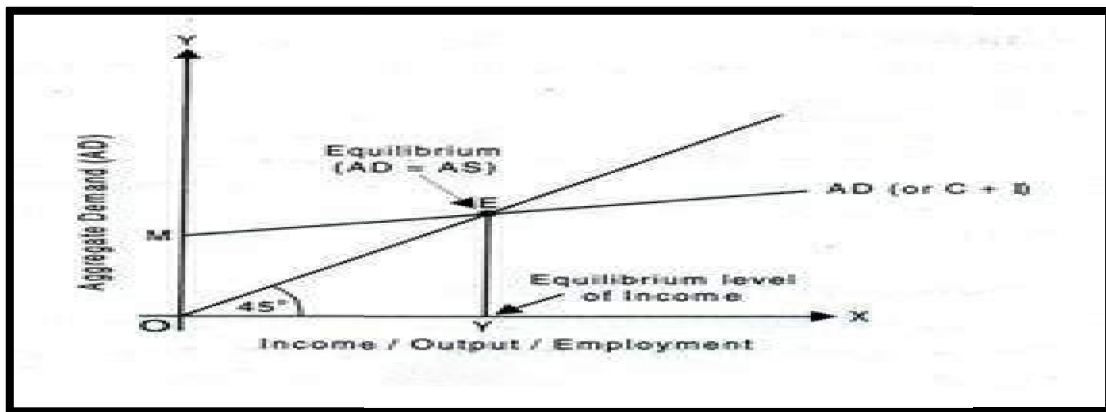
I - Aggregate Demand and Aggregate Supply Approach (AD=AS Approach)

According to this approach the equilibrium level of the economy is determined when aggregate demand is equal to the aggregate supply. $AD=AS$

It can be explained with the help of the schedule and diagram.

Schedule showing determination of equilibrium

| Y(Income) | C(Consumption) | Investment(I) | S(Saving) | AD =C+I | AS=Y=C+S |
|-----------|----------------|---------------|-----------|---------|----------|
| 0 | 10 | 20 | -10 | 30 | 0 |
| 20 | 20 | 20 | 0 | 40 | 20 |
| 40 | 30 | 20 | 10 | 50 | 40 |
| 60 | 40 | 20 | 20 | 60 | 60 |
| 80 | 50 | 20 | 30 | 70 | 80 |
| 100 | 60 | 20 | 40 | 80 | 100 |



In diagram-

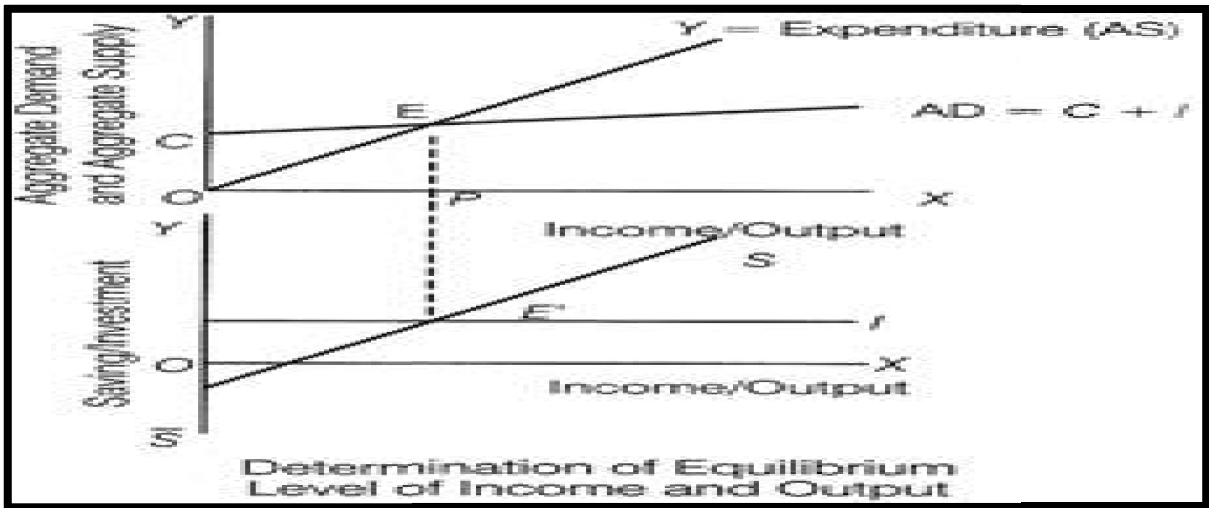
1. The economy is in equilibrium at point 'E' where (C + I) curve intersects the 45° line.
2. OY is the equilibrium level of Income corresponding to point E.

When $AD > AS$: If aggregate demand is greater than aggregate supply, i.e. $AD > AS$, flow of goods and services in the economy tends to be less than their demand. The existing stocks of the producers would be sold out to rebuild the desired stock, the producers would be left with unfulfilled demand and will plan higher production. AS would increase to become equal to AD. This is how AS equals AD.

When $AD < AS$: It means that consumers are buying less goods than firms are willing to produce. As a result, the planned inventory would rise. To clear the unwanted increase in inventory, firms plan to decrease the employment and output until the economy is back at output level OY, where AD becomes equal to AS.

SAVING - INVESTMENT APPROACH (S-I Approach): According to this approach, the equilibrium level of income is determined at a level, when planned saving (S) is equal to planned investment (I).

Let us understand this with the help of following diagram-



In diagram

1. The economy is in equilibrium at point 'E' where saving and investment curves intersect each other.
2. OY is the equilibrium level of income corresponding to point E.

S > I: It means that households are not consuming as much as the firms expected them to. As a result, the inventory rises above the desired level. To clear the unwanted increase in inventory, firms would plan to reduce the production till saving and investment become equal to each other.

S < I: It means that households are consuming more and saving less than what the firms expected them to. As a result, planned inventory would fall below the desired level. To bring the inventory back to the desired level, firms would plan to increase the production till saving and investment become equal to each other.

Meaning of Investment Multiplier:

Investment multiplier is a ratio between change in income and change in investment.

$$K = \Delta Y / \Delta I$$

Relation between MPC and Multiplier

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

There is direct or positive relation between MPC and investment multiplier.

It means if MPC increases than K will also increase and if MPC decreases than K will also decreases

If the value of MPC is minimum i.e. 0 than K will also minimum i.e. 1

If the value of MPC is max. i.e. 1 than K will also max. i.e. ∞

Working of Multiplier

Investment multiplier works on the fact that the expenditure of one person is income of another person.

Investment multiplier and its mechanism: -

Multiplier is the ratio between change in income and changes in investment.

It shows the number of times income would rise as a result of an initial rise in investment.

Following table explains how the multiplier process works. It is based on the given value that I = Rs. 1000 Crore and MPC = 0.9.

| Round | Δ I | Δ Y | Induced change in consumption [MPC (Δ Y)] | Leakage/Saving |
|-------|------|------|---|----------------|
| 1 | 1000 | 1000 | 900 (= 0.9 x 1000) | 100 |
| 2 | --- | 900 | 810 (= 0.9 x 900) | 90 |
| 3 | --- | 810 | 729 (= 0.9 x 810) | 81 |

And so on ...

| | | | | |
|--|----------------------|-----------------------|------|------|
| | $\Delta I =$ 1000 | $\Delta Y =$ 10000 | 9000 | 1000 |
|--|----------------------|-----------------------|------|------|

PROPENSITY TO CONSUME AND PROPENSITY TO SAVE:-

The relationship between consumption and income is called propensity to consume or consumption function.

$$C = f(Y).$$

Propensity to consume is of two types:

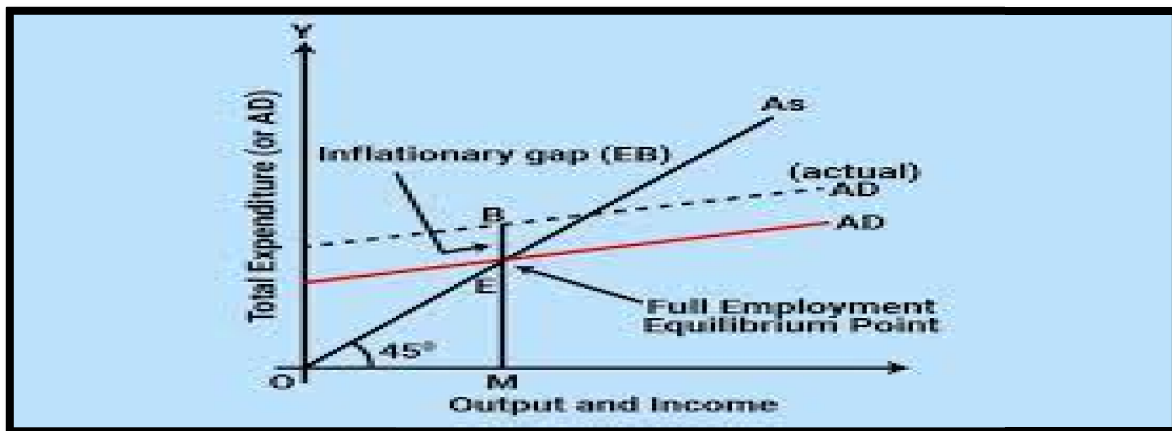
| | | |
|---|--|-------------------------|
| APC | Average propensity to consumption of total consumption to total income | $APC=C/Y.$ |
| MPC | Marginal propensity to consume is the ratio of change in consumption to change in income | $MPC=\Delta C/\Delta Y$ |
| APS | Average propensity to save is the ratio of saving to income | $APS=S/Y$ |
| MPS | Marginal propensity to save is the ratio of change in saving to change in income | $MPS=\Delta S/\Delta Y$ |
| Relationships between APC & APS: $APC+APS=1, APC=1-APS, APS=1-APC$ | | |
| Relationships between MPC & MPS: $MPC+MPS=1, MPC= 1-MPS, MPS = 1-MPC$ | | |

Excess Demand (Inflationary Gap):

Excess Demand-When in an economy, aggregate demand exceeds “aggregate supply (AD>AS) at full employment level”, the demand is said to be an excess demand.

Inflationary gap is the gap showing excess of current aggregate demand over ‘aggregate demand at the level of full employment’. It is called inflationary because it leads to inflation (continuous rise in prices)

Excess Demand:- Inflationary Gap ($AD>AS$) ($AD_P = \text{Planned } AD > AD_F = \text{Full Employment } AD$)



Reasons or causes for excess demand:

- (a) Increase in household consumption demand due to rise in propensity to consume.
- (b) Increase in private investment demand because of rise in credit facilities.
- (c) Increase in public (government) expenditure.
- (d) Increase in export demand.
- (e) Decrease in Imports

Measures to control the excess demand:

We can control the excess demand with the help of the following policy:

- (A) Monetary Policy (B) Fiscal Policy

(A) Monetary Policy: Monetary policy is the policy of the central bank of a country to control money supply and availability of credit in the economy. The central bank can take the following steps:

Quantitative Instruments or General Tools of Monetary Policy: These are the instruments of monetary policy that affect overall supply of money/credit in the economy. These instruments do not direct or restrict the flow of credit to some specific sectors of the economy. They are as under

1. **Bank Rate:** - It refers to the rate at which the central bank lends money to commercial banks for long term.
2. **Repo Rate** – The rate at which the RBI offers short period loans to the commercial banks by buying the govt. securities in open market.
3. **Reverse Repo Rate-** The rate at which the RBI accept deposits from the commercial banks (through govt. securities). It is a Reverse Repurchase Rate.
4. **Cash Reserve Ratio (CRR):** It refers to the minimum percentage of net demand and time liabilities to be kept by commercial banks with central bank.
5. **Statutory Liquidity Ratio (SLR):** It refers to minimum percentage of net demand and time liabilities which commercial banks required to maintain with themselves in legal assets. (Currency, Gold, Bonds)

❖ Central Bank increases the bank rate/ Repo Rate/ Reverse Repo Rate/ Cash Reserve Ratio /Statutory Liquidity Ratio-during inflation

Rise in bank rate/ Repo Rate/ Reverse Repo Rate/ Cash Reserve Ratio /Statutory Liquidity Ratio
 Rise in Market Rate of Interest → Rise in Cost of Credit → Fall in demand for Credit → Fall in Supply of Money → Inflation is controlled

6. **Open Market Operations:** It refers to the buying and selling of securities by the Central Bank from/ to the public and commercial banks.

It sells government securities during inflation/excess demand

Sale of Securities → Soaks Liquidity and leads to fall in cash reserves of the comm. Banks → Fall in Credit creation → Fall in Money Supply → Inflation is controlled

7. **MARGIN REQUIREMENTS:** It is the difference between the amount of loan and market value of the security offered by the borrower against the loan.

Margin requirements are increased during inflation.

Rise in Margin Requirement → Fall in demand for credit → Fall in supply of money by comm. Banks→
 Fall in Money supply → Inflation is controlled

(B) Fiscal Policy: A general government can take the following steps:

Revenue Policy (Increase Taxes):

-During inflation the government impose higher amount of taxes causing the decrease in purchasing power of the people.

-It is so because to control excess demand we have to reduce the amount of liquidity from the economy.

Expenditure Policy -Government invest huge amount on public works like roads, buildings, irrigation works, etc.

During inflation, government should curtail (reduce) its expenditure on public works like roads, buildings, irrigation works thereby reducing the money income of the people and their demand for goods and services.

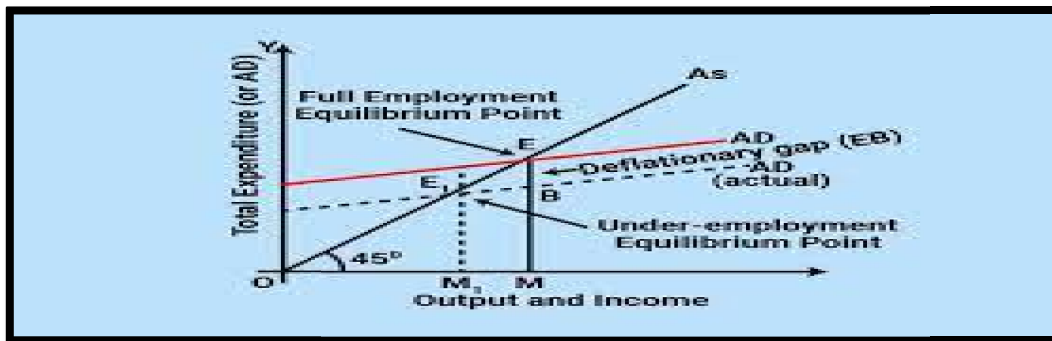
Increase in Public Borrowing/Public Debt:

This measure means that government should raise loans from public and hence borrowing decreases the purchasing power of people by leaving them with lesser amount of money. So, government should resort to more public borrowing during excessive demand.

