



MEASI
Institute of Management

**SECURITY ANALYSIS AND PORTFOLIO
MANAGEMENT –534E7B**

STUDY MATERIAL

IIIrd SEMESTER (FULL TIME)

Batch 2024-2026

***MASTER OF BUSINESS ADMINISTRATION
UNIVERSITY OF MADRAS***



VISION & MISSION STATEMENTS

VISION

To be an oasis of knowledge to the seeker, to nurture one's creativity and research acumen, and to instil a unique blend of leadership, innovative spirit and empathy in response to the ever-evolving business ecosystem.

MISSION

- Provide a pedagogy that blends academic rigor and experiential learning.
- Inculcate an entrepreneurial mindset through curated activities.
- Establish a conducive environment for research.
- Foster a culture of innovation and collaboration to progress in a dynamic business landscape.
- Promote humanistic values to produce socially responsible leaders.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

PEO 1 – Employability

To develop students with industry specific knowledge & skills to meet the industry requirements and also join public sector undertaking through competitive examinations.

PEO 2 - Entrepreneur

To create effective business service owners, with a growth mindset by enhancing their critical thinking, problem solving and decision-making skills.

PEO3 – Research and Development To instil and grow a mindset that focusses efforts towards inculcating and encouraging the students in the field research and development.

PEO 4 – Contribution to Business World

To produce ethical and innovative business professionals to enhance growth of the business world.

PEO 5 – Contribution to the Society:To work and contribute towards holistic development of society by producing competent MBA professionals.

PROGRAM OUTCOMES

PO1: Problem Solving Skill

Application of tools & techniques relevant to management theories and practices in analyzing & solving business problems.

PO2: Decision Making Skill

Fostering analytical and critical thinking abilities for data-based decision making.



PO3: Ethical Value

Ability to develop value based leadership attributes.

PO4: Communication Skill

Ability to understand, analyze and effectively communicate global, economic, legal and ethical aspects of business.

PO5: Individual and Team Leadership Skill

Ability to be self-motivated in leading & driving a team towards achievement of organizational goals and contributing effectively to establish industrial harmony.

PO6: Employability Skill

Foster and enhance employability skills through relevant industry subject knowledge.

PO7: Entrepreneurial Skill

Equipped with skills and competencies to become a global entrepreneur.

PO8: Contribution to Society

Strive towards becoming a global influencer and motivating future generation towards building a legacy that contributes to overall growth of humankind.

| Subject Code | Subject Name | Category | L | T | P | O | Credits | Inst. Hours | Marks | | |
|--------------------------|--|----------|---|---|---|---|---------|-------------|-------|----------|-------|
| | | | | | | | | | CIA | External | Total |
| 934E907B | Security Analysis and Portfolio Management | Elective | 3 | - | - | 1 | 3 | 3 | 25 | 75 | 100 |
| Course Objectives | | | | | | | | | | | |
| C1 | To provide insight about the relationship of the risk and return and how risk should be measured to bring about a return according to the expectations of the investors in investment avenues and securities market. | | | | | | | | | | |
| C2 | To provide an overview of the operation of the securities markets and the mechanics of trading securities in stock exchanges. | | | | | | | | | | |
| C3 | To ensure acquaintance of in-depth understanding of fundamental analysis tools to make optimum investment decision. | | | | | | | | | | |
| C4 | To analyze stock price behavior in market, that is affected by various factors by calculating various technical indicators using Technical Analysis. | | | | | | | | | | |
| C5 | To enable the students with a basic introduction to portfolio theory and study various methods of modeling the risk associated with stock investment. | | | | | | | | | | |



| UNIT | Details | No. of Hours | Course Objectives |
|------------------------|--|-------------------------|-------------------|
| I | Investment - Concept of investment-importance-alternate forms of investment-LIC schemes-bank deposits-government securities-mutual fund schemes-post office schemes-provident fund-company deposits-real estate- Gold and Silver- Growth adjusted value investing strategy; G-Secs; P-note investments. Concepts of risk and return, measurement of risk is measured in terms of standard deviation and variance, the relationship between risk and return. | 9 | C1 |
| II | Securities Market - Investment Environment; Financial Market - Segments – Types - Participants in financial Market – Regulatory Environment, Primary Market – Methods of floating new issues, Book building – Role of primary market – Regulation of primary market, Stock exchanges in India – BSE, OTCEI, NSE, ISE, and Regulations of stock exchanges – Trading system in stock exchanges – SEBI. ESG, Stop loss, Fat finger trades, circuit breaker, T+1 and T+2 settlement, Funding of Social Sector; open interest volume and prices; free float in listed companies; Algo trading; Block Chain Technology. | 9 | C2 |
| III | Fundamental Analysis - Economic Analysis – Forecasting techniques. Industry Analysis; Industry classification, Industry life cycle – Company Analysis. Measuring Earnings – Forecasting Earnings – Applied Valuation Techniques – Graham and Dodds investor ratios. | 9 | C3 |
| IV | Technical Analysis - Fundamental Analysis Vs Technical Analysis – Charting methods – Market Indicators. Trend –Trend reversals – Patterns - Moving Average – Exponential moving Average – Oscillators – Market Indicators – Efficient Market theory. | 9 | C4 |
| V | Portfolio Management - Portfolio analysis –Portfolio Selection –Capital Asset Pricing model – Portfolio Revision –Portfolio Evaluation | 9 | C5 |
| Total | | 45 | |
| Course Outcomes | | | |
| Course Outcomes | On completion of this course, students will; | Program Outcomes | |