Deficient Demand or Deflationary Gap:

Deficient Demand- When in an economy, aggregate demand falls short of aggregate supply ($AD < AS$) at full employment level, the demand is said to be a deficient demand.

Deflationary gap is the gap showing Demand deficient of current aggregate demand over 'aggregate Demand at the level of full employment'. It is called deflationary because it leads to deflation (continuous fall in prices).



Reasons or causes for deficient demand:

- a) Decrease in household consumption demand due to fall in propensity to consume.
- b) Decrease in private investment demand because of fall in credit facilities.
- c) Decrease in public (government) expenditure.
- d) Decrease in export demand
- e) Increase in Imports.

Measures to Control the deficient demand:

We can control the deficient demand with the help of the following policies:

- (A) Monetary policy (B) Fiscal policy

Let us discuss it in detail:

(A) **Monetary Policy:** Monetary policy is the policy of the central bank of a country of controlling money supply and availability of credit in the economy. The central bank takes the following steps:

(i) **Quantitative Instruments or General Tools of Monetary Policy:** These are the instruments of monetary policy that affect overall supply of money/credit in the economy. They are as under:

Central Bank decreases the

- 1. Bank rate
- 2. Repo Rate
- 3. Reverse Repo Rate
- 4. Cash Reserve Ratio
- 5. Statutory Liquidity Ratio-during deflation

Fall in Bank rate/ Repo Rate/ Reverse Repo Rate/ Cash Reserve Ratio /Statutory Liquidity Ratio
 Fall in Market Rate of Interest → Fall in Cost of Credit → Rise in demand for Credit → Rise in Supply of Money → deflation is controlled

- 6. **Open Market Operations:** It refers to the buying and selling of securities by the Central Bank from/ to the public and commercial banks. RBI buys government securities during deflation/deficient demand.

Purchase of Securities → Release Liquidity and leads to rise in cash reserves of the comm. Banks → Rise in Credit creation → Rise in Money Supply → Deflation is controlled

- 7. **MARGIN REQUIREMENTS:** It is the difference between the amount of loan and market value of the security offered by the borrower against the loan.

Margin requirements are increased during inflation and decreased during deflation.

Rise in Margin Requirement → Fall in demand for credit → Fall in supply of money by comm. Banks → Fall in Money supply → Inflation is controlled

(B) **Fiscal Policy:** A general government can take the following steps:

Revenue Policy (Decrease Taxes):

-During Deflation the government reduce amount of taxes causing the increase in purchasing power of the people.

-It is so because to control deficient demand we have to increase the amount of liquidity in the economy.

Expenditure Policy - During deflation, government should increase its expenditure on public works like roads, buildings, irrigation works thereby increasing the money income of the people and their demand for goods and services.

Decrease in Public Borrowing/Public Debt:

This measure means that government should reduce borrowing from public.

| EXCESS DEMAND | DEFICIENT DEMAND |
|---|---|
| REASONS | REASONS |
| Increase in consumption. Increase in Autonomous consumption. Increase in Government expenditure. Increase in money Supply. | Decrease in consumption. Decrease in Autonomous consumption. Decrease in Government expenditure. Decrease in money Supply. |
| EFFECT | EFFECT |
| 1.Rise in price of goods 2.Producer gets abnormal profit 3.Purchasing power decreases 4.wage price spiral | 1. Fall in price of goods 2.Producer incurs losses 3.Purchasing power increases 4.low level equilibrium trap |

| MEASURES | EXCESS DEMAND | DEFICIENT DEMAND |
|--------------------------------------|----------------------|-------------------------|
| FISCAL POLICY (BY GOVERNMENT) | | |
| 1.GOVERNMENT EXPENDITURE | Decrease (∨) | Increase (∧) |
| 2.GOVERNMENT REVENUE(TAXES) | Increase (∧) | Decrease (∨) |
| 3.PUBLIC BORROWINGS | Increase (∧) | Decrease (∨) |
| 4.DEFICIT FINANCING | Stop | Starting |
| MONETARY POLICY (BY THE RBI) | | |
| 1. Bank Rate | Increase (∧) | Decrease (∨) |
| 2. Repo Rate | Increase (∧) | Decrease(∨) |
| 3. Reverse Repo Rate | Increase (∧) | Decrease(∨) |
| 4. Open Market Operations | Sale of Securities | Purchase of Securities |
| 5. CRR (Case Reserve Ratio) | Increase (∧) | Decrease(∨) |
| 6. SLR (Statutory Liquidity Ratio) | Increase(∧) | Decrease(∨) |
| 7. Margin Requirement. | Increase(∧) | Decrease(∨) |

UNIT-4 (6 Marks)
GOVERNMENT BUDGET AND THE ECONOMY

Government Budget

It is the statement of the **estimated receipts and expenditure** of the Government during the period of the financial year.

Main objectives of Government Budget

1. Redistribution of income and wealth: -

Government tries to reduce inequalities of income and wealth in the economy through taxes and expenditure to increase welfare.

Government imposes high rate of tax on higher income group and low rate of tax on lower income group. Government spent its income for the welfare of poor in the form of free education, medical, cheaper housing etc.

2. Reallocation of resources: - Govt. uses budgetary policy to allocate resources in the manner such that there is a balance between the goals of profit maximization and social welfare. Gov. can influence allocation of resources through: -

(i) **Tax concession or subsidies:** To encourage investment Gov. can give tax concession subsidies to the producer. For example, Govt. discourage the production of liquor, tobacco products etc. by imposing heavy taxes and encourage the use of Khadi Products by giving subsidies.

(ii) **Directly producing goods and services:** if private sector does not take interest, govt. can directly undertake the production.

3. Economic Stability: -Government Budget is a tool to **prevent** economy from the **inflation or deflation** and to maintain economic stability. Policy of surplus budget during inflations and deficit budget during deflation helps to maintain stability of prices in the economy.

4. Managing Public Enterprises: - There are large number of public sector undertakings in the economy. In Budget, Government makes various provisions to manage public sector undertakings.

5. Economic Growth: -The growth rate of the country depends on rate of saving and investment. For this purpose, budgetary policy aims to mobilize sufficient resources for investment in the economy. Therefore Govt. makes various provisions in the budget to raise overall rate of saving and investment.

Components of budget

The government budget is divided into two parts:

REVENUE BUDGET- Revenue budget includes revenue receipts and revenue expenditure of the government.

CAPITAL BUDGET – Capital budget includes capital receipts and capital expenditure of the government.

REVENUE RECEIPTS: Those receipts which neither create liabilities nor reduce assets to the government.

(A) Tax revenue:

Tax: - Tax is a compulsory payment to govt. without expectation of direct benefit to the tax payers. There are mainly two types of taxes: -

| Direct Tax | Indirect tax |
|--|---|
| 1. These taxes are imposed on income and wealth. | These taxes are imposed on Goods and services. |
| 2. Its burden cannot be shifted | Its burden can be shifted |
| 3. The incidence of tax and impact of tax goes on same person. | The incidence of tax and impact of tax goes on different persons. |
| 4. It is progressive in nature | It is regressive in nature. |
| 5-Example: income tax, corporate tax, wealth tax | GST (CGST & SGST), Custom duty, |

(B) Non-tax revenue: Sources other than taxes are

- 1. Fees:** - Paid to govt. for services which are generally for public interest. (Ex: - School fees, Platform ticket)
- 2. License and permit:** - Paid to Govt. for granting the permission of doing certain things of activities. Like driving license fees
- 3. Fines and Penalties:** Those payments which are imposed on law breakers. (Ex.Trafficchallan,Late payment fee)

4. **Escheats:** It refers to claim of government on the property of a person who dies without leaving behind any legal heir or a will.
5. **Gifts and Grants:** For example, Government receives gifts and grants from public, foreign government and organizations.
6. **Interest from state govt.etc.**
7. **Profits and dividend from Govt. enterprises and Govt. departmental enterprises like railway.**
8. **Special assessment:** it refers to the payment made by owners of those properties whose value has appreciated due to development activities of the government.

REVENUE EXPENDITURE: Neither creates assets nor reduces any liability of the government.

EXAMPLE: Salaries, pensions, interest payments, subsidies, grants to state governments and others, etc.

CAPITAL RECEIPTS: Either create liability for the government or cause reduction in assets of the government.

1. **Borrowings:** The government can borrow money from open market (general public), Reserve Bank of India, International organizations (like IMF, World Bank, etc.), foreign governments.

Borrowings by the govt. are capital receipts as borrowings create liability for the government.

2. **Recovery of loans and advances:** To state governments, foreign governments, public sector enterprises, private companies, etc. It is a capital receipt as it reduces the financial assets of the govt.

3. **Disinvestment:** It means selling of the shares of the public sector enterprises to private sector. It is a capital receipt as it reduces the assets of the government.

CAPITAL EXPENDITURE: Either create asset or reduce liability of the government.

EXAMPLE: Expenditure on purchasing asset, land and buildings, equipment, purchase of shares, repayment of loan, construction of roads, flyovers, etc.

EXPLANATION BOX

| ITEMS | EFFECT ON ASSET | EFFECT ON LIABILITY |
|---------------------|-----------------|---------------------|
| Revenue receipts | No change | No change |
| Revenue expenditure | No change | No change |
| Capital receipts | Reduces | Increases |
| Capital expenditure | Increases | Reduces |

Various types of Budget

Balance Budget: - A govt. budget is said to be balanced budget in which total receipts are equal to Total Expenditure.

Total Receipts = Total Expenditure

$$\text{GOVT. RECEIPTS} = \text{GOVT. EXPENDITURE}$$

Surplus Budget: - Budget in which govt. receipts is greater than govt. expenditure.

$$\text{GOVT. RECEIPTS} > \text{GOVT. EXPENDITURE}$$

Deficit Budget: - Budget in which govt. expenditure is greater than govt. receipts.

$$\text{GOVT. RECEIPTS} < \text{GOVT. EXPENDITURE}$$

Budget Deficit: It refers to a situation when Budget expenditure of the govt. is greater than Budget receipts.

Budget Deficit = Total Expenditure - Total Receipts (when TE > TR)

Where Total expenditure = Revenue expenditure + capital expenditure

Total receipts = Revenue receipts + capital receipts

Revenue Deficit: - It is excess of governments revenue expenditure (RE) over revenue receipts (RR) during a Fiscal year.

$$\text{Revenue Deficit} = \text{Revenue Expenditure (RE)} - \text{Revenue Receipts (RR)}$$

Implication of Revenue Deficit

- i) Increased revenue deficit shows the warning to govt. to reduce its day to day expenditure.
- ii) Increased revenue deficit raises the loan liability of the govt.
- iii) A high revenue deficit warns the Govt. to cut its expenditure or to increase tax and non tax receipts.
- iv) It increases inflationary pressure in the Economy.

Measures to Reduce Revenue Deficit

- (ii) Reduce Expenditure: Government should take serious steps to reduce unproductive expenditure.
- (iii) Increase Revenue: Government should increase its receipts from various sources of tax and non-tax.

Fiscal Deficit: - Fiscal deficit is the excess of total expenditure (revenue+ capital) over total receipts excluding borrowings (revenue receipts + capital receipts other than borrowings) during a given Fiscal year.

Implication/Significance: -

1. Fiscal deficit raises the inflation. Government take loan from RBI to meet its borrowings. It increases the money supply in the economy. So, inflation arises.
2. It increases the dependence on foreign country because govt. also borrows from rest of the world.
3. It effects the future growth and development because borrowings increase the financial burden for future generations. It adversely affects the future growth.
4. It indicates greater borrowings and liability which may cause of a country in a debt trap.

Measures to Reduce Fiscal Deficit

1. 1 Increase capital receipts other than borrowing.
2. 2 Reduce non-development expenditure
3. 3 Increase other revenue sources.

Primary Deficit: -It is the difference between fiscal deficit and interest payment.

Primary Deficit = Fiscal Deficit – Interest payments

Implication/Significance: -

It indicates govt. borrowing on account of current year expenditure and current year receipts.

Unit-5 (6 Marks)

BALANCE OF PAYMENTS

Balance Of Payments

The balance of payments of a country is a systematic record of all economic transactions between residents of a country and residents of foreign countries during a given period of time.

A balance of payments statement is a summary of a Nation`s total economic transactions undertaken on international account.

Current account and capital account of BOP. There are two types of account.

1. **Current Account:** It records the following 03 items.

- a) **Visible items:** It includes value of exports and imports of goods.

Balance of trade(Merchandise): Balance of trade is the difference between the money value of exports and imports of material goods (visible item)

BOT= Value of Export of goods-Value of Imports of goods

- b) **Invisible Items:** It includes value of exports and imports of services. Eg. Shipping, insurance, communication, Banking, medical tourism etc.

- c) **Unilateral transfers:** Unilateral transfers are one sided payments/receipts of a country from/to rest of the world. Ex. Gifts, Grants, Donations.

Current account Balance of BOP= Balance of **Visible items**+ Balance of **Invisible Items**+ Balance of **Unilateral transfers**

Note- All the Exports/Receipts are recorded in credit side(Positive side) of BOP Current Account.
All the Import/Payments are recorded in debit side(Negative side) of BOP Current Account.

2. **Capital Account:**It records all those transactions, between the resident of country and the rest of the world, which cause a change in the assets and liabilities of the residents of country and Government.

Components of Capital account

(1) **Borrowing and lending:** It may be

- a) Market Borrowing – Borrowing at international market rate of interest.
- b) External Assistance - Borrowing at concessional (less than market rate) rate of interest

(2) **Investments:** It involves transactions of investments. There are two types of investments abroad.