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| | | |
|-------------------------|---|--------------------|
| CO1 | Ability to understand the role of Risk Return propositions in securities analysis such as fixed income securities, preference shares and ordinary shares. | PO2, PO6, PO7 |
| CO2 | Knowledge on apprehend role, functions and key players in the securities market and understand the trading system of the stock market | PO2, PO4, PO6, PO7 |
| CO3 | Knowledge to execute better investment decisions by analyzing Economic, Industry and Company factors with the help of fundamental analysis techniques. | PO2, PO4, PO7, PO8 |
| CO4 | Clarity to identify the stock price movements and its behavior with the help of technical analysis techniques. | PO4, PO6 PO7 |
| CO5 | Understanding on the benefit of diversification of holding a portfolio of assets, and the importance played by the market portfolio. | PO6, PO7 |
| Reading List | | |
| 1. | Falguni, H. Pandya, Security Analysis and Portfolio Management, PHI Learning, 2015 | |
| 2. | Ambika Prasad Dash, Security Analysis and Portfolio Management, I.K. International, 2009 | |
| 3. | The Journal of Portfolio Management, Springer | |
| 4. | Financial Markets and Portfolio Management, Scimago Journal and Country Rank | |
| References Books | | |
| 1. | Kevin, S., Security Analysis and Portfolio Management, PHI Learning, Second Edition, 2015. | |
| 2. | Prasanna Chandra, P., Investment Analysis and Portfolio Management, Tata McGraw-Hill Education, 5th Edition, 2017. | |
| 3. | Donald E. Fischer & Ronald J. Jordan, Security Analysis & Portfolio Management, PHI Learning., New Delhi, 8th edition, 2018. | |
| 4. | Khatri, D.K., Security Analysis and Portfolio Management, Macmillan Publishers India, First Edition, 2014. | |
| 5. | Ranganathan, M. and Madhumathi, R., Security Analysis and Portfolio Management, 2ndEdition, Pearson, 2015. | |
| 6. | Reilly, F. and Brown, K. C., Analysis of Investments and Portfolio Management, Cengage Learning, 11th Edition, 2019. | |



UNIT- I

INTRODUCTION TO INVESTMENT ANALYSIS

Structure:

1. Introduction
2. Investment Avenues
3. Security & its valuation
4. Evaluation of fixed income securities
5. Evaluation of ordinary shares

PART- A (ONE MARKS)

Investment:

- It is the employment of funds on asset with aim of earning income or capital appreciation. It means use the money in the hope of making more money.
- It means laying out the money \ capital in an enterprise with the expectation of profit.

Investor:

- Investor is a person or group of people who have undertaken the activity of allocating the surplus funds \ money in any financial asset.
- He is a person who sacrifices their present consumption for future growth.

Speculator:

- One who invests with the expectation that an event will occur to increase the value of the investment. It means taking up business risk in the hope of getting short term gain.

| Investor | Speculator |
|---|--|
| 1. An investor is a person who sacrifice s their present consumption for future growth. | It means taking up business risk in the hope of getting short term gain. |
| 2.He plans for long period | Short period |
| 3.He assumes moderate risk | High risk |
| 4.He likes to have moderate rate of return | High rate of return |
| 5.investor have ideas about the performance of the company | No ideas. |
| 6. Uses his own funds. | Borrowed funds. |
| 7.Its holding period may be from one to few year | Few days to months |



| Individual Investors | Institutional investors |
|---|--|
| 1. An investor is a person individual or a particular person who invest their money in the prescribed investment modes. | An investor who collectively forms a group or an organization for the purpose of investment is called Institutional investors. |
| 2. Individual defines risk as losing money. | Institutions define risk in terms of standard deviation of return. |
| 3. Individual can be categories by their personalities. | Institutions can be categorized by their investment characteristics of their beneficiaries. |
| 4. Individuals enjoy great freedom to invest the way they want. | Institutions are subject to various legal constraints. |
| 5.. Taxes often matter a great deal for individual investors. | Institutions such as mutual funds, pension funds and insurance companies are tax exempt entities. |

Gambling:

- It is the activity or practice of playing at a game of chance for money or other stakes.

Money market:

- It is the global financial market for short-term borrowing and lending.
- It is debt instruments which have a maturity of less than one year are called money market.

Security:

- According to the securities contracts regulation act 1956, securities include shares, scrip's, stocks, bonds, debentures or fixed income securities or other marketable like securities of any incorporate company.
- It is a negotiable instrument representing financial value& it is representing by a certificate or by electronic book entry.

Security Analysis:

- The entire process of estimating the return and risk for individual securities is called security analysis.

Corporate Securities:

- They are securities issued by Joint Stock Companies in the private Sector which included Debentures, Equity Shares, and Preference shares.

Government Securities:

- A government security is a bond or other type of debt obligation that is issued by a government with a promise of repayment upon the security's maturity date.



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Par value\ Face value:

- This value is stated on the face of the bond. It is the amount which the firms borrows and promises to pay at the time of maturity.
- Usually a debentures or bonds have a face value of RS10\ 100.

Interest rate\coupon rate:

- The debentures or bonds carry a fixed interest rate.
- It is also known as the coupon rate. It is payable at this rate on the face value of the debentures.

Spot Interest Rate:

- It is the annual rate of return on a bond that has only one cash inflow to the investor.

Maturity period:

- This refers to the period after which the money raised on account of debentures or bonds will be repaid to the debentures holders.

Yield to maturity (YTM):

- It is the single discount factor that makes present value of future cash flows from a bond equal to the current price of the bonds.

Yield to call (YTC):

- It is a measure of the yield of a bond if you were to hold it until the call date.

Going Concern value:

- It a value that makes the business to earn profit in future.
- It refers to the value of the business as an operating, performing and running unit.

Book value:

- It is based on value stated in the books of records.
- It is an accounting concept and historical in natures.
- It is the net worth of the company as decided by the number of shares outstanding.

$$BV = \frac{\text{equity capital} + \text{free reserves (OR) Net worth}}{\text{No of shares outstanding}}$$

Intrinsic value:

- It is a value in which a company brings more profit in future to investors.
- It is the actual value of a company such as brand name, trademarks and copyrights.
- It is the present value of the stream of cash flow expected from an asset.

Market value:

- It is the price at which the security is traded in the market.
- It is the price that gets settled by the forces of demand and supply.
- It is given by
 $MV = \text{earnings} \backslash \text{discount rate.}$



Liquidating Value / Break down value:

- It represents the net difference between the realizable value of all assets and the sum total of external liabilities.

Capitalised Value:

- It is the assessment of the value of an asset, based on the total income expected to be realized over its economic life span.

Coupon \ Nominal yield:

- It is simply the coupon payment (C) as a percentage of the face (F).
- It is given
$$\text{Coupon yield} = C / F$$

Current yield:

- It is simply the coupon payment (C) as a percentage of the bond price (P).
- It is given by
$$\text{Current yield} = C / P_0.$$

Duration of bonds:

- It represents the length of time that elapses, before the average rupees of present value from the bond are received.
- It measures the interest rate sensitivity of a bond.
- It is a useful tool for immunizing against interest rate risk.
- It posses the properties as higher coupon result in shorter duration.

Bond valuation:

- It is the process of determining the fair price of a bond.
- It is determined by discounting the bond's expected cash flows to the present using the appropriate discount rate.

Bond valuation theorems:

The concept of current yield is closely related to other bond concepts, including yield to maturity, and coupon yield. The relationship between yield to maturity and coupon rate is as follows:

- When a bond sells at a discount, $YTM > \text{current yield} > \text{coupon yield}$.
- When a bond sells at a premium, $\text{coupon yield} > \text{current yield} > YTM$.
- When a bond sells at par, $YTM = \text{current yield} = \text{coupon yield}$.

Preference shares\ Hybrid Security:

- They are those which carry the following preferential rights over classes of shares.
 - a. A preferential right in respect of a fixed dividend. It may consist of a fixed amount.
 - b. A preferential right as to repayment of capital in the case of winding up of the company.
- It is known as a **hybrid security**, since it has many features of both debentures and common shares.



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Equity shares\ Common Stock \ Ordinary stock:

- Equity shares are those shares which are ordinary in the course of company business.
- These shares are preferred by persons who prefer risk to better return
- These share holders do not enjoy preference regarding payment of dividend and repayment of capital.

Authorized capital:

- The maximum value of shares as specified in the memorandum of association of the company is called the authorized\ registered\ nominal capital.

Subscribed capital:

- In cases shares offered for public subscription is not taken up, the portion of capital subscribed is called subscribed capital. This is less than the issued capital.

Paid –up capital:

- The part of the capital that has been subscribed to by the investors is called the paid up capital.

Issued capital:

- The amount offered by the company to the investors is called issued capital.

Time value of money\ Return:

- The time value of money is that the rupees received today is more valuable than a rupees received tomorrow.
- It makes the rupees invested today grow more than rupees in future. To quantify this concept mathematically, compounding and discounting principles are used.

Voting Rights:

- It is the right of a common stock shareholder to vote in person or by proxy for members of the board of directors and other matters of corporate policy

Risk Averse:

- A risk adverse investor is an investor who prefers lower returns with known risks rather than higher returns with unknown risks.

Risk Seekers:

- Investors who are open to risk seeking which means they may invest in a company that poses a risk, but has the potential of a high earnings return.

Risk Neutrals:

- Neutrals are those who do not care much about the investment.
- A situation in which an investor effectively ignores risk in making investment decisions.



PART- B (5 MARKS)

1. Explain the objectivities \Characteristic and Qualities required for Successful investment?

Investment:

- It is the employment of funds on asset with aim of earning income or capital appreciation. It means use the money in the hope of making more money.
- It means laying out the money \ capital in an enterprise with the expectation of profit.

Characteristic \ objects of investment:

- Return
- Risk
- Safety
- Liquidity
- Uncertainty
- Tax planning

Qualities required for successful Investment:

(I) Contrary thinking:

- Investor should have herd mentality.
- Investor should follow the crowd.
- Investor should have own judgments.

(II) Patience:

- It is distributed among investors. Young investors look for instaneous results and often check prices on daily basis.
- Old investors have high degree of patience.
- Investor should have careful attention.

(III) Composure:

- Investor should try to understand own impulses and instinct towards greed and fear.
- Surmount these emotions that can shape your judgments.
- Capitalize on the greed and fear of other investors.

(IV) Flexibility and Openness:

- Due to macroeconomic condition changes, new technologies, consumer taste, preference shift, investor habit changes.
- Investor should be flexible in nature and have open mind.

(V) Decisiveness:

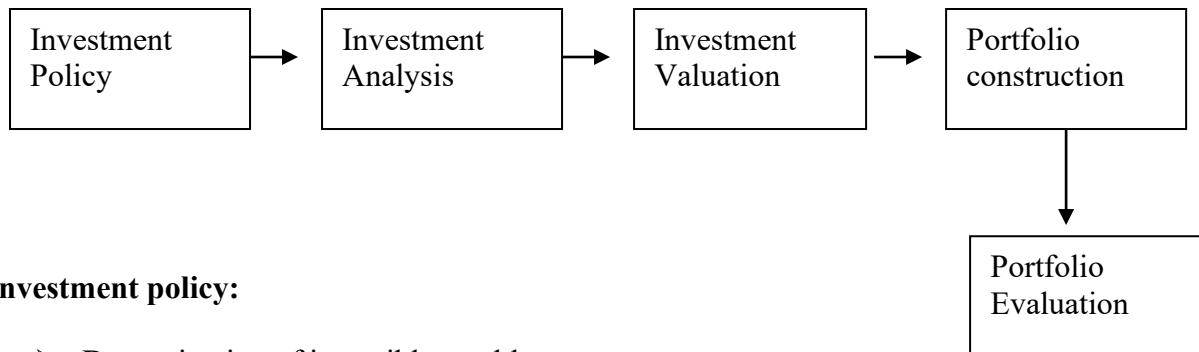
- Investor should take valuable decision.
- To succeed in the investing game, investor should follow the above qualities.



2. Explain the steps involved in investment process?

Investment process:

It is a series of activities leading to purchase of securities and other alternatives investments.



Investment policy:

- Determination of ingestible wealth.
- Determination of portfolio objectives.
- Identifications of potential investments assets.
- Consideration of attributes of investment assets.

Investment Analysis:

- Equity stock analysis
- Debentures and bond analysis
- Analysis of economy
- Screening of Industry analysis.
- Screening of Company analysis.

Investment Valuation:

- Valuation of stock
- Valuation of debentures and bonds
- Valuation of other assets

Portfolio construction:

- Determination of diversification level
- Consideration of investment timing
- Selection of investment assets
- Allocation of ingestible wealth to investment assets.

Portfolio Evaluation:

- Portfolio Appraisal
- Portfolio revision



3. Explain the source of investment information for investor in modern scenario?

Source of Investment information:

The source of information varies with the types of information required.

1. International Affairs:

- With increasing globalization, international events affect the economy of the nations.
- The international events are provided by foreign journals like London economist, Far East Economic Review and Indian magazines like business world & Fortune India review the international events.
- International financial institution like IMF, World Bank and Asian Development Bank publish their own survey periodically.