- i) **Foreign Direct Investment:** Foreign direct investment relates to ownership of enterprises in domestic economy by rest of the world.
- ii) **Portfolio Investment (FII):** Portfolio investment basically refers to foreign institutional investment. It is investment by rest of world in shares and bonds of the domestic companies.

Other components are NRI Deposits, Banking capital, short term trade credit.

Differences between Current Account and Capital Account.

| Current Account | Capital Account |
|--|--|
| It refers to an account which records all the transactions relating to exports and imports of goods and services and unilateral transfers during a given period of time. | It records all those transactions, between the resident of country and the rest of the world, which cause a change in the assets and liabilities of the residents of country and Government. |
| Bring a change in the current level of a country's income. | Bring a change in the capital stock of a country. |
| It is a flow concept. | It is stock concept. |
| It includes visible, invisible items and unilateral transactions | It includes borrowings, lending's and investment to and from rest of the world |

Differences between Autonomous items and Accommodating items of BOP.

| | Autonomous items | Accommodating items |
|----|---|---|
| 1. | Refers to those international economic transactions which take place due to some economic motive such as profit maximization. | Refer to the transactions that are undertaken to cover deficit or surplus in autonomous transactions. |
| 2. | Independent of the state of BOP Account | These are undertaken to maintain the balance in BOP account. |
| 3. | Take place on both current and capital accounts. | Take place only on capital account. |
| 4 | These are also known as 'above the line items. | These are also known as 'below the line items. |

Disequilibrium in BOP means condition of surplus or deficit in BOP.

- 1) Surplus BOP – Current account balance + capital account balance > Zero (positive)
- 2) Deficit BOP –Current account balance + capital account balance < Zero (negative)

Causes of Disequilibrium in BOP

1. Economic factors: Large scale development expenditure, cyclical fluctuations.
2. Political factors: Political instability.
3. Social factors: Changes in tastes, preferences and fashions.

FOREIGN EXCHANGE RATE

1. **Foreign Exchange:** Foreign exchange refers to all the currencies of the rest of the world other than the domestic currency of the country. For example, in India, US dollar is the foreign exchange.
2. **Foreign Exchange Rate:** The rate at which one currency is exchanged for another is called foreign exchange rate. eg – 1\$ = ₹80
3. **Foreign exchange market:** Foreign exchange market is the market where the national currencies are converted, exchanged or traded for one another.

Types of Foreign Exchange Rate System

1. **Fixed exchange rate System:** Fixed Exchange rate system refers to the system in which the rate of exchange for a currency is fixed by the government. There are two systems of exchange rate
 - a) **Gold standard system of exchange rate:** According to this system, gold was taken the common unit of parity between currencies of different countries. Each country defined value of its currency in terms of gold. E.g., 1 pound= 2g of gold and 1\$ = 1g of gold. Then exchange rate would be 1 £= 2 \$
 - b) **The Bretton Woods system:** Under this system, all currencies were related to U.S. dollar which ultimately was convertible into gold. IMF worked as central institution in controlling the system.

Merits of fixed exchange rate system

1. Stability in the exchange rate
2. Promotes international investments
3. Promotes international Trade
4. Prevent Speculative Activities

Demerits of fixed exchange rate system

1. Huge gold reserves required
 2. Discourage Venture capital
 3. Restricts Economic growth
 4. Fixed Exchange rate may not be the equilibrium rate
2. **Flexible exchange rate system:** Flexible Exchange rate system refers to the system in which the rate of exchange for a currency is determined by the market forces of Demand and supply of foreign exchange. The exchange rate at which demand for foreign currency is equal to its supply is called par rate of exchange, normal rate or equilibrium rate of foreign exchange.

Merits of flexible exchange rate system

- a. Gold reserves not required
- b. Promotes International mobility of capital
- c. Promotes Venture Capital in the international market.
- d. Maintains equilibrium level.

Demerits of flexible exchange rate system

- a) Instability in the Exchange Rate.
- b) Speculative Activities increases.
- c) Creates Inflationary Situation.

Sources of Demand for Foreign Exchange

- I. Import of goods and services
- II. Tourism
- III. Remittances by foreigners working in India
- IV. Repayments of interest and loans
- V. Extension of loans to foreigners.

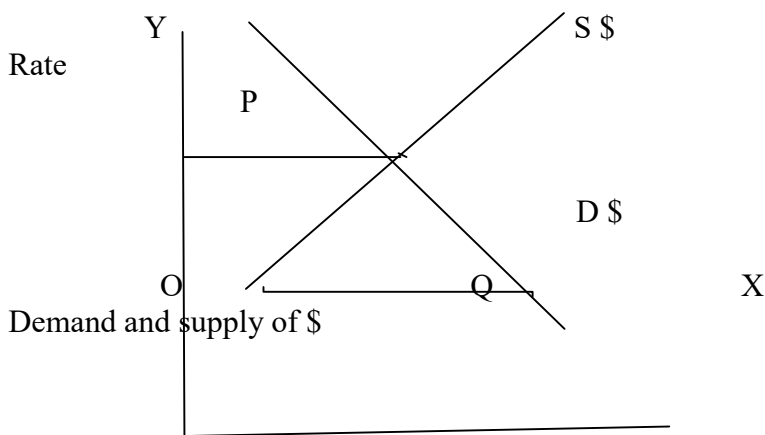
Sources of supply for foreign exchange

- I. Export of goods and services
- II. Foreign tourists in India
- III. Remittances by Indian working abroad

- IV. Foreign direct investment by multinational companies
- V. Purchase of shares by foreign investors
- VI. Deposits by Non-resident Indians

Determination of the equilibrium rate of Foreign exchange (flexible)

Equilibrium rate of exchange is established at a point where the quantity demanded and the quantities supplied of foreign exchange are equal. This can be shown through the following diagram



Point E indicates equilibrium exchange rate where demand for dollar equals to that of the supply of dollar.

Managed Floating Rate System.

It refers to system in which foreign exchange rate is determined by the market forces and central bank influences the exchange rate through intervention in the foreign market.

It is hybrid of a fixed exchange rate and flexible exchange rate. In this system central bank interferes in foreign exchange market to control fluctuations. It is also known as a dirty floating.

Currency Depreciation It refers to decrease in the value of domestic currency in terms of foreign currency. It makes the domestic currency less valuable. For example if 1\$ = Rs. 80 and it becomes 1\$ = Rs. 85 then it will be called depreciation of rupee in terms of Dollar.

In the case of depreciation of domestic currency the demand of domestically produced goods will increase in rest of the world because they become cheaper in rest of the world. So the export of the country will increase and the goods made in rest of the world become expensive so their demand will decrease and import will decrease.

Currency Appreciation It refers to increase in the value of domestic currency in terms of foreign currency. It makes the domestic currency more valuable. For example if 1\$ = Rs. 80 and it becomes 1\$ = Rs. 75 then it will be called appreciation of rupee in terms of Dollar.

In the case of appreciation of domestic currency the demand of abroad produced goods will increase in the country because they become cheaper. So, the import of the country will increase and the goods made in the country become expensive so their demand will decrease and export will decrease.

Devaluation of domestic currency It refers to reduction in the value of domestic currency by the government.

On the other hand, **depreciation** refers to fall in the value of domestic currency in terms of foreign currency by the market forces of demand and supply.

Revaluation of domestic currency. It refers to increase in the value of domestic currency by the government. On the other hand, **Appreciation** refers to rise in the value of domestic currency in terms of foreign currency by the market forces of demand and supply.

Indian economy before British rule-

- Agriculture was the main source of livelihood.
- India was known for handicraft industry.

Dada Bhai Naoroji, William Digby, Findlay Shirras, VKRV Rao, R C Desai were the notable estimators of India's per Capita Income and National Income.

Features of Indian economy on the Eve of Independence.

1. Agriculture sector on the eve of independence

- During colonial rule economy was primarily agricultural
- 85% people dependents on agricultural
- It suffered stagnation
- Agriculture productivity became low

Causes of stagnation of agriculture sector

- Permanent settlement or Zamindari system.
- Profits accruing out of agriculture sector went to the zamindars Instead of cultivators
- Zamindar collected rent regardless of the economic condition of the cultivators
- Revenue settlement was responsible for zamindar attitude.
- If they fails to do so, they may lost their rights.
- Both British govt. and Zamindars did nothing for the betterment of farmers.
- Low level of productivity due to Low level of technology, Lack of irrigation facilities

Commercialization of Agriculture-

- It means production of crops for sale in market rather than for self-consumption. Like jute, cotton etc.
- Farmers were given higher price for producing cash crops like cotton or jute, to provide raw material to the British base industries.
- This resulted in shortage of food grains, which causes frequent famines in India.
- Although farmers are getting higher price for their crops but their economic condition didn't improve.

2. Industrial Sector – Like agriculture, industrial sector of India could not develop.

A. Deindustrialization of Indian handicraft industry: Two-fold motive of British govt were -

- (i) Mere exporter of raw material – To get raw material from India at cheap rates to be used by upcoming modern industries in Britain.
- (ii) Importer of finished goods – To sell finished products of British industries in Indian market at high price.

B. Reasons for Decay of indigenous handicraft industries -

- (i) Discriminatory Tariff Policy – This policy allowed (a) Free export of raw material from India and free import of finished goods from Britain; (b) Heavy duty was imposed on the export of Indian handicrafts.
- (ii) Indian market was full of cheap finished goods from Britain and domestic goods couldn't compete with foreign cheap goods.

Adverse effect of decline of handicraft industry – Due to decline of handicraft industry there was a high level of unemployment in the country which resulted in overcrowding of agriculture sector.

C. Slow Growth of Modern Industry –

The growth rate of the new industrial sector and its contribution to the GDP remained less. Modern Industries began to setup in India, in the second half of nineteenth century, this development

was confined to setting up of cotton and jute textile mills These industries were setup in the western part of the country, Maharashtra and Gujarat.

- D. **Lack of capital goods industries-** The Tata iron and steel company {TISCO} was incorporated in 1907. There were very few capital good industry at that time.
- E. **Limited role of the Govt. -** The public sector was remained confined only to the railways, power generation, communication, ports and some other departmental undertakings.

3. **Foreign Trade** - India was a trading nation before the advent of colonial rule. But due to restrictive policies adopted by the colonial government, India's foreign trade was affected adversely. Foreign Trade conditions on the eve of independence were as follows:

(i) **Export of primary products and import of finished goods** – Exporter of primary products such as raw silk, cotton, wool, sugar, indigo, jute etc. and importer of finished consumer goods like cotton, silk, woollen clothes and capital goods like light machinery produced in Britain.

(ii) **Monopoly control of Britain on foreign trade** – More than half (>50%) foreign trade was restricted to Britain. Opening of Suez Canal in 1869 gave boost to foreign trade with Britain.

(iii) **Drain of Indian wealth** – Due to excess exports of raw material from India to Britain, India has a huge export surplus. However, export surplus was used to:

- (a) Expenditure on office setup by British Govt. in India;
- (b) Meet expenses of war fought by British government;
- (c) To import invisible items.

4. **Occupational structure on the eve of independence -**

An occupational structure refers to distribution of working population across primary, secondary and tertiary sectors. Some observations are -:

1. **Agriculture** - the principal source of occupation on the eve of independence, about 70-75% of working population was engaged in agriculture .

2. **Industry** - A insignificant source of occupation, barely 10% of the working population in India was engaged in manufacturing industries, mining, etc

3. **Services** – only 15-20% of population was engaged in tertiary sector.

4. **Regional variation** – The states of Tamilnadu, AndhraPradesh, Maharashtra, Kerala, Karnataka and West Bengal witnessed a decline in dependency of workforce on agriculture sector. However, at the same time states such as Orissa, Rajasthan and Punjab reported increase in the share of workforce in agriculture.

5. **Demographic conditions on the eve of Independence -**

First official Census of population of British India was made in 1881. 1921 is the year of great. Before 1921 India was in the first stage of demographic transition. The second stage of transition began after 1921. The features of demographic conditions were as follows:

- i) **High birth and death rate-** Birth rate refers to number of children born per thousand in a year. Death rate refers to number of people dying per thousand persons in a year. Both birth rate and death rate were very high as 48 and 40 per thousand respectively.
- ii) **High infant mortality rate** – It refers to infants dying before reaching one year of age per thousand live births in a year. It was 218/1000.
- iii) **Low life expectancy ratio** – It refers to the average number of years for which people are expected to live. It is based on the birth year, demographic factors, its age and gender. The life expectancy was 32 years at the eve of independence.
- iv) **Low literacy rate** – Total literacy was less than 16 percent. Female literacy was about 7 %.
- v) **Low standard of living and widespread poverty**
- vi) **Poor state of health facilities** – Public health care facilities either unavailable or inadequate. As a result air and water borne diseases were widespread.

6. **Infrastructure on the eve of independence -**

Under infrastructure, we include all those industries and services which are used to develop other industries. Development of infrastructure during colonial rule was not to provide better facilities to general public but serve the British interest only. We include the following under infrastructure:

- a) **Railway** – Railways introduced in 1850. First passenger train ran between Mumbai to Thane in 1853. Railways were developed to transport finished goods from Britain to the interior of the colonial India to widen the size of markets for the British products in India.

The railways were developed:

- To have effective check on the vast Indian economic territory,
 - To make huge profit by linking railways with Indian ports.
- b) **Roads** – Built primarily for the purpose of mobilizing the army within the country and send raw material to the nearest port.
 - c) **Communication System** – Post and telegraph were developed to maintain law and order in country. First stamp was released in 1952 and first telegraph line was started in 1953.
 - d) **Ports**- ports were developed to handle export of raw material to Britain and import of finished goods from Britain.