2. National Affairs:

- The growth of the national economy and political events within the nation influence the investment decisions.
- The political events are provided by the newspaper, magazines like India today, Outlook & Fortune India.
- The economic events and their implications on the securities market are analyzed in Financial Express, Economic Times & Business lines.
- RBI bulletin and annual reports give a wide range of information regarding macro economic indicators like GDP, GNP, inflation, agriculture, industrial production, capital market & balance of payment.

3. Industry information:

- Information about the industry is required to identify the industries that perform better than the national economy as a whole.
- Financial newspapers regularly bring out industries studies for the benefit of investor.
- Experts opinion about are available in Business India, Business Today and Dalal Street.
- Centre for Monitoring Indian Economy also publishes data regarding the industries.

4. Company information:

- Almost all the financial journals carry out the company analysis.
- The Annual reports of the companies and the unaudited quarterly results provide an insight into the performance of the company.
- Kotharis Economic and industry guide of India gives relevant financial information about the public limited companies.

5. Stock market Information:

- All the financial dailies and investment related magazines publish the stock market news.
- Separate news bulletins are issued by the BSE, NSE, and OTCEI providing information regarding the changes that takes place in the stock market



4. Explain the different types of DEBENTURES \ BONDS? Also distinguish between Bonds and Equity shares?

Bond market:

The bond market or debt or credit or fixed income market is a financial market where participants buy and sell debt, securities in the form of bonds.

Bonds:

- It is a debt security, in which the authorized issuer owes the holders a debt and is obliged to repay the principal and interest at a later date, termed maturity.
- It is simply a loan in the form of a security with different terminology.

| | | |
|---------------|---|----------|
| ➤ Issuer | = | borrower |
| ➤ Bond holder | = | lender |
| ➤ Coupon | = | interest |

Types of bonds\ Debentures:

1. Redeemable and Irredeemable bonds:

- It is a bond which has been issued for a certain period on the expiry of which its holder will be repaid the amount with or without premium.
- On the other hand, it may be repaid in the event of the winding up of the company.

2. Income bonds:

- They are bonds on which the payment of interest is mandatory only to the extent of current earnings.

3. Joint bonds:

- They are loan certificates that are jointly secured by two or more companies.

4. Assumed bonds:

- They are issues in respect of a company that has been acquired by another way of merger or a result of the organization

5. Fixed rate bonds:

- They have a coupon that remains constant throughout the life of the bond.

6. Sub-sovereign government bonds:

- It is known in the U.S. as municipal bonds;
- Represent the debt of state, provincial, territorial, municipal or other governmental units other than sovereign governments.

7. Supranational bonds:

- Represent the debt of international organizations such as the World Bank, the International Monetary Fund, regional multilateral development banks and others.

8. Fixed rate bond:

- It is a bond with a fixed interest rate, as opposed to a floating rate note. A fixed rate bond is a long term debt paper that carries a predetermined interest rate. The interest rate is known as coupon rate and interest is payable at specified dates before bond maturity.



9. Zero coupon bonds:

- It is also called **discount bond** or **deep discount bond** .
- It is a bond bought at a price lower than its face value, with the face value repaid at the time of maturity.
- It does not make periodic interest payments, or so-called "coupons," hence the term zero coupon bond. They do not pay any interest.
- Example: U.S. Treasury bills, U.S. savings bonds

10. Convertible bonds:

- It gives the bond holder the right option to convert them into equity shares on certain terms.

11. Floating rate bonds:

- It pays an interest rate that is linked to a bench rate such as the Treasury bill interest rate.

12. Corporate Bond:

- It is a bond issued by a corporation.
- The term is usually applied to longer-term debt instruments, generally with a maturity date falling at least a year after their issue date.

Equity shares\ Common Stock \ Ordinary stock:

- Equity shares are those shares which are ordinary in the course of company business.
- These shares are preferred by persons who prefer risk to better return

| Bonds\ debentures | Equity shares |
|--|---|
| 1. It is a document issued by a company as an evidence of a debt due from the company with or without a charge on the assets of the company. | It is a share which are preferred by persons who prefer risk to better return |
| 2. It constitute loan to the company. | They are a part of the capital of the company |
| 3. Debentures holders are creditors of the company. | Share holders are owners of the company |
| 4. Payment of fixed interest on debentures will be given to the Debentures holders. | Payment of dividend will be given to the share holder. |
| 5. Interest on debentures is payable whether there are profit or not. | Dividend on shares is paid only when the company has earned profits. |
| 6. Debentures have a maturity date. | Shares do not have a maturity date |
| 7. Debentures holders do not carry voting rights. | Shares holders enjoy voting rights in the meeting. |
| 8. Debentures cab be issued at a discount | Shares cannot be issued at a discount. |



5. Describe the features, merits and types of Preference Shares?

PREFERENCE SHARES:

They are those which carry the following preferential rights over classes of shares:

- A preferential right in respect of a fixed dividend. It may consist of a fixed amount.
- A preferential right as to repayment of capital in the case of winding up of the company.

It is known as a **hybrid security**, since it has many features of both debentures and common shares.

Advantages:

- It saves the company from paying higher rate of interest.
- It does not create any sort of charge against assets of the company.
- They are useful for those investors who want fixed return with lower risk.
- Finance through preference share is less costly than equity shares.

Disadvantages:

- Non deductibility
- Commitment to pay dividend.

Features of Preference shares:

It is similar to debenture in the following ways:

- Interest rate is fixed.
- Preference shares holders do not share in the residual earnings.
- Preference shares holders have claims on income and asset prior to common share holders.
- Preference shares holders do not have voting rights.

It is similar to equity share in the following ways

- Dividend are not deductible for tax purposes
- Non payment of dividend does not force the company to insolvency.
- It has no fixed maturity date.



Features of Preference Shares:

1. Dividends
2. Voting rights
3. Right on assets
4. Pre-emptive right
5. convertibility
6. hybrid security

Types of Preference shares:

Participating preference shares: - This type of preferred stock allows the possibility of additional dividend above the stated amount under certain conditions

Non- Participating preference shares: shares do not enjoy the right to participate in surplus profits.

Cumulative preference shares: shares where the arrears of dividends in times of no and lean profits can be accumulated and paid in the year in which the company earns good profits.