Features of Indian Economy on the Eve of Independence –

- 1) **Colonial economy** – Britishers exploited Indian economy to
 - a) Facilitate growing British industries with the supply of raw materials from India;
 - b) To encourage commercialization of agriculture.
- 2) **Semi-feudal economy** –
 - a) The land settlement system gave birth to feudal relations between landlord and tenants.
 - b) Establishment of modern industries led to creation of two classes – capitalist and labourers.
- 3) **Backward Economy** – The main reasons of backwardness are:
 - (a) Low level of productivity;
 - (b) Low per capita income;
 - (c) Traditional methods of agriculture;
 - (d) High birth rate and death rate;
 - (e) Mass illiteracy.
- 4) **Stagnant Economy** – An economy with very low growth rate is termed as stagnant economy. India's growth of aggregate real output was (first half of 20th century) was less than 2% and Per Capita Output was only 0.5%.
- 5) **Bleak Industrialization**- industrial sector in India was well known for handicraft. But it was destroyed by the discriminatory British policy. By the time of independence, small scale and cottage industry were almost ruined. For capital goods requirements, we were dependent upon import from Britain.
- 6) **Limited Urbanization**- At the time of independence bulk of the population of India lived in villages. In 1948, only 14% of population lived in urban areas while 86 % lived in rural areas. Rural population lacked opportunities outside agriculture. This compounded their poverty.

Positive contribution of British rule -

- (i) Introduction of Railways
- (ii) Better Education system
- (iii) Effective administration.
- (iv) Introduction of Monetary system
- (v) Better means of communication (post and telegraph) and transportation

CHAPTER-2 INDIAN ECONOMY 1950-1990

Types of Economy –

| Market or Capitalist Economy | Socialist or Centrally Planned Economy | Mixed Economy |
|--|---|--|
| Factors of production owned and operated by individuals. | Factors of production owned and operated by government. | Government and private individuals owned and operated factors of production; |

| | | |
|---|--|---|
| Main motive to earn profit. | Main motive is social welfare. | Main motive is both social welfare and to earn profit. |
| All decision taken by Market demand and supply (Price Mechanism). | All decision taken by Government/Government Committee or Commission. | Govt. and the market forces both decide together what, how and for whom to be produced. |

- As a result, India adopted Mixed Economy System with best features of both capitalist and socialist economy. Now India would be a socialist economy, with a strong public sector, but also with private property and democracy.
- **Planning** – it is a process to allocate limited resources which have alternative uses in an economy to get pre-determined objective in given time.
- **Plan period in India** - India has completed 12 Five Year Plans and the Time Period of 12th Plan was 2012-2017.
- **Indian Planning Commission** - The Planning Commission of India was established on 15th March 1950. Chairman of planning commission is Prime Minister.
- The Planning Commission of India has been dissolved in 2015 and replaced with National Institution for Transforming India (NITI) Aayog.

Objectives / Common Goals of Planning in India –

(i) Growth – Increase in country's capacity for production of goods and services. GDP is the indicator of growth. Contribution of Primary, Secondary and Tertiary sector in GDP is known as structural composition.

- An increase in stock of productive capital;
- An increase in supporting services like infrastructure;
- An increase in the efficiency of productive capital and services.

(ii) Modernization – To adopt new technology with change in social outlook i.e. women also have same rights as men.

- Adoption of New Technology
- Change in Social Outlook

(iii) Self-reliance – Non-dependency on rest of the world for capital and new technology as well as self-reliance in food grain production. To promote economic growth and modernization five-year plan stressed on use of own resources in order to reduce our dependence on foreign countries.

(iv) Economic equity – Every Indian should meet their basic needs like Food, shelter, Housing, education, health and sanitation, Improve standard of living of weaker section of society and reducing regional inequalities and promote social justice. It is important to ensure that benefits of economic prosperity are availed by all the sections of society.

AGRICULTURE FEATURES, PROBLEMS, POLICIES AND LAND REFORMS

Importance of Agriculture in Indian Economy –

1. Main source of employment
2. Base of Industrialisation – As a supplier of raw material.
3. Supply of food grains
4. Importance in Foreign Trade
5. Contribution to Domestic Trade

Land Reforms - Land reforms refer to change in the ownership of holdings.

- It was done with the purpose of increasing agricultural production
- For equity in agriculture

Land Reform Measures –

1. **Abolition of Intermediaries** – Intermediaries, popularly known as Zamindars has been abolished. Ownership rights have been given to the actual tillers. This has been done with a view to stop exploitation by the zamindars. Farmers are in direct contact with government.
2. **Cooperative Farming** – This was encouraged to enhance to bargaining power of small farmers. Together they can buy inputs at lower rates and can sell their products at a high price.

3. Tenancy Reforms.

Shortcomings of Land Reforms

- In some areas former zamindars continued to have large land holdings.
- In some cases, tenants were evicted and zamindars claim to be sole cultivators.
- Even after getting the ownership of land, the poorest of the agricultural labourers did not benefit from land reforms.

Land Ceiling –

- Fixation of maximum size of land which would be owned by an individual.
- The concentration of land ownership in a few hands can be reduced.
- The progress was very slow and highly unsatisfactory due to poor enforcement of land ceiling law. Data show that only less than 2% land has been declared surplus and only 1% of the total cultivated area actually has been distributed among landless labourers. The reason behind the failure of land ceiling law was:
 - A large number of exemptions were granted from land ceiling law.
 - Zamindars and big landlords succeeded to transferring a large area of land to their relatives.
 - State delayed its implementation.

Consolidation of Land Holdings (Chakbandi) – Under this policy, a farmer is given one consolidated land holding equal in area to all his split land holdings.

New Agricultural Strategy: Green Revolution -

- Strategy related to increase agricultural production and productivity by using modern technology and inputs like HYV seeds, pesticides and insecticides etc.
- Dr. Norman E Borlaug – Father of Green revolution
- Dr. M. S. Swaminathan – Father of Green revolution (In India)

Phases:

I Phase(Mid 1960s up to mid-1970s): The use of HYV seeds was restricted to the more affluent states such as Punjab, Andhra Pradesh and Tamil Nadu. Further, the use of HYV seeds primarily benefited the wheat growing regions only.

II Phase(Mid-1970s to mid-1980s): The HYV technology spread to a larger number of states and benefited more variety of crops.

Achievements of Green Revolution –

1. **Rise in Production and Productivity** – As a result food grain production increased from 81.0 million tons in third five-year plan to 118.1 million tonnes in fifth five-year plan.,
2. **Increase in Income / Marketable Surplus** – Green revolution resulted in marketable surplus. It refers to that part of agricultural produce which is sold in the market by the farmers after meeting their own consumption requirements.
3. **Change in Farmer's Outlook** – Commercialization of agriculture has caused a change in outlook of the farmers. Now farmers are considering agriculture as a source of earning instead of subsistence.
4. **Buffer Stock of Food Grains** – India became able to procure sufficient amount of food grains to build a stock which can be used in tough times.
5. **Decrease in the price of food grains**
6. **Benefit to low Income Group** – As a result in the decrease in the price of food grains, those people, who were spending a large proportion of their income on food grains, now had to spend less.
7. **Rural prosperity**- After the green revolution, Rural people were able to maintain their living standard and able to satisfy their basic needs.

Shortcomings of Green revolution –

1. **Increase in disparities between small and big farmers** – The gulf between poor and rich farmer has substantially risen over time. Poverty is widespread and indebtedness was extremely high. Green revolution increases the economic inequality.

2. **Risk of pest attack** – The HYV crops are more prone to attack by pests. So, there was a risk that small farmers who adopted this technology could lose everything in a pest attack.
3. **Limited crops** – Revolutionary rise in output is stick mainly with production of food grains. There has been no similar rise in production of pulses and commercial crops like jute, cotton, tea etc.
4. **Regional imbalances** – It was not uniform across all regions. In states like Tamilnadu, Haryana, Maharashtra, Punjab, it made a remarkable impact. But in eastern UP, Bihar, MP and Odisha, its impact was relatively insignificant.
5. **Limited Farming Population** – The benefits of green revolution eluded the marginal and small farmers as inputs are beyond the reach of these farmers.

Agricultural Subsidies- To assure availability of fertilizers and use of new technology at reasonable price government is providing subsidy. India has been providing two types of subsidies – (a) subsidy in agricultural inputs, (b) subsidy on food supplies to PDS. A current debate is whether subsidy should be continued or not. Arguments are put forward both in favour and against subsidy.

Favour –

1. Agriculture is a risky business.
2. Farmers are poor and can't afford new technology and seeds.
3. Eliminating subsidy will increase income inequality.
4. Encourage use of new technology and HYV package.

Against –

1. Main benefit is taken by big farmers.
2. Technology is now adopted by all so it should be eliminated.
3. It does not benefit the target group that is poor farmers but rich fertilizer industrialists and created a huge burden on government.

CRITICAL APPRISAL OF AGRICULTURAL REFORMS

Advantages/Merits:

1. Land reforms and Green revolution are great achievements of India.
2. Substantial increase in agricultural productivity between 1950 to 1990.
3. India is now self-sufficient in food grain production.
2. Abolition of Zamindari system.

Drawbacks/Limitations:

1. Population depends upon agriculture is not decreased significantly.
2. Output Increases but workforce engaged in agricultural sector is not decreases and marginal productivity of labour still negative in agricultural sector.
3. Industry and service sector failed to absorb agriculture sector workforce.

INDUSTRIAL POLICY, FEATURES AND PROBLEMS

- At the time of independence, India had a weak industrial base, poorly developed infrastructure.
- The variety of industries was very limited. Cotton and textile industries were mainly developed in India.
- Only two well managed iron and steel firms – one in Jamshedpur and other in Kolkata.

INDUSTRIAL POLICY RESOLUTION, 1956

- On 30th April, 1956, a second Industrial Policy Resolution was adopted in India. IPR-1956 has the following objectives:
 - Development of machine building industrialization.
 - Increase in rate of industrial development.
 - Reduction in income and wealth inequality.
 - Classification of industries into public and private sectors.
 - Stress on the role of cottage and small-scale industries.

- Reduction in regional disparities.

CLASSIFICATION OF INDUSTRIES:- According to IPR-1956, the industries were reclassified in to three categories.

Schedule A– In this schedule, 17 industries were included. (like Arms and Ammunition, Atomic Energy, Railway Transport, Air Transport, Heavy and Core Industries, Oil Industries, Shipping Industries, Iron and Steel Industries, Coal, Aircraft, Electricity Generation and Distribution).

In the above 17 industries, Arms and Ammunition, Atomic Energy, Railway Transport, Air Transport, Govt. will have its monopoly. New units of rest industries will be established by govt., whereas old privately-owned units will operate.

Schedule B – In this schedule, 12 industries were included. (like Road Transports, Sea Transport, Machine Tools, Fertilizers, Synthetic Rubber, Chemical Pulp, Aluminum, Minerals, Carbonizations of coal, Antibiotic Drugs etc.) These industries will be established by govt. but if private sector wants to establish unit, will be allowed.

Schedule C – Rest all industries, which have not been placed under schedule A and B, open for private sector. This will be controlled by the government through licensing system under Industrial (Development and Regulation) Act – 1951.

OUTCOMES OF IPR-1956

- Scope of the public sector in India got widened.
- A clear-cut classification of industries done first time.
- Provision of compulsory licensing was enacted.
- The policy paved the way of development of public sector in India.

INDUSTRIAL LICENSING- Industrial licensing was necessary for –

- To set up new industries.
 - To expansion of existing one.
 - To diversification of products.
- As per under licensing system:
- No new industry was allowed to setup unless a license is obtained.
 - Easy to obtained license for industrial setup in backward regions. These types of setups have also given certain concession like tax benefits, water and electricity at low tariff etc.
 - License to expand production or diversification of products was given only if the govt. was convinced that there is a need of large quantity of goods in economy.

SMALL SCALE SECTOR IN INDIA

In 1955, the Village and Small-Scale Industries Committee (Karve Committee) recognized the importance of above said industries in rural development.

Cottage Industry - These industries are mostly traditional, producing traditional products by employing traditional methods.

Small Scale Industries - These are defined in relation to capital investment in machines and buildings. Presently, this limit is 5 crores. Some examples of small-scale industries are – Bakery products, school stationary, water bottle, belt, paper bags, small toys, beauty products etc.

Features of Small Scale Industries

1. Less capital Required
2. Labour intensive, Flexibility
3. Utilisation of locally available resources.

Role of Small Sector in Indian Economy

1. Provide Economic equality
2. Production of artistic goods;
3. Provide employment.
4. Provide more goods for exports.

Important points related to Small Scale Industries

- Government reserved a large number of products for small scale industries to protect them from large scale industries.

- Various types of concession given to the SSIs such as lower excise duty, bank loan at a lower rate, tax benefits, water and electricity supply at a lower rate etc.

PRINCIPAL FEATURES OF THE STRATEGY OF INDUSTRIAL GROWTH DURING 1950-90

- Public sector played a crucial role in industrialization.
- Private sector played a secondary role.
- Focused on Import substitution and self-reliance target achievement.
- Domestic industries to be protected.
- Large scale industries were developed with a view to develop infrastructure.
- Small Scale industries were developed with a view to achieve objectives of equity and employment.

CRITICAL APPRAISAL OF INDUSTRIAL DEVELOPMENT (1950-90) POSITIVE /GOOD EFFECT / GAINS

1. **Economic Growth** – Contribution of industrial sector in GDP increases from 11.8% in 1950-51 to 24.6% in 1990-91. The 6% annual growth rate of industrial sector with structural reforms during the period is also admirable.
2. **Diversification** – There is diversification of industries with Industrial development. Indian industries are now include a wide range of consumer as well as engineering goods.
3. **Establishment of large-scale industries:** Establishment of Large-Scale Industries during the period of 1950-90.
4. **Promotion of small-scale industries** – It gave opportunity to people with small capital to get in to production process. SSI made substantial achievement to achieve growth with social justice and equity in addition to employment generation.

NEGATIVE / BAD EFFECTS / LOSS

1. **Monopoly of Public Sector** – Industries, which can be handles with the private operators (like telecommunication, hotel industry etc.) also given to the public sector which channelize precious fund to these industries.
2. **Inward Looking Trade Strategy** – This policy stopped industries to develop a strong export sector and focused only to develop domestic industries.
3. **Lack of Competition** – Due to excessive protection to the domestic industries and restrictions on imports, domestic industries failed to achieve international standard of product quality.
4. **Licensing Policy** – It was misused by some industrial houses to get license not for production but to prevent competitors from starting new firms.

INWARD LOOKING TRADE STRATEGY /(IMPORT SUBSTITUTION STRATEGY)

In the first seven plans, trade was characterised by what is commonly called an inward-looking trade strategy. Technically, this policy is called Import Substitution Policy.

Import Substitution - It refers to a policy of replacement or substitution of imports by domestic production. In other words, it is a process to produce the alternate or close substitute of imported goods in the country itself.