Non -Cumulative preference shares: shares where the carry forward of the arrears of dividend is not possible.

Redeemable preference share: shares that are to be repaid at the end of the term of issue. Only fully paid shares are redeemed.

Convertible preferred share: This type of preferred stock carries the option to convert into a common stock at a prescribed price.

Exchangeable preferred share: This type of preferred stock carries the option to be exchanged for some other security upon certain conditions.

Perpetual preferred share: This type of preferred stock has no fixed date on which invested capital will be returned to the shareholder, although there will always be redemption privileges held by the corporation. Most preferred stock is issued without a set redemption date.

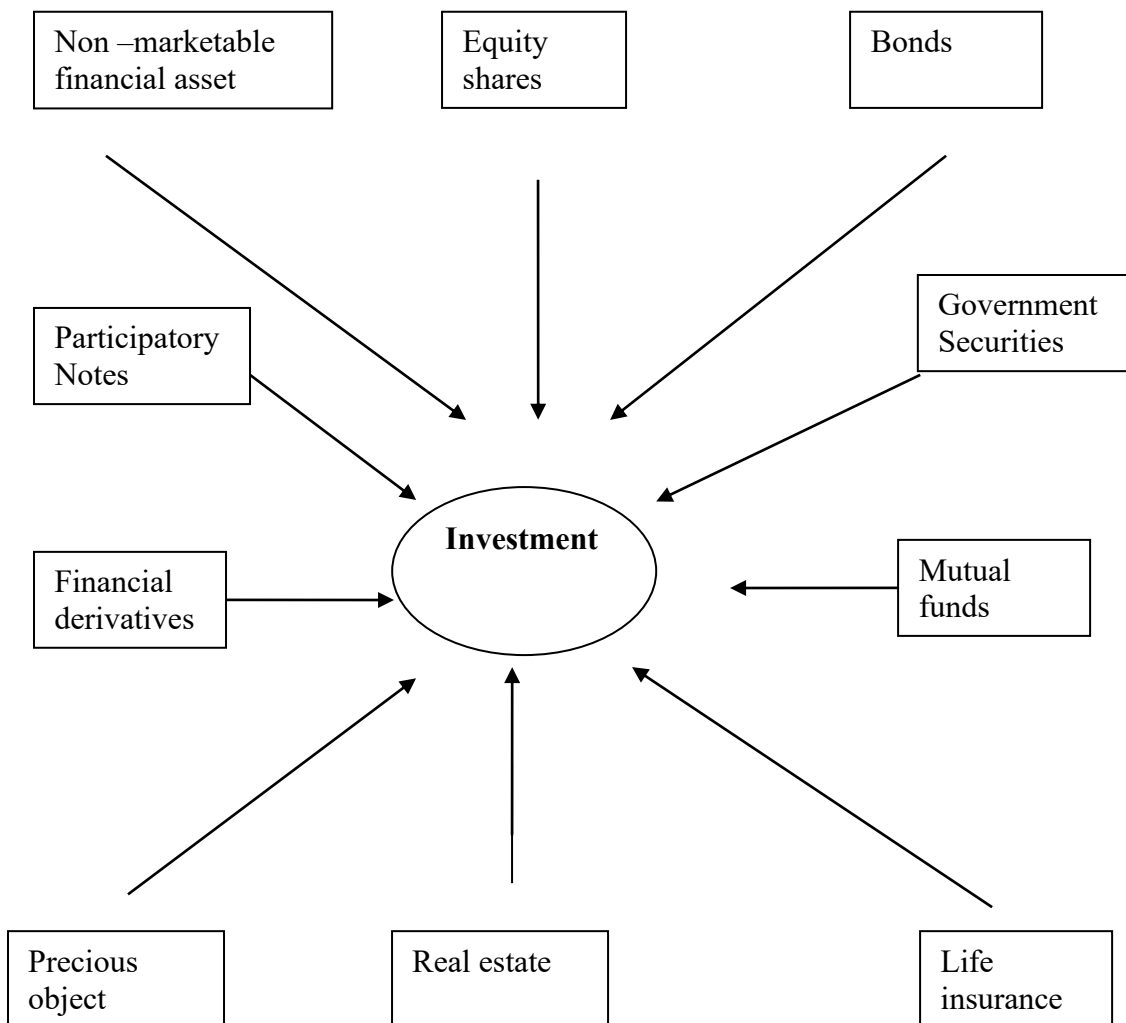


PART- C (10 MARKS)

1. Explain the different Investment avenues? \ Explain the features of Investment Avenues/Options?
INVESTMENT:

- It means laying out the money in an enterprise with the expectation of profit.
- It is the commitment of the funds made in the expectation of some positive rate of return.

INVESTMENT AVENUES/OPTIONS:



1. Non-marketable financial asset:

A good portion of financial assets is represented by non marketable assets. These can be classified into the following broad categories. Example, when you open a saving account, you know the bank manager personally. In contract to equity shares, and you don't know the seller.

- A. BANK DEPOSITS**
- B. POST OFFICE DEPOSITS**
- C. COMPANY DEPOSITS**
- D. PROVIDENT FUND DEPOSITS**



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A. BANK DEPOSITS

- An amount of money held at a financial institution on behalf of an account holder for safekeeping.
- These deposits are made to deposit accounts such as
 - a. savings account
 - b. current account
 - c. Fixed Deposit
 - d. Recurring Deposit

B. POST OFFICE DEPOSITS

- It is the deposit scheme offered by the department of post on which fixed interest is paid.
- The individual investors deposit a good portion of their financial assets in a postal savings account in order to earn a fixed rate of interest on the investments.
- The various schemes offered by department of post are
 - a. Kisas Vikas Patra
 - b. Sukanya Samridhhi Accounts
 - c. National Saving certificates
 - d. Post office Deposit Schemes
 - e. Senior Citizen Savings Scheme
 - f. 5-Year Post Office Recurring Deposit Account

C. COMPANY DEPOSITS

- The deposit placed by investors with companies for a fixed term carrying a prescribed rate of interest is called Company Fixed Deposit.
- Financial institutions and Non-Banking Finance Companies (NBFCs) also accept such deposits.
- Example: Shriram Transport finance company limited, PNB Housing finance limited, LIC housing finance limited, Sundaram Finance and Mahindra Finance.

D. PROVIDENT FUND DEPOSITS

- Provident fund schemes are compulsory deposit schemes applicable to employees in the public & private sector.
- There are three kinds of provident funds namely
 - a. Statutory Provident fund
 - b. Recognized Provident fund
 - c. Unrecognized Provident fund

2. Equity Shares:

These are shares which are not preference shares. They do not carry any preferential right. These shares are preferred by persons who prefer risk to better return. It represents ownership capital. This essentially means that you have a residual interest in income and wealth. Equity shares are classified into broad categories:

- Blue chip shares
- Growth shares
- Income shares
- Cyclical shares
- Speculative shares



3. Bonds:

Bonds or Debentures represents long term debt instruments. The issuer of a bond promises to pay a stipulated stream of cash flows. Bonds can be classified into the following categories:

- Government securities
- Debentures of private sector companies
- Government agency securities
- Government of India relief bonds

4. Mutual funds:

It is a financial service organization that receives money from shareholders, invests it, earns returns on it, attempts to make it grow and agrees to pay the shareholder cash on demand for the current value of his investment. Instead of directly buying equity shares, you can participate in various schemes floated by mutual funds which in turn invest in equity shares. These are three broad types of mutual funds schemes:

- Equity schemes
- Debt schemes
- Balance schemes

5. Life Insurance policies:

It is a kind of spreading of risks of a few persons to more number of people to more number of people so that loss suffered will be negligible. They are protecting and savings. In order to migrate losses, insurances play a major role. The important types of policies in India:

- Endowment assurance policy
- Money back policy
- Whole life policy
- Premium back term assurance policy

6. Real estate:

The most important asset for individual investors is generally a residential house. It represents an attractive investment proposition. In addition to these the most affluent investors are likely to be interested in the following types of real estate:

- Agricultural land
- Semi-urban land
- Commercial property
- Time share in a holiday resort

7. Precious objects:

Precious objects are in terms that are generally small in size but highly valuable in monetary terms. Some important precious objects are:

- Gold and Silver
- Precious stones
- Art objects
- Paintings
- Antiques



8. Financial Derivatives:

A financial derivative is an instrument whose value is derived from the value of an underlying asset. The main types of derivatives are futures, forwards, options, and swaps. Derivative products are financial products which are used to control risk or paradoxically exploit risk. It is also called financial economics. It may be viewed as a side bet on the asset. The most important financial derivatives from the point of view of investors are:

- Options
- Futures

9. Money market Instruments:

Debt instruments which have a maturity of less than one year at the time of issue are called money market instruments. These instruments are highly liquid and have negligible risk.

A. Certificate of Deposits:

- A marketable document of title deposit for a specified period may be referred to as a certificate of deposit.
- It is a short term deposits which are transferred from one party to another party.
- Its maturity period varies from 3 months to 1 year.

B. Treasury Bills:

- It is an instrument that do not pay interest rates
- T-bills are 28 days, 91 days, 364 days.
- Its maturity period varies from 6 to 12 months.

C. Commercial Paper:

- Debt instruments that are issued by corporate houses for raising short term financial resources from the money market are called commercial houses.
- It is one which is issued by a leading commercial house and it will enable businessman to borrow money in the market.
- Its maturity period from 90 to 180 days.

10. Participatory Note:

- A participatory note, commonly known as a P-note or PN, is an instrument issued by a registered foreign institutional investor (FII) to an overseas investor who wishes to invest in Indian stock markets without registering themselves with the market regulator, the Securities and Exchange Board of India

11. G-Secs:

- Government Securities (G-Secs) are tradable debt instruments issued by the Central or State governments in order to borrow money from the public to finance their fiscal deficit.



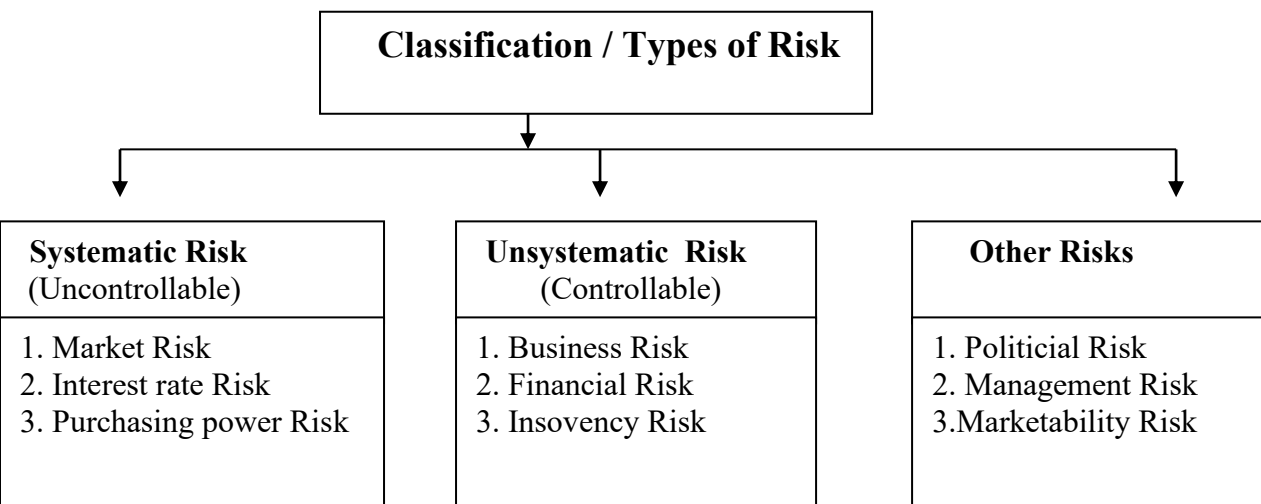
2. Explain the causes (source), types, various methods of minimizing Risk and Methods of Measurement of Risk? Also explain the methods of measurement of Return? (OR) Explain Risk adjusted measures of performance and mention relationship between risk and Return of a security?

RISK:

- It may be defined as the chance of future loss that can be foreseen.
- It is a measure of deviation of actual return from expected return.
- Higher the return higher the risk involved and vice versa.
- The causes of risk are wrong decision of what to invest in, wrong time of investments and long period, more risky.