Export Promotion – It is a strategy to earn foreign exchange by promoting the export of domestic goods and making domestic industry competitive in the international market

Need for Import Substitution –

1. Scarcity of foreign exchange
2. Un-favourable balance of Trade,
3. Need for industrial development,
4. To protect domestic goods

Objectives of ILTS - The three definite objectives of this policy was:

1. Savings of Foreign Exchange Reserve;
2. Increase in self-sufficiency.

3. Utilisation of Foreign Exchange Reserves in importing developmental goods.

Protection from imports through Tariffs and Quotas –

Tariffs –It refers to taxes imposed on imported goods. The basic aim for imposing heavy duty on imported goods was to make them more expensive and discourage their use.

Quotas –it refers to fixing maximum limit (quantity) on the imports of a commodity by a domestic producer.

Chapter-3 Liberalisation, Privatisation and Globalisation: An Appraisal

In 1991, the government of India initiated a series of economic reforms due to a financial crisis and pressure from international organisations like World Bank and IMF. These reforms came to be known as the New Economic Policy (NEP).

Need for Economic Reforms

1. **Fall in foreign exchange reserves:** In 1991, India met with a foreign exchange or external debt crisis.

(A)The government was not able to make repayments on its borrowings from abroad.

(B)The foreign exchange reserves declined to a level that was not adequate-

To finance imports for more than two weeks and

2. **Financial crisis:**

(A) Development policies required that even though the revenues were very low, the government had to overshoot its revenue to meet challenges like unemployment, poverty and population explosion.

(B) The government was not able to generate sufficient revenue from internal sources such as taxation.

(C) The income from public sectors undertakings (PSUs) was also less to meet the growing expenditure.

3. **Mounting government debts:** In the late 1980s, government expenditure began to exceed its revenue by such large margins that meeting the expenditure through borrowings became unsustainable.

4. **Adverse Balance of Payments:** Imports grew at a very high rate without matching growth of exports. Slow growth of exports was due to low quality and high prices of Indian goods in the international market. Also, no sufficient attention was given to boost exports to pay for the growing imports.

5. **Rising prices of essential goods:** Prices of many essential goods rose sharply due to inefficiencies in private as well as public sector production and high tariffs even on essential imports.

The New Economic Policy

This set of policies can broadly be classified into two groups:

- ❖ The stabilisation measures – these are short term measures to correct weaknesses in balance of payment and to bring inflation under control.
- ❖ The structural reform measures – these are long term measures to improve efficiency of economy and increase international competitiveness. The three broad components of NEP are – Liberalisation, Privatisation and Globalisation.

Liberalisation: It refers to the removal or reduction of government controls and restrictions from various sectors of the economy.

(1) Industrial Sector Reforms:

The various measures under industrial policy reforms include:

- **Reduction in Industrial Licensing:** Industrial licensing was abolished for almost all products except alcohol, cigarettes, hazardous chemicals, industrial explosives, electronics, aerospace, drugs and pharmaceuticals.

- **De-reservation of public sector:** The only industries which are now reserved for the public sector are a part of defence equipment, atomic energy generation and railway transport.
- **De-reservation of small-scale industries:** Many goods produced by small-scale industries have now been de-reserved.
- **Removal of price control:** In many industries, the market has been allowed to determine the prices.
 - (1) **Financial Sector Reforms (Banking Sector Reforms):** The role of RBI was shifted from regulator to facilitator of financial sector. This means that the financial sector was allowed to take decisions on many matters without consulting the RBI.
 - The reform policies led to the establishment of private sector banks, Indian as well as private.
 - Foreign investment limit in banks was raised to around 50 percent.
 - Those banks which fulfill certain conditions have been given freedom to set up new branches without the approval of the RBI and rationalise their existing branch networks.
 - Foreign Institutional Investors (FII), such as merchant bankers, mutual funds and pension funds are now allowed to invest in Indian financial markets.

(3) Tax Reforms (or Fiscal Policy Reforms):

The major tax reforms made are:

- Since 1991, there has been a continuous reduction in the taxes on individual incomes as it was felt that high rates of income tax were an important reason for tax evasion.
- The rate of corporation tax, which was very high earlier, has been gradually reduced.
- Efforts have also been made to reform the indirect taxes, in order to facilitate the establishment of a common national market for goods and commodities.
- In order to encourage better compliance on the part of taxpayers, many tax procedures have been simplified and the rates also substantially lowered.
- Recently, the Indian Parliament passed a law, Goods and Services Act 2016, to simplify and introduce a unified indirect tax system in India. This law came into effect from July 2017. This is expected to generate additional tax revenue for the government, reduce tax evasion and create 'one nation, one tax and one market.'

(4) Foreign Exchange Reforms: Before 1991, fixed exchange rate system was followed by the RBI.

The major reforms made in the foreign exchange market are:

- A. In 1991, as an immediate measure to resolve the balance of payment crisis, the rupee was devalued against foreign currencies. (Devaluation refers to reduction in the value of domestic currency with respect to foreign currency.) This led to increase in the inflow of foreign exchange by making exports cheaper and more competitive.
 - B. It also led to freeing the determination of rupee value in the foreign exchange market from government control. Now markets determine exchange rates based on the demand and supply of foreign exchange.
- ### (5) Trade and investment Policy Reforms:
- A. Dismantling of quantitative restrictions (Quotas) on imports and exports- Quantitative restrictions on imports of manufactured consumer goods and agricultural products were also fully removed from April 2001.
 - B. Reduction tariff rates– Export duties have been removed to increase the competitive position of Indian goods in the international markets and import duties have also been reduced.
 - C. Removal of licensing procedures for imports – Import licensing was abolished except in case of hazardous and environmentally sensitive industries.

Privatisation: It implies shedding of the ownership or management of a government owned enterprise and its transfer to the private sector.

Privatisation can be done in two ways:

- A. by withdrawal of the government from ownership and management of public sector companies (Disinvestment)
- B. by outright sale of public sector companies (Complete privatisation)

Disinvestment:-Privatisation of the public sector undertaken by selling off part of the equity of PSEs to the private sector/ public is known as disinvestment.

- A. Improve financial discipline and facilitate modernisation.
- B. It was also felt that private capital and managerial capabilities would be effectively utilized to improve the performance of the PSU's.
- C. It was felt that privatisation could provide strong impetus (encouragement) to the inflow of FDI.

Navratnas (profit making PSU's)

- ❖ In order to improve efficiency of PSUs, infuse professionalism and enable them to compete more effectively in the liberalised global environment, the government chose nine PSUs and declared them as *maharatnas, navratnas and miniratnas*
- ❖ They were given greater managerial and operational autonomy in taking various decisions to run the company efficiently and thus increase their profits.
- ❖ Greater operational, financial and managerial autonomy has also been granted to profit making enterprises referred to as *miniratnas*
- ❖ Few examples of public enterprises with their status are as follows
- ❖ Maharatnas - Indian Oil Corporation (IOCL), Steel Authority of India Limited (SAIL)
- ❖ *Navratnas* - Hindustan Aeronautics Limited (HAL), Mahanagar Telephone Nigam Limited (MTNL)
- ❖ *Miniratnas*- Bharat Sanchar Nigam Limited (BSNL), Airport Authority of India (AAI) and Indian Railway Catering and Tourism Corporation Limited (IRCTC).

Globalisation:Globalisation means integrating the economy of the country with the world economy through removal of barriers on international trade and capital movements.

- It is an outcome of the set of various policies that are aimed at transforming the world towards greater interdependence and integration.
- It involves creation of network and activities transcending economic, social and geographical boundaries.
- In short, Globalisation implies turning the world into one whole or creating a borderless world.

Outsourcing: Outsourcing is one of the important outcomes of the globalisation process.

Outsourcing refers to the hiring of regular services by a company from external sources, mostly from other countries, which was previously provided internally or from within the country. e.g. legal advice, computer service, advertisement, security- each provided by respective departments of the company.

Outsourcing has intensified in recent times because of:

- A. The growth of fast modes of communication, particularly the growth of Information Technology (IT).
- B. With the help of modern telecommunication links including the internet, the text, voice and visual data in respect of these services is digitalised and transmitted in real time over continents and national boundaries.

Factors that have made India one of the favourite outsourcing destination in the post reform period are:

- Availability of skilled manpower in India and
- The low wage rates.

Some of the services outsourced to India include:

- A. Voice-based business processes (popularly known as BPO or call centers)
- B. Record keeping
- C. Accountancy
- D. Banking services
- E. Music recordings
- F. Film editing
- G. Book transcription
- H. Clinical advice etc

Effects of Globalisation:The process of globalisation through liberalisation and privatisation policies has produced positive as well as negative results both for India and other countries.

Positive effects: Globalisation resulted in -

- 1) Greater access to global markets;
- 2) High (advanced) technology and
- 3) Increased possibility of large industries of developing countries to become important players in the international arena.

Negative effects: Globalisation has been criticised by some scholars because according to them:

- 1) Globalisation is a strategy of the developed countries to expand their markets in other countries.
- 2) It has compromised the welfare and identity of people belonging to poor countries.
- 3) Market-driven globalisation has widened the disparities among nations and people.

World Trade Organisation (WTO):

WTO was founded in 1st January, 1995 as the successor organisation to the General Agreement on Trade and Tariff (GATT). GATT was established in 1948 with 23 countries as the global trade organisation to administer all multilateral trade agreements by providing equal opportunities to all countries in the international market for trading purposes.

Aim (Functions) of WTO:

- 1) To establish a rule-based trading regime in which nations cannot place arbitrary restrictions on trade.
- 2) To enlarge production and trade of services.
- 3) To ensure optimum utilisation of world resources.
- 4) To protect the environment.
- 5) To facilitate international trade (bilateral and multilateral) through removal of tariff as well as non-tariff barriers and providing greater market access to all member countries.

Indian Economy During Reforms: An Assessment:

Positive effects of reforms:

- 1) The growth of GDP increased from 5.6% during 1980-91 to 8.2 % during 2007-12..
- 2) The foreign investment, which includes foreign direct investment (FDI) and foreign institutional investment (FII) has increased from about US \$100 million in 1990-91 to US \$ 36 billion in 2016- 17.
- 3) There has been an increase in the foreign exchange reserves from about US \$ 6 billion in 1990-91 to about US \$ 321 billion in 2014-15.
- 4) Rising prices have also been kept under control.

Negative effects of reforms:

1. **Insufficient Growth and Employment** - Though the GDP growth rate has increased in the reform period, scholars point out that the reform led growth has not generated sufficient employment opportunities in the country other than the service sector. This is known as 'Jobless growth'.
2. **Neglect Agriculture** - Reforms have not been able to benefit agriculture. The growth rate in the agriculture sector has been decelerating in the reform period because:
 - Public investment in agriculture sector especially in infrastructure, which includes irrigation, power, roads, market linkages and research and extension has fallen in the reform period.
 - The removal of fertiliser subsidy has led to increase in the cost of production, which has severely affected small and marginal farmers.
 - A number of policy changes such as reduction in import duties on agricultural products, removal of minimum support price and lifting of quantitative restrictions on agricultural products have adversely affected Indian farmers as they have to face increased international competition.
 - The export-oriented policy strategies in agriculture have resulted in a shift from production of food grains for the domestic market towards production of cash crops for exports there by putting immense pressure on prices of food grains.
3. **Inadequate Reforms in Industry:** Industrial growth has also recorded a slowdown during the reform period because of decreasing demand of industrial products due to various reasons such as:
 - Domestic manufacturers are facing competition from cheaper imports, which have replaced the demand for domestic goods.
 - The infrastructure facilities, including power supply, have remained inadequate due to lack of investment.

4. **Fiscal Policy and Reforms:** Economic reforms have placed limits on the growth of public expenditure, especially in social sectors.

- The tax reductions in the reform period, aimed at yielding larger revenue and to curb tax evasion, have not resulted in increase in tax revenue for the government.
- The reform policies involving tariff reduction have reduced the scope for raising revenue through custom duties.
- Tax incentives provided to foreign investors to attract foreign investment, has further reduced the scope for raising tax revenues.

GOODS & SERVICE TAX (GST)

- GST: The full form of GST is goods and services tax. It is an indirect tax which has replaced many indirect taxes in India. The goods and service tax Act was passed in the parliament on 29th March 2017. The Act came into effect on 1st July 2017.
- Goods and service law in India is a comprehensive multi-stage. Destination based tax that is levied on every value addition. In simple words, GST is an Indirect Tax levied on the supply of goods and services. This law has replaced many indirect laws that previously existed in India. GST is one indirect law for the entire country.

COMPONENTS OF GST:

- There are three taxes applicable under this system: CGST, SGST, IGST.
- CGST is collected by central government on an intra state sales eg ; transactions happening within Maharashtra.
- SGST is collected by State Government on intra state sales eg: transactions happening within Maharashtra.
- IGST is collected by the central government for the interstate sale eg: Maharashtra and Tamil Nadu

| |
|---|
| GST RATES: - 0%, 5%, 12%, 18%, 28% |
|---|

COMPOSITION OF GST COUNCIL:

As per Article 279A of the amended constitution the GST council which will be a joint forum of the Centre and

States shall consist of the following members:

- The Union Finance Minister... Chairperson
- The Union Minister of State In charge of Revenue or Finance...Member
- The Ministers in charge of Finance or Taxation or any other
- Minister nominated by the State Government Members.

Advantages:

1. Mitigation of cascading effect:
2. Abolition of multiple layers of taxation:
3. Resourceful administration by the government
4. Ease of doing business

Disadvantages

1. IT Infrastructure: Most of the procedure of the GST is done on-line. Only a few states have implemented the E-Governance model and therefore they face a lot of problem to comply with the procedure of GST.
2. INCREASE IN BURDEN OF COMPLIANCE GST administration states that companies are required to register in all the states they operate in. this increases the burden on the business of excessive compliance.
3. PETROLEIUM PRODUCTS DON'T FALL UNDER THE GST SLAB: Petrol and petroleum products have not been included in the scope of GST until now. States levy their taxes on this sector.

4. **COACHING OF TAX OFFICERS:** The government officers are not properly trained for the practical usage and implementation of the GST Administration. It requires a lot of knowledge of information technology.

CONCLUSION:

GST in India is a sweeping reform and the benefits of GST have changed the way businesses are conducted. Businesses are being included in the formal economy through GST implementation. It has provided long term returns for the Indian economy on a large scale which have been welcomed as a new change by all.

TOPIC: DEMONETISATION

- Demonetisation is referred to as the process of stripping a currency unit of its status to be used as a legal tender. In simple words, demonetisation is the process by which the demonetised notes that cease to be accepted as legal currency for any kind of transaction.
- After demonetisation is done, the old currency is replaced by a new currency, which may be of the same denomination or may be of a higher denomination.
- The impact of changing the legal tender status of a currency unit has a huge impact on the economic transactions that take place in an economy.
- Demonetisation can cause unrest in an economy or it can help in stabilizing the economy from existing problems. Demonetisation is usually taken by a country for various reasons.

Demonetisation in India

- Demonetisation in India has taken place three times till now, namely in the years of 1946, 1978 and 2016. Let us have a look at all the three events.
- Demonetisation 1946 : The first demonetisation event happened in 1946, at that time the denominations of Rs.1000 and Rs.10000 were removed from circulation.
- There was a visibly low impact of the demonetisation as the higher denomination currencies were not available to the common people.
- In 1954, these notes were again introduced with an additional denomination of 5000.
- Demonetisation in 1978 : The second demonetisation in India took place in 1978, at that time the Prime Minister was Morarji Desai. During the second demonetisation the denominations of 1000, 5000 and 10000 were taken out of circulation.
- The whole purpose of demonetisation was to reduce the circulation of black money in the country. The announcement was made by Morarji Desai over the radio.
- Demonetisation in 2016: The latest demonetisation was announced on 8th of November, 2016 by the Prime Minister Narendra Modi.
- During this demonetisation the notes that were taken out of circulation were the denominations of 500 and 1000. PM Modi also introduced new currency of denominations 500 and 2000 after demonetisation.

Objectives of Demonetisation:-The objectives of demonetisation are as follows:

1. To stop the circulation of black money in the market.
6. To help in reducing the interest rates of the prevalent banking system
7. To help in creation of cashless economy
8. To formalise the informal Indian Economy.
9. To remove counterfeit notes from the market.
10. To help reduce anti-social activities and their finances.

Benefits of demonetization:-

1. Increased savings :- People tend to deposit their cash with bank and less store at home. This helps them save more.
2. Lower lending rates :- money moves from people to bank and financial Institution. Bank and financial institution have a lower cost of funds which translate into lower leading rates.
3. Better economy:- people deposit their cash with the bank which is used in development project.

4. Curbing anti-social activities :- usually, anti-social elements like smugglers and terrorist use cash as a mode of transaction.

CHAPTER-4 HUMAN CAPITAL FORMATION

Physical capital -refers to all those inputs which are required for further production, like plant and machinery, factory, buildings, raw materials, etc.

Human capital refers to the stock of skill, ability, expertise, education and knowledge involved in the people.

| Physical Capital | Human Capital |
|--|---|
| It is tangible | It is intangible. |
| It is separable from its owners. | It cannot be separated from its owners. |
| It is perfectly mobile between the countries. | Its mobility is restricted by nationality and culture. |
| It depreciates over time due to constant use or due to change in technology. | It though depreciates with ageing but can be made up through continuous investment in education and health. |
| It creates only private benefit. | It creates private benefit as well as social benefit. |

Human Capital formation: Human capital formation means the development of abilities and skills among the population of the country.

Sources of Human Capital Formation:

(1) **Expenditure on education:**

- Proper utility of man power depends on the system of education, training. It develops critical thinking and innovative ideas of the people.
- Investment in education is not only highly productive but also it gives increasing return and accelerates economic growth of all the resources.

(2) **Expenditure on Health:**

- Expenditure on vaccination, curative medicines, (i.e. medical intervention) and awareness during the time of illness is very important.
- Provision of clean drinking water and good sanitation.
- Increases the physical capacity of human being and it raises the supply of healthy and productive labour force.

(3) **On the job training:**

- It increases the skill and efficiency of the workers and leads to an increase in productivity.
- It is of two types -In campus & off Campus
- Such training keeps the employees updated with latest changes in their fields.

(4) **Migration-**

- People migrate from one place to another for better opportunities like income, Living standard, Education, Health facilities.
- It includes transportation cost, social cost, psychic cost (cost of increased stress and change in socio-cultural set-up).

(5) **Expenditure on Information: -**

- Expenditure for acquiring information relating to labour market and other market.

- It involves amount spent on seeking information about educational institutions, education standard, their educational needs and cost of education.
- It is necessary to make decisions regarding investment in human capital as well as for efficient utilization of the acquired human capital stock.

Importance of Human capital formation & Economic Growth

1. Human Capital formation is very important for the **growth of an economy**.
 - Effective use of physical capital
 - Increase in GDP & Per capita income
2. Inventions, innovations and technological improvement are all due to the extra knowledge acquired during education.
3. The knowledgeable, skilled and physically fit people increases human capital formation which increases the speed of economic growth.
4. Increases life expectancy & quality of life.

Reasons for Low/poor Human Capital formations are:

- 1) Insufficient Resources
- 2) High Growth of population
- 3) Lack of proper manpower planning
- 4) Brain drain
- 5) Lack of Implication of govt. policies at mass level.

Human Capital & Human Development

| Sr.No | Human Capital | Human Development |
|-------|---|---|
| 1 | It considers education & health as a means to increase labour productivity | It is based on the Idea that education & health are integral to human well being |
| 2 | investment in education and health is considered to be unproductive, if it does not increase output of goods & services | investments in education and health is taken to be productive, even if it does not leads to higher output |
| 3 | In the human capital, human beings as a means to an end. | In human development, Human beings is an end itself. |

STATE OF EDUCATION SECTOR IN INDIA

1. **Growth of Education Sector in India:** The number of schools increased from 230.7 thousands (1950-51) to 1,500(2020-21). The no. of teachers in the same period increased from 751 thousand to 9700 thousands & no of students from 23,800 to 2, 50,000.
2. **Gross Enrolment Ratio:** Gross Enrolment Ratio (GER) is the total percentage of enrolment of all eligible children in different stages of education like in primary education, secondary education, higher education. GER in elementary education increased steadily from 19.2% in 1950-51 to 98.7% in 2019-20.
3. **Literacy Rate:** The literacy rate has increased from 16% in 1947 to 74.04% in 2011.
4. **Elementary Education in India: Elementary** Education in India means eight years of schooling from the age of six i.e., primary & middle school education together, is called Elementary Education. In December 2002, the government of India made free and compulsory education, a fundamental right of all children in the age group of 6-14 years.
5. **Primary Education Schemes:** Government has made number of schemes to make “Education for all” The following are the few schemes
 - i) **SarvaShikshaAbhiyan (SSA):** It was launched in 2001 to universalize & improve the quality of Elementary Education in India through community ownership of Elementary Education. The SSA is being implemented in partnership with states to address the needs of children in age group of 6-14 years.

- ii) **National Programme for Education of Girls at Elementary Education(NPEGEL):** The programme is aimed at enhancing girl's education by providing additional support for development of a model girl child friendly school.
- iii) **Samagra Shiksha Abhiyan:** Launched in 2018, with aim of improving school effectiveness measured in terms of equal opportunities and equitable learning outcomes.
- iv) **Mid-day Meal Scheme** – Launched in 1995, In this scheme, prepared food is provided to students of class 1 to 8 to improve their nutrition and regular attendance in schools.
- v) **Right to Education Act:** Launched in 2009 and started in April, 2010. It provides free and compulsory education to the children of age group of 6-14 years up to class 8.
- vi) **NIPUN BHARAT MISSION (National Initiative for Proficiency in reading with understanding and Numeracy Bharat Programme) :** Started in July, 2021. It is related with Reading with Understanding and Numeracy skill.

6. Secondary Education:

- (i) Secondary Education, which starts with classes IX and X leads to senior secondary classes XI and XII aims to in cooperate basic skills & analytical abilities. It provides a stepping stone to higher professional and technical education.
- (ii) **National education policy (NEP)** –It was started in July 2020 with the aim of equitable and inclusive education. It assures that no child should be denied access to a quality education because of their socio-cultural background.
- (iii) **Skill India** – launched in July 2015 with aims at vocational training and certification of more than 40 crores Indian youth for a better livelihood and respect in the society.

7. Different Education Institutions:

- (i) **University Grants Commission (UGC)** takes measures for promotion and coordination of university education and determination and maintenance of standards in teaching, examination and research in universities and allocation and disbursement of grants to them.
- (ii) **NCERT:** (National Council of Educational Research and Training): It assist Central and State Government for Education Policies and Programmes.
- (iii) Institutions for higher education Indian council of Medical Research (ICMR)
- (iv) All India Council for Technical Education (AICTE) is the apex body in the field of Technical Education.

Weakness/ Challenges of the Education Sector:

- 1) High Illiteracy: According to 2011 census, the literacy rate of 74.04 percent is still far off the 100 percent mark.
- 2) Gender Bias: Education in India is gender biased. The enrolment of girls in both primary and upper primary classes is much below the boys.
- 3) Low Quality Education: The quality of the education is fairly low.
- 4) Lack of Vocational and Technical Training: Too much emphasis on general education neglecting the Vocational and Technical Education.
- 5) Low Level of Government Expenditure: Actual level of expenditure is only 3.46% compared to the desired level of 6%

| |
|------------------------------------|
| Chapter-5 Rural development |
|------------------------------------|

Rural development.

Rural development is a strategy to improve social and economic condition of rural areas

Key Issues of Rural Development

- (i) Land Reforms.
- (ii) Development of human resources.
- (iii) Infrastructure development -electricity, irrigation, credit, marketing, transport, construction of village Road.

- (iv) Alleviation of Poverty: Special measures for alleviation of poverty and bringing the significant improvement in the living condition of the weaker section.

Rural Credit Growth of rural economy depends on agriculture, the time gestation between crop sowing and realisation of income after production is quite long,

- Farmers borrow from various sources to meet their initial investment on seeds, fertilizers, implements and other family expenses.
- At the time of independence moneylenders and traders exploited small and marginal farmers and landless labourers by lending to them on high interest rate and by manipulating the accounts to keep them in debt trap.
- A major change occurs after 1969 when India adopted social banking and multiagency approach to adequately meet the needs.

Types of Rural Credit

1. **Short term Credit** – It is given for agricultural needs of the farmers like seeds, fertilizers, pesticides etc upto 1 Year.
2. **Mid-term Credit**- It is given for agricultural needs of the farmers like for purchase of new tools, machinery etc. upto 5 Year.
3. **Long term Credit** - It is given for agricultural needs of the farmers like Purchase of Land, Tube well, Permanent construction on Land upto 20 Year.

NABARD:

National bank for Agriculture and Rural Development (NABARD): It was set up on 12 July, 1982 as an Apex body to coordinates the activities of all Institutions involved in the rural financial system. Its objective is to promote strength of credit institutions like Commercial banks, RRBs, Cooperative Banks etc. It also provide financial assistance to non-farm sectors in rural areas.

Self-help groups (Microcredit)

- The SHGs promote saving in small proportions by a minimum contribution from each member. Self-help group pooled money, credit is given to the needy members to be repayable in small instalments at reasonable interest rates. These types of credit provisions are generally referred to as micro credit programs.
- Initially SHGs were started to empower the women. ‘Kudumbashree’ is a women-oriented community-based poverty reduction programme being implemented in Kerela.
- SHGs have emerged to fill the gap in the formal credit system because the formal credit delivery mechanism has not only proven inadequate but has also not been fully integrated into the overall rural social and community development.

Rural Banking.

- Rapid expansion of the banking system had a positive effect on rural farm and men from output income and employment it helps farmers to avail services and credit facilities and a variety of loans for meeting their production needs.
- Other former institution has failed to develop a culture of deposit mobilisation lending to worthwhile borrowers and effective loan recovery agriculture loan default rates have been chronically higher many farmers are deliberately refusing to pay back loans.

Agricultural market System.

Agricultural marketing is a process that involved the assembling storage, processing, transportation, packaging, grading and distribution of different agricultural commodities across the country.

There are four measures that improve the marketing aspects

1. **Regulation** of market to create orderly and transparent marketing condition.
2. **Provision of physical infrastructure** facilities like roads, railways, warehouses, godown, cold storage and processing unit.

3. **Cooperative marketing** in realising fair prices of farm products taken by the government initiative. It is system in which the farmers pool their marketable surplus of crops and distribute the sale proceeds on the basis of each individual shares.
4. **Emerging Alternate Marketing Channels:** It has been realised that if farmers directly sell their produce to consumers, it increases their incomes. Some examples of these channels are Apni Mandi (Punjab, Haryana and Rajasthan); Hadaspar Mandi (Pune); Rythu Bazars (vegetable and fruit markets in Andhra Pradesh and Telangana) and Uzhavar Sandies (farmers markets in Tamil Nadu).

Benefits of agricultural marketing?

- Increases bargaining strength of farmers.
- Direct dealings with final buyers.
- Fulfil immediate requirement of cash.
- Example Milk Cooperatives (AMUL in Gujarat), PURVI in Assam,

NAFED: National Agricultural Cooperative Marketing Federation of India Limited is the apex Cooperative Marketing Organisation dealing in Procurement, distribution, export and import of selected agricultural commodities.

Policy instruments for rural development

- (i) Assurance of minimum support prices(MSP) for Agricultural Products
- (ii) Maintenance of buffer stock of wheat and rice by Food Corporation of India.
- (iii) Distribution of food grains and sugar group PDS.
- (iv) These instruments are aimed at protecting the income of the farmers and providing food grains at a subsidized rate to the poor. Such an event will help in reducing the price risk of farmer and would also expect the market for products

Diversification in Agriculture includes two aspects-

- Change in cropping pattern.
- Shift of the workforce from agriculture sector to other allied activities and non-agriculture sector.
- Much of the agricultural employment activity are concentrated in the Kharif season. During the Rabi season it becomes difficult to find gainful employment in the areas where there are inadequate irrigation facilities, so diversification into other sectors is essential-
 - To provide supplementary gainful employment,
 - To enable them higher level of income
 - To enable rural people to overcome poverty and other troubles.