CAUSES/ SOURCE/FACTORS / ELEMENTS OF RISK:

1. Amount of Investment
2. Nature of business
3. Demand and supply forces
4. Terms of lending
5. Wrong time of investment
6. Incorrect decision with regard to investment.



(I) Systematic Risk:

It is arising out of external and uncontrollable factors, arising out of the market, nature of the industry, the state of the economy. Legal aspects, social, and political aspects.

1. Market Risk: This arises out of changes in Demand and Supply pressures in the markets, following the changing flow of information's.



2. Interest Rate Risk: The return of an investment depends on the interest rate promised on it and changes in market rates of interest from time to time. Interest rates depend on nature of instruments, stocks, bonds, loan, and maturity period.

3. Purchasing Power Risk: Inflation or rise in prices leads to rise in costs of production, lower margins, wages rises and profits squeezing .It is inherent in all investments and cannot be controlled by him.

(II) Unsystematic Risk:

It emerges out of the known and controllable factors, internal to the issuers of the securities or companies.

1. Business Risk: This relates to the variability of the business, sales, and income, profits which in turn depend on the market conditions for the product mix, input supplies, and strength of competitors.It can be categories as

- a. **Internal business Risk** – Fluctuation in sales, fixed cost, R&D and production of single product
- b. **External business Risk-** Business cycle, govt policies, demographic factors and social factors

2. Financial Risk: This relates to the method of financing, adopted by the company, high leverage leading to larger debt servicing problems of short term liquidity problems due to bad debt, rise in current liabilities.

3. Insolvency Risk: This relates to the inability of the borrower in satisfying the needs of the investor.

(III) Other Risks:

1. Political Risk: This relates to the investment in foreign securities .It arises because of change in foreign government and nationalization of business enterprises.

2. Management Risk: This arises out of errors or due to the inefficiency of the management causing financial loss of the company.

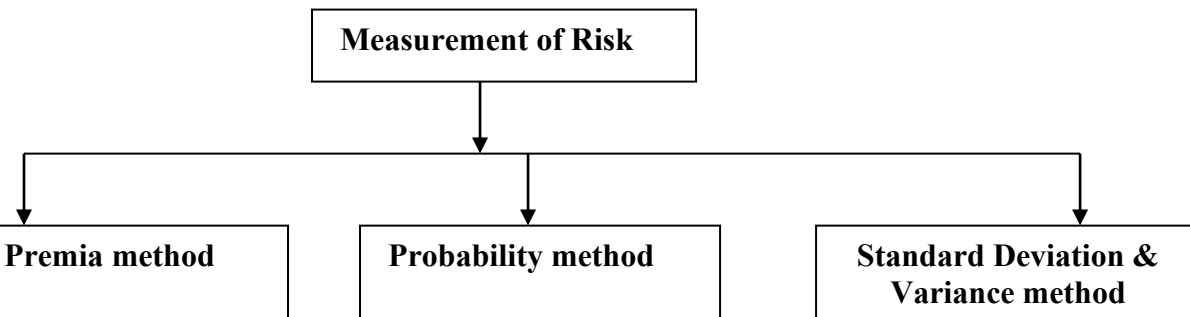
3. Marketability Risk: This arises out of loss of liquidity and monetary loss in conversion from one asset to another.

VARIOUS METHODS/ WAYS TO MIMIMIZE RISK:

1. Protection against Market risk
2. Protection against interest rate risk
3. Protection against inflation
4. Protection against business & Financial Risk



DIFFERENT METHODS OF MEASUREMENT OF RISKS



1. Premia / Assigning Risk allowance Method:

- Risk can be measured by determining required rate of return (r).
- It comprises a riskless rate plus compensation for individual risk factors.
- The types of rates are determined by

$$r = i + p + b + f + m + o$$

Where i = interest rate
 p = purchasing power risk allowance
 b = business risk allowance
 f = financial risk allowance
 m = marker trisk allowance
 o = other risk allowance

2. Probability method:

- It means likelihood of an occurrence of an event in future.
- It is the relative frequency with which an event may happen in future.
- If the event has 1 probability, it is bound to occur.
- If the event has 0 probability, it is not going to occur.

3. Standard deviation and variation method:

- It is a measure of dispersion and variation.
- It is used to compare the variability of possible cash flows of different projects from their respective mean.
- The Variance and standard deviation is given by

$$\text{Variance} = \sum P_i (R_i - \bar{R}_i)^2$$

$$\text{Standard deviation} = \sqrt{\text{Variance}}$$



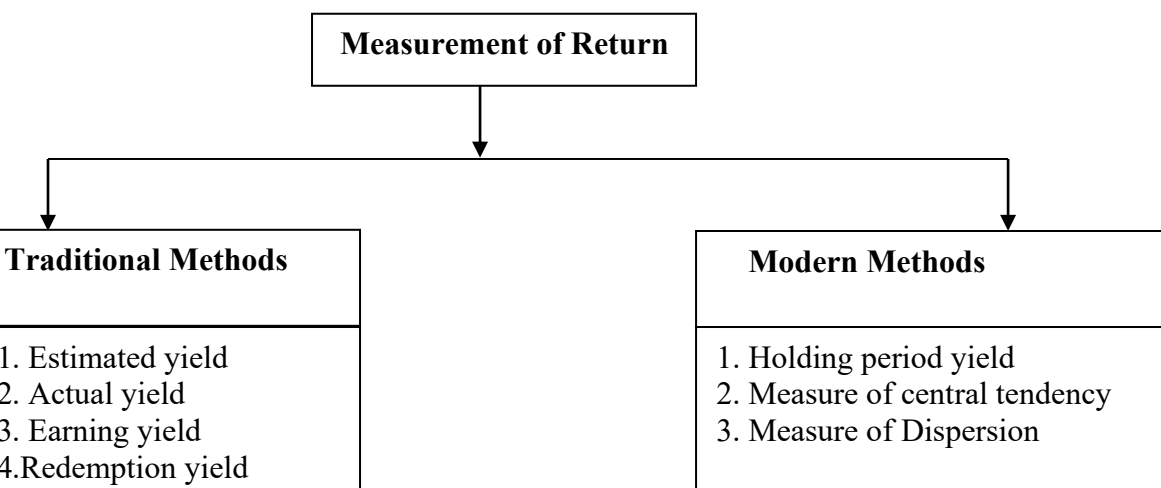
RETURN/YIELD:

- It is defined as the percentage of change in the values of the investment over a given period of time.
- It consists of the income and the capital gains relative on an investment.
- It consists of two types of return as
 - a. Actual Return – it means actual money gained during a period.
 - b. Expected Return- it mean anticipated/ receiving money during a period.