Non-Farm Activities

Animal husbandry:-Animal husbandry is that branch of agriculture which is concerned with the breeding, rearing and caring for farm animals-

- India owns one of the largest livestock populations in the world.
- Livestock production provides increased stability in income food security transport fuel and nutrition for family.
- Livestock sector provides alternate livelihood options to over 70 million small and marginal farmers including landless labourers.
- A significant number of women also find employment in this sector.

Dairying: -Dairying is the business of production, storing and distributing milk and its products.

- The performance of Indian Dairy Sector over the last three decades has been quite impressive.
- Successful implementation of **Operation Flood**, India ranks first in the world in milk production.

- Operation Flood or **white revolution** was started by a National Dairy development board in 1970 under the expert guidance of then chairman doctor Varghese Kurien.

Fisheries (Pisciculture)

- The water bodies are considered as mother or provider as they provide life giving source to the fishing community.
- Fish production from inland sources contributes about 49% to the total fish production and the balance 51% comes from the Marine sector.
- The total fish production accounts for 1.4 % of its total GDP.
- Kerala, Gujarat, Maharashtra and Tamil Nadu are the major producer of Marine Products.
- The overall socio-economic status of fishermen is comparatively lower than that of the other backward sector of the economy. Some of the major problems faced by these communities-
 - i) Wide spread under employment.
 - (ii). Low per capita earnings.
 - (iii). Absence of mobility of labour to other sectors.
 - (iv). High illiteracy rate and indebtedness.

Horticulture: -

Horticulture refers to the science or art of cultivating fruits, vegetables, tuber crops, flowers, medicinal and aromatic plants, species and plantation crops. These crops play a vital role in providing food and nutrition besides addressing employment concern. The Period between 1991-2003 is called **Golden Revolution** as investment in Horticultural is highly productive and immerges as sustainable livelihood options.

- India is blessed with a varying climate and soil condition.
- It is an important factor for potential diversification and value addition in agriculture
- It has been estimated that this sector provides employment to around 19 % of total labour force.
- This sector is highly productive and the sector emerged as a sustainable livelihood option.
- India has emerged as a world leader in producing a variety of fruits, vegetables, mangoes, bananas, coconuts, cashew nuts and number of spices.
- Horticulture has improved economic condition of many farmers and has become a means of improving livelihood for many unprivileged classes.

Organic Farming.

It refers to the farming without the use of chemical fertilizers and pesticides which restores, maintains and increases ecological balance.

Organic agriculture offers a means to substitute costlier agriculture inputs with locally produced organic inputs that are cheaper and thereby generate good returns on investment organic agriculture generates income through exports as the demand for organically grown crops is on a rise.

Advantages/benefits of Organic Farming

1. Environment friendly as it is free from the use of Chemicals
2. Sustains Soil Fertility because Organic farming discards the use of chemical fertilizers.
3. Healthier and Tastier Food
4. Inexpensive Technology.
5. Generates Income from Exports because of huge international demand for organic crops.

Limitations of Organic farming

1. In the initial years, Organic Farming offers lesser yield than the conventional farming.
2. Due to the low yield per hectare therefore it is costly.
3. The crops have shorter life span.
4. Only seasonal crops can be grown.

CH. 6 EMPLOYMENT: GROWTH, INFORMALISATION AND OTHER ISSUES

- **ECONOMIC ACTIVITIES** – All activities which contribute to gross national product through production of goods and services are called economic activities.
- **WORKER** - A worker is an individual who is doing some productive employment to our living
- **WHAT IS EMPLOYMENT:-** Employment is an indicator of that situation in which workers is engaged in some productive activity for earning his living.
- **FORMAL SECTOR** – It is an organize sector which include all the public sector enterprises and private enterprises which employ 10 or more workers.
- **INFORMAL SECTOR** – It is an unorganized sector of an economy which includes all those private sector enterprises which employ less than 10 workers.
- **LABOUR SUPPLY:-** It refers to the amount of labour that are willing to offer corresponding to a particular wage rate.
- **WORKFORCE-** refers to the number of persons actually working thus workforce does not account for those who are willing to work.
- **LABOUR FORCE-** refers to the number of persons actually working and willing to the work. The difference between labour force and work force is the total number of unemployed persons
- **JOBLESS GROWTH:** - If economic growth is driven by better technology but it fails to improve the rate of participation in economy, such a growth is called “jobless Growth”

WORKERS AND EMPLOYMENT:-

(Data from Annual Reports, Ministry of Labour, Government of India, Delhi.)

- During 2017-18, India had about a 471 million (47.1 Crore) strong workforce.
- Since majority of our people reside in rural areas,
- The rural workers constitute about 75% of this 471 million.
- Men form the majority of workforce in India.
- Women workers account for 33% of the rural workforce, whereas in urban areas, they are just 20% of the workforce.

PARTICIPATION OF PEOPLE IN EMPLOYMENT

Worker-population ratio is an indicator which is used for analysing the employment situation in the country.

- This ratio is useful in knowing the proportion of population that is actively contributing to the production of goods and services of a country.
- If the ratio is higher, it means that the engagement of people is greater; if the ratio for a country is medium, or low, it means that a very high proportion of its population is not involved directly in economic activities.
- Population is defined as the total number of people who reside in a particular locality at a particular point of time.

$$\text{Worker-Population ratio} = \frac{\text{Total number of workers in India}}{\text{Total population in India}} \times 100$$

| GENDER | WORKER-POPULATION RATIO IN INDIA (2017-18) | | |
|--------|--|-------|-------|
| | RURAL | URBAN | TOTAL |
| MEN | 51.7 | 52.1 | 52.1 |
| WOMEN | 17.5 | 17.5 | 16.5 |
| TOTAL | 35.0 | 33.9 | 34.7 |

SOURCE-Data from Annual Reports, Ministry of Labour, Government of India, Delhi

In urban areas, the proportion is about 33.9% whereas in rural India, the ratio is about 35%. Reason for such a difference:

- **Rural areas** have limited resources to earn a higher income and participate more in the employment market. Many do not go to schools, colleges and other training institutions. Even if some go, they discontinue in the middle to join the workforce;
- **Urban areas**, a considerable section is able to study in various educational institutions. Urban people have a variety of employment opportunities. They look for the appropriate job to suit their qualifications and skills. In rural areas, people cannot stay at home as their economic condition may not allow them to do so.

Compared to females, more males are found to be working

- The difference in participation rates is very large in urban areas: for every 100 urban females, only about 14 are engaged in some economic activities. In rural areas, for every 100 rural women about 18 participate in the employment market.
- It is common to find that where men are able to earn high incomes, families discourage female members from taking up jobs.

Types of Labour

- **Self – Employed labour** – An arrangement in which a worker uses his own resources to make a living is known as self-employed. He owns and operates an enterprise to earn his livelihood.
- **Hired-Workers-** Those people who are hired by other on paid wages or salaries as a reward for their services are called hired workers. Hired workers can be of two types:
 - (I) **Casual Workers:** Those people who are not hired by their employers on a regular or permanent basis and do not get social security benefits are called casual workers.
 - (II) **Regular Workers:** These types of workers are hired on permanent basis by the employer.

SELF-EMPLOYED AND HIRED WORKERS:

| Distribution of Employment by Gender (2017-18) | | |
|--|--------------|----------------|
| | Male Workers | Female Workers |
| Self-employed | 52% | 52% |
| Regular Salaried Employees | 24% | 21% |
| Casual Wage Labourers | 24% | 27% |

SOURCE-Data from Annual Reports, Ministry of Labour, Government of India, Delhi

Let us take three workers from the construction industry –

- **A cement shop owner (Self–Employed labour)**-Workers who own and operate an enterprise to earn their livelihood are known as self-employed. Thus, the cement shop owner is self-employed. About 52% workforce in India belongs to this category.
- **A construction worker (Casual Workers)**- The construction workers are known as casual wage labourers; they account for **25%**of India’s workforce. Such labourers are casually engaged in others’ farms and, in return, get income for the work done.
- **A civil engineer (Regular Workers)**- of a construction company. Workers like the civil engineer working in the construction company account for **23%** of India’s workforce. When a worker is engaged by someone or an enterprise and paid his or her wages on a regular basis, they are known as regular salaried employees.
- **Salaried employment**, men are found to be so engaged in greater proportion. They form 18 percent whereas women form only 10 percent. One of the reasons could be skill requirement. Since regular salaried jobs require skills and a higher level of literacy, women might not have been engaged to a great extent.

Difference between formal and informal sector

| Sr. no. | Formal/Organised Sector | Informal/Unorganised Sector |
|---------|-------------------------|-----------------------------|
|---------|-------------------------|-----------------------------|

| | | |
|----|--|---|
| 1. | All the public sector establishments and those private sector establishments which employ 10 hired workers or more are called formal sector. | All the other than organised sector including self-employed are called informal sector. |
| 2. | Workers are entitled for social security benefits. Workers get regular income, Pension, paid holidays, medical benefits etc. | Workers are not entitled for social security benefits. Workers do not get regular income, Pension, paid holidays, medical benefits etc. |
| 3. | Protected from Labour laws and Trade unions | Not protected from Labour laws and trade unions. |

Informalisation of workforce refers to the situation when proportion of workforce in the informal sector tends to increase and that in the formal sector tends to decrease.

Indicators of Informalisation :

1. Absence of maternity benefits
2. Absence of provident fund
3. Absence of gratuity and pension.
4. Absence of equal salary for equal work in the private sector.
5. Absence of social security benefits, labour laws and trade unions. Etc.

Casualisation of the workforce is the situation where the percentage of casually hired workers in the total workforce tends to rise over time.

| Distribution of Employment by Region (2017-18) | | |
|--|---------------|---------------|
| | Rural Workers | Urban Workers |
| Self-employed | 58% | 47% |
| Regular Salaried Employees | 13% | 38% |
| Casual Wage Labourers | 29% | 15% |

SOURCE-Annual Report of Periodic Labour Force Survey 2017-18, National Statistical, NEW DELHI

EMPLOYMENT IN FIRMS, FACTORIES AND OFFICES

| Distribution of Workforce by Industry, 2017-2018 | | | | | |
|--|--------------------|-------|-------|--------|-------|
| Industrial Category | Place of Residence | | Sex | | TOTAL |
| | Rural | Urban | Male | Female | |
| Primary Sector | 59.8 | 6.6 | 40.7 | 57.1 | 44.6 |
| Secondary Sector | 20.4 | 34.3 | 26.5 | 26.5 | 24.4 |
| Tertiary/ Service Sector | 19.8 | 59.1 | 32.8 | 32.8 | 31.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

SOURCE-Annual Report of Periodic Labour Force Survey 2017-18, National Statistical, NEW DELHI

Growth and changing structure of employment.

- During the period 1950–2010, Gross Domestic Product (GDP) of India grew positively and was higher than the employment growth. However, there was always fluctuation in the growth of GDP. During this period, **employment grew at a stable rate of about 2 per cent.**
 - In 2010, out of about 29 million formal sector workers, about 18 million workers were employed by the public sector. Here also men form the majority, as women constitute only about one-sixth of the formal sector workforce.
 - We learnt that there are about 471 million (2017-2018) workers in the country. 7% from formal sector the rest 93 percent are in the informal sector.
 - Out of 29 million formal sector workers, only 6 million, that is, only 17 percent are women. In the informal sector, male workers account for 69 per cent of the workforce.
- Trends in Employment Pattern (Sector-wise and Status-wise), 2011-2018 (in %)

| SECTORS | 2011-12 | 2017-18 |
|-----------|---------|---------|
| PRIMARY | 48.9 | 44.6 |
| SECONDARY | 24.3 | 24.4 |
| SERVICES | 26.8 | 31.0 |
| TOTAL | 100.0 | 100.0 |

SOURCE-Annual Report of Periodic Labour Force Survey 2017-18, National Statistical, NEW DELHI
Trends in Employment Pattern (Sector-wise), 2011-2018 (in %)

| STATUS | 2011-12 | 2017-18 |
|-----------------------|---------|---------|
| Self-Employed Workers | 52 | 52.2 |
| Regular Workers | 18 | 22.8 |
| Casual Workers | 30 | 25.0 |
| TOTAL | 100.0 | 100.0 |

SOURCE-Annual Report of Periodic Labour Force Survey 2017-18, National Statistical, NEW DELHI

Define Unemployment.

- Unemployment refers to a situation where all able and willing persons may not find work.
- National Sample Survey Organisation's (NSSO) defines unemployment as a situation in which all those who, owing to lack of work, are not working.
- Economists define unemployed person as one who is not able to get employment of even one hour in a day.

Sources of data on unemployment

There are three sources of data on unemployment:-

- (I) Reports of Census of India,
- (II) NSSO Reports of Employment
- (III) Directorate General of Employment and Training Data of Registration with Employment Exchanges.

Nature Of Unemployment in India.

- **OPEN UNEMPLOYMENT** – It refers to that situation where in although they worker is willing to work and he has the necessary ability to work yet he does not get work. He remains unemployed for full time and fails to get any work casual or full time.
- **FRictional UNEMPLOYMENT** – Frictional unemployment is a temporary phenomenon. It results when some workers are temporarily out of work while changing jobs. It can also be due to strikes or lock outs.
- **STRUCTURAL UNEMPLOYMENT**– It is cause by the decline in demand for a product in a particular industry. it results in reduction in its man power requirement.
- **SEASONAL UNEMPLOYMENT** – It occurs in case of Agriculture, ice-cream factory woolen factories etc., which are seasonal occupation. They have busy seasons and they have stack seasons. In the off seasons, there is no work the result is seasonal unemployment.
- **DISGUISED/HIDDEN UNEMPLOYMENT**– It is a situation where workers are apparently employed but their marginal productivity is Zero or negative.

Adverse effects of unemployment

| Sr No | Economic effects | Social effect |
|-------|---|-----------------------------|
| 1 | Waste of human power | Creation of social problems |
| 2 | Increase in economic disparity | Exploitation of labour |
| 3 | Industrial conflicts | High inequality |
| 4 | Increase in poverty adverse effect on capital formation | Political instability |

Causes of unemployment in India

| SrNo | General Causes: | Specific Causes: |
|------|--------------------------------|------------------------------------|
| 1 | Rapid increase in population | Increase in pressure of population |
| 2 | Slow pace of development | Shortage of capital |
| 3 | Inadequate economic planning | Social status |
| 4 | Seasonal nature of agriculture | Shortage of secondary education |

Measures to eradicate unemployment in India

| General measures | Specific Measures | |
|---|--------------------|---|
| Control population | Rural unemployment | Industrialization in rural areas |
| Increase investment | | Diversification of farm activity |
| Manpower planning | | Increase Multiple cropping |
| Employment oriented planning | Urban unemployment | Practical form of education |
| Development of entrepreneur's qualities | | Fuller utilisation of production capacity |
| Employment generation program | | Investment in small scale industries |

CHAPTER-7 Environment and Sustainable development

Environment is defined as the total planetary inheritance and the totality of all resources.

It includes all biotic and abiotic factors that influence each other.

Functions and role of environment

- Environment supplies resources-renewable and non-renewable
- Environment sustains life by providing genetic and bio diversity
- Environment assimilates waste
- Environment enhance quality of life

Some concepts about environment:

- **Carrying capacity of Environment:** - It implies that the resources extraction is not above the rate of regeneration of the resources and the wastes generated are within the assimilating capacity of the Environment.
- **Absorptive capacity:** It means the ability of the environment to absorb degradation.
- **Renewable resources:** Those resources which can be used without the possibility of the resources becoming depleted or exhausted.
- **Non-renewable resources:** Those resources which get exhausted with extraction and use.

Global environment issues:

Global Warming

- **Global warming** is a gradual increase in the average temperature of the earth's lower atmosphere as a result of the increase in greenhouse gases since the Industrial Revolution.
- Global warming is human-induced.
- It is caused by man-made increases in carbon dioxide and other greenhouse gases through the burning of fossil fuels and deforestation.
- Some of the longer-term results of global warming are melting of polar ice with a resulting rise in sea level and coastal flooding, extinction of species, frequent tropical storms; and an increased incidence of tropical diseases.
- A UN Conference on Climate Change, held in Kyoto, Japan, in 1997, resulted in an international agreement to fight global warming and the goal of achieving "stabilization of greenhouse gas concentrations in the atmosphere."

Long term results of global warming

- Increase in atmospheric temperature

- Melting of polar ice caps which rises sea level and coastal flooding
- Disruption of drinking water
- Extinction of species
- Frequent tropical storms and tropical diseases.

Causes and effects of Ozone Depletion

- Ozone depletion refers to the phenomenon of reductions in the amount of ozone in the stratosphere.
- The problem of ozone depletion is caused by high levels of chlorine and bromine compounds in the stratosphere.
- The origins of these compounds are chlorofluorocarbons (CFC), used as cooling substances in air conditioners and refrigerators. As a result of depletion of the ozone layer, more ultraviolet (UV) radiation comes to Earth and causes damage to living organisms.
- UV radiation seems responsible for skin cancer in human beings.
- The Montreal Protocol is an international treaty designed to protect the ozone layer by phasing out the production of numerous substances believed to be responsible for ozone depletion. The treaty was opened for signature on September 16, 1987, and entered into force on January 1, 1989

Dichotomy of the threat to India's Environment

The threat to India's environment poses a dichotomy- threat of poverty induced environmental degradation and at the same time, threat of pollution from rapidly growing industrial sector.

Key Challenges to India's environment

Land degradation: Deterioration in the quality of land, its topsoil, vegetation, and/or water resources, caused usually by excessive or inappropriate exploitation.

Factors responsible of land degradation:

- Deforestation
- High use unsustainable fuel wood
- High fodder extraction and over extraction
- Shifting cultivation
- Encroachment into forest lands
- Forest fires
- Non-adoption of adequate soil conservation measures
- Improper crop rotation
- Over use of agro-chemicals (fertilizer and pesticides)

Chipko or Appiko movement.

- The first recorded event of Chipko however, took place in village Khejarli, Jodhpur district, in 1730 AD, when 363 Bishnois, led by Amrita Devi sacrificed their lives while protecting green Khejri trees, considered saved by the community by hugging them from the local ruler.
- The modern Chipko movement started in the early 1970s in the Garhwal Himalayas of Uttarakhand, took place on March 26, 1974, when a group of peasant women in Reni village, Hemwalghati, in Chamoli district, Uttarakhand, India, acted to prevent the cutting of trees and reclaim their traditional forest rights that were threatened by the contractor system of the state Forest Department.
- In 1987, the United Nations released the Brundtland Commission Report, which defines sustainable development as 'development which meets the needs of the present, without compromising the ability of future generations to meet their own needs.

Steps and strategies to achieve Sustainable development.

- Limiting the human population to a level of within carrying capacity of environment
- Input efficient techniques should be used
- Rate of extraction of renewable resources should not exceed rate of regeneration
- Control over pollution

- Encourage conservation of natural resources and necessary recycling
- Investment in renewable sources of energy such as solar, wind, etc.
- Avoiding the imposition of added costs or risks on future generations, etc.

Strategies for sustainable development in India

- Use of non-conventional sources of energy:
 - Tidal energy, solar energy, Biomass energy, Wind energy
- Use of LPG and Gobar gas in rural areas
- Use of CNG in urban areas for transportation
- Mini-hydel plants in mountainous regions
- Traditional knowledge and practices
 - Use of traditional treatment system- Ayurveda, Unani, folk system, etc.
 - Use of herbal medicinal properties
 - Use of traditional fertilizers
- Bio-composting
- Bio-pest control
 - Use of pesticides based on plant products-Neem Tulsi
 - Mixed cropping and growing different crops in following years on same land
 - Awareness spreading about various animals and birds which help in controlling pests- snakes, owls, peacocks, Lizards, etc

| |
|---|
| <h2>CHAPTER-8 COMPARATIVE DEVELOPMENT EXPERIENCES OF INDIA AND ITS NEIGHBOURS</h2> |
|---|

- Development Strategy of different countries reflects the integration of economic, social and environmental objectives of countries towards the maximization of human welfare etc.
- For the development of a country, it is required to form some Regional and Economic Groups like SAARC (The South Asian Association for Regional Cooperation), ASEAN (The Association of Southeast Asian Nations), European Union, G-7, G-8, G-20, BRICS etc.

DEVELOPMENTAL PATH-INDIA, CHINA AND PAKISTAN

- All the three nations- India, Pakistan and China have started towards their developmental path at the same time.
- India and Pakistan became independent nations in 1947.
- The People's Republic of China was established in 1949.
- The three countries had started their planning strategies in similar ways. India announced its first Five Year Plan for 1951–56
- Pakistan announced its first five-year plan, now called the Medium-Term Development Plan, in 1956.
- China announced its First Five Year Plan in 1953.
- India and Pakistan adopted similar strategies, such as creating a large public sector and raising public expenditure on social development.
- All the three countries had similar growth rates and per capita incomes till the 1980s.

China:

After the establishment of the People's Republic of China under one party rule, all critical sectors of the economy, enterprises and lands owned and operated by individuals were brought under government control.

The Great Leap Forward (GLF):

- Campaign initiated in 1958 aimed at industrializing the country. People were encouraged to set up industries in their backyards.
- **Commune system** - People collectively cultivated lands towards the welfare of members. In rural areas, communes were started.
- GLF got setback due to Famine (killed around 30 million people) in China and conflict with Russia.

The Great Proletarian Cultural Revolution:

- Mao Zedong introduced in 1965, under which students and professionals were sent to work and learn from the countryside.
- The present day fast industrial growth in China was the result of industrial reforms introduced in 1978.
- China introduced reforms in phases. In the initial phase, reforms were initiated in agriculture, foreign trade and investment sectors. In the later phase, reforms were initiated in the industrial sector.
- Enterprises owned by the government are known as State Owned Enterprises—SOEs. In India it is called Public Sector enterprises

Dual pricing: This means fixing the prices in two ways: farmers and industrial units were required to buy and sell fixed quantities of inputs and outputs on the basis of prices fixed by the government and the rest were purchased and sold at market prices.

- To attract foreign investors, **Special Economic Zones (SEZ)** were set up.
- SEZ is an area in a country that is subject to different economic regulation than other regions with in the same country.

PAKISTAN:

- Pakistan follows the mixed economy model with co-existence of public and private sector.
- Pakistan introduced import substitution-based industrialization. This policy combined tariff protection for manufacturing of consumer goods together with direct import controls on competing imports.
- In Pakistan nationalization of capital goods industries took place in the 1970s.
- In 1988, industrial reforms were initiated in the country which led to a favourable climate for new investments.

DEMOGRAPHIC INDICATORS (2017-18):

| Country | Estimated Population (in million) | Annual Growth of Population | Density (per sq. km.) | Sex Ratio | Fertility Rate | Urbanization |
|----------|-----------------------------------|-----------------------------|-----------------------|-----------|----------------|--------------|
| India | 1352 | 1.03 | 455 | 924 | 2.2 | 34 |
| China | 1393 | 0.46 | 148 | 949 | 1.7 | 59 |
| Pakistan | 212 | 2.05 | 275 | 943 | 3.6 | 37 |

- When compared to India, Pakistan, China's density is the lowest. Population growth is highest in Pakistan.
- **One child** norm introduced in China in the late 1970s as the major reason for low population growth. After a few decades in China, there will be more elderly people in proportion to young people. This led China to allow couples to have two children.
- The fertility rate is low in China and very high in Pakistan and Urbanization is high in China.

GROSS DOMESTIC PRODUCT AND SECTORS

Annual Growth of Gross Domestic Product (%) 2015-17

| Country | 1980-90 | 2015-17 | Remarks |
|----------|---------|---------|--|
| India | 5.7 | 7.3 | Growth rate increased |
| China | 10.3 | 6.8 | Growth rate decreased |
| Pakistan | 6.3 | 5.3 | Growth rate declined due to political instability and Economic crisis. |

- China has the second largest GDP (PPP) of \$22.5 trillion, India's GDP (PPP) is \$9.03 trillion and Pakistan's GDP is \$ 0.94 trillion roughly about 11 per cent of India's GDP. India's GDP is about 41 per cent of China's GDP. China was able to maintain near double-digit growth but now it is decreasing.
- In China due to topographic and climatic conditions, the area suitable for cultivation is relatively small. Government encouraged people to leave their fields and follow other activities such as handicrafts, commerce and transport etc.
- In both India and Pakistan, the contribution of agriculture to GVA was 16 and 24 per cent, respectively.

Sectoral Share of Employment and GVA (%) in 2018-2019

| Sector | Contribution to GVA | | | Distribution of Workforce | | |
|-------------|---------------------|-------|----------|---------------------------|-------|----------|
| | India | China | Pakistan | India | China | Pakistan |
| Agriculture | 16 | 7 | 24 | 43 | 26 | 41 |
| Industry | 30 | 41 | 19 | 25 | 28 | 24 |
| Services | 54 | 52 | 57 | 32 | 46 | 35 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |

- In China, manufacturing and service sectors contribute the highest to GDP at 41 and 52 per cent, respectively whereas in India and Pakistan, it is the service sector which contributes the highest by 54 and 57 percent of GDP respectively.
- China's growth is mainly contributed by the manufacturing and service sectors and India's growth by the service sector.

INDICATORS OF HUMAN DEVELOPMENT

Some Selected Indicators of Human Development, 2017-2019

| Items | India | China | Pakistan |
|---|---------------------------|---------------------------|---------------------------|
| Human Development Index (HDI) | 0.645 | 0.761 | 0.557 |
| Rank (based on HDI) | 130 | 87 | 154 |
| Life Expectancy at Birth (years) | 69.7 | 76.9 | 67.3 |
| Mean years of Schooling (%aged 15 and above) | 6.5 | 8.1 | 5.2 |
| Gross National Income per capita (PPP US\$) | 6681 | 16057 | 5005 |
| Percentage of People living Below Line (National) | 21.9* (for the year 2011) | 1.7** (for the year 2015) | 24.3* (for the year 2011) |
| Infant Mortality Rate (per 1000 live births) | 29.9 | 7.4 | 57.2 |
| Maternal Mortality Rate (per 1 lakh births) | 133 | 29 | 140 |
| Population using at least basic Sanitation (%) | 60 | 75 | 60 |
| Population using at least basic drinking Water Source (%) | 93 | 96 | 91 |

| | | | |
|---------------------------------------|------|-----|------|
| Percentage of Undernourished Children | 37.9 | 8.1 | 37.6 |
|---------------------------------------|------|-----|------|

- China is moving ahead of India and Pakistan. This is true for many indicators — income indicators such as GDP per capita, or proportion of population below poverty line or health indicators such as mortality rates, access to sanitation, literacy, life expectancy or malnourishment.
- China and Pakistan are ahead of India in reducing the proportion of people below the poverty line and also their performance in sanitation.
- In China, for one lakh births, only 29 women die whereas in India and Pakistan, about 133 and 140 women die respectively.

DEVELOPMENT STRATEGIES — AN APPRAISAL

- The reforms were initiated in China in 1978, Pakistan in 1988 and India in 1991.
- **China** did not have any compulsion to introduce reforms as dictated by the World Bank and International Monetary Fund to India and Pakistan. Maoist vision of economic development based on decentralization, self-sufficiency and shunning of foreign technology, goods and capital had failed.
- In China, establishment of infrastructure in the areas of education, health, land reforms, long existence of decentralized planning and existence of small enterprises helped positively in improving the social and income indicators in the post-reform period.
- Experts point out that in China, each reform measure was first implemented at a smaller level and then extended on a massive scale.
- **In Pakistan**, scholars argued that the reform process led to worsening of all the economic indicators. It was very clear that compared to the 1980s, the growth rate of GDP and its sectoral constituents have fallen in the 1990s.
- The reasons for the slow-down of growth and re-emergence of poverty in Pakistan's economy, was that, agricultural growth and food supply situation were based not on an institutionalized process of technical change but on good harvest. When there was a good harvest, the economy was in good condition, when it was not, the economic indicators showed stagnation or negative trends.
- During the last few years, Pakistan has recovered its economic growth and has been sustaining. Agriculture recorded growth rate far from satisfactory level, industrial and service sectors grew at 6.8 and 5.7 per cent respectively.