FACTORS DETERMINING RETURN:

1. Price of the stock
2. type of the stock
3. issue price of the stock
4. Future projects of the company
5. Goodwill of the company
6. government policies
7. Reserve for dividend

DIFFERENT METHODS OF MEASUREMENT OF RETURN



A. Traditional Methods

1. **Estimated yield:** it is calculated using the formula as = $\frac{\text{Expected cash Income}}{\text{Current price of asset}}$

2. **Actual yield:** it is calculated using the formula as = $\frac{\text{Cash Income}}{\text{Amount invested}}$



3. **Earning yield** : it is calculated using the formula as $= \frac{\text{Earning}}{\text{Price of share}}$

4. **Redemption yield** : it is calculated using the formula as $= \frac{\text{Average Annual Return}}{\text{Average Investment}}$

B. Modern Methods

1. Holding period yield (HPY):

It is the total return on an asset over a period during which it was held.

$$\text{HPY} = \frac{\text{Income payment} + \text{Change in price during the period}}{\text{Price at the beginning of period}}$$

2. Measure of central Tendency:

It is a typical method around which other figures gather together. Mean, median and mode are some important methods of central tendency which measures the average return of distributions.

a. Arithmetic Mean:

- It is defined as a sum of value divided by the number of values.

b. Median:

- It is defined as the middle most or central value of the variable in a set of observation, when the observation are arranged in ascending order of their magnitude.

c. Mode:

- It is the value that occurs often or equivalently has largest frequency.

3. Measure of Dispersion:

It is a method used to measure the return on investment. Range, Variance and standard deviation are some important methods of dispersion which measures the return.

a. Range:

- It is the difference between the largest frequency and smallest frequency of the value.

b. Variance:

- It is the square of standard deviation.

c. Standard deviation:

- It is the square root of the average of square deviations taken from arithmetic mean.

$$SD = \sqrt{\frac{\sum (fd)^2}{N}}$$



WELL KNOWN RISK PREMIUM:

It may be defined as the additional return, investors expect to get or investors earned in the past for assuming additional risk. It may be calculated between two classes of securities that differ in their risk level. These are known as risk premium.

(a) Equity risk premium:

This is the difference between the return on equity stocks as a class and the risk free rate represented commonly by the return on treasury bills.

(b) Bond Horizon Premium:

This is the difference between the return on long term govt bonds and the return on treasury bills.

(c) Bond Default Premium:

This is the difference the return on long term corporate bonds and the return on long term govt bonds.

RELATIONSHIP BETWEEN RISK AND RETURN:

The rate of return required by a firm, to a great extent, depends upon the risk involved. Higher the risk, greater is the return expected by the firm. The rate of return by the business consists of 3 components:

(a) Return at zero risk:

- This refers to the expected rate of return, where a project involves no risk whether business or financial.

(b) Return for Business risk:

- The term business refers to the variability in operating profit (EBIT) due to changes in sales.
- In cases of project have more than the normal or average risk, the firm will expect a higher rate of return than the normal rate. Hence, the return expected by the business will go up.
- Similarly, if the project involves a lower degree of risk than the normal level, the return expected by the firm will come down

(c) Premium for financial risk:

- The term financial risk refers to the risk on account of pattern of capital structure. A firm having higher debt content in its capital structure expects a higher rate of return as compared to a firm which has comparatively low debt content.
- The above 3 components may be put in the form of the following equation:

$$\text{Rate of return} = r_o + b + f$$



**3. Discuss the different theoretical approaches and methods of valuation of Equity shares (Common stock)? (or) Explain the Multiplier approach to share valuation?
(Or) Explain the steps in valuation of equity shares?**

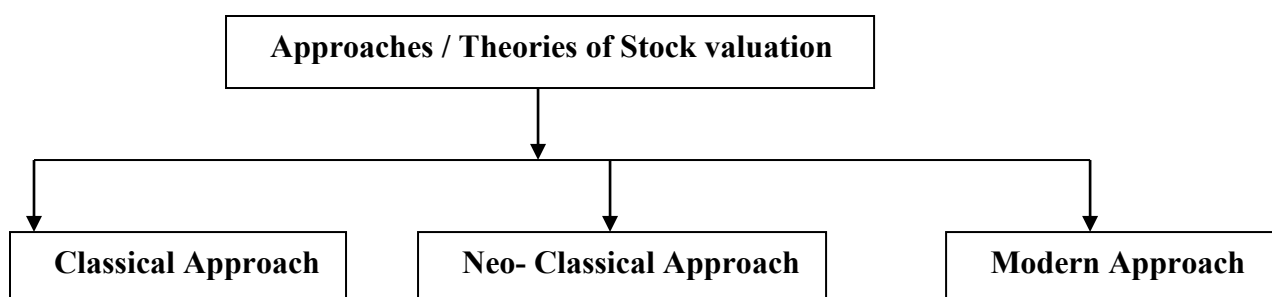
Equity Shares/Common stock / Ordinary stock:

- Equity shares are those shares which are ordinary in the course of company business.
- These shares are preferred by persons who prefer risk to better return
- These share holders do not enjoy preference regarding payment of dividend and repayment of capital.
- The Equity shares are classified into broad categories:
 - Blue chip shares
 - Growth shares
 - Income shares
 - Cyclical shares
 - Speculative shares

Features or Characteristics of Equity Shares/Common Stock:

1. ownership rights
2. voting rights
3. Fixed nominal value
4. Distinct number
5. capital appreciation
6. Return on shares
7. transfer of shares
8. Benefit of bonus shares

DIFFERENT APPROACHES/THEORIES TO STOCK VALUATION:



A. Classical Approach:

This theory is based on the traditional view that debt is cheaper than equity. So a company can increase its value of equity shares through debt financing.



B. Neo- Classical Approach:

This theory believes that the valuation of a company is independent of its capital structure. When the return on the capital is more than the cost of capital, all external and internal sources of finance are substitutes and profits retained & dividend paid make no difference.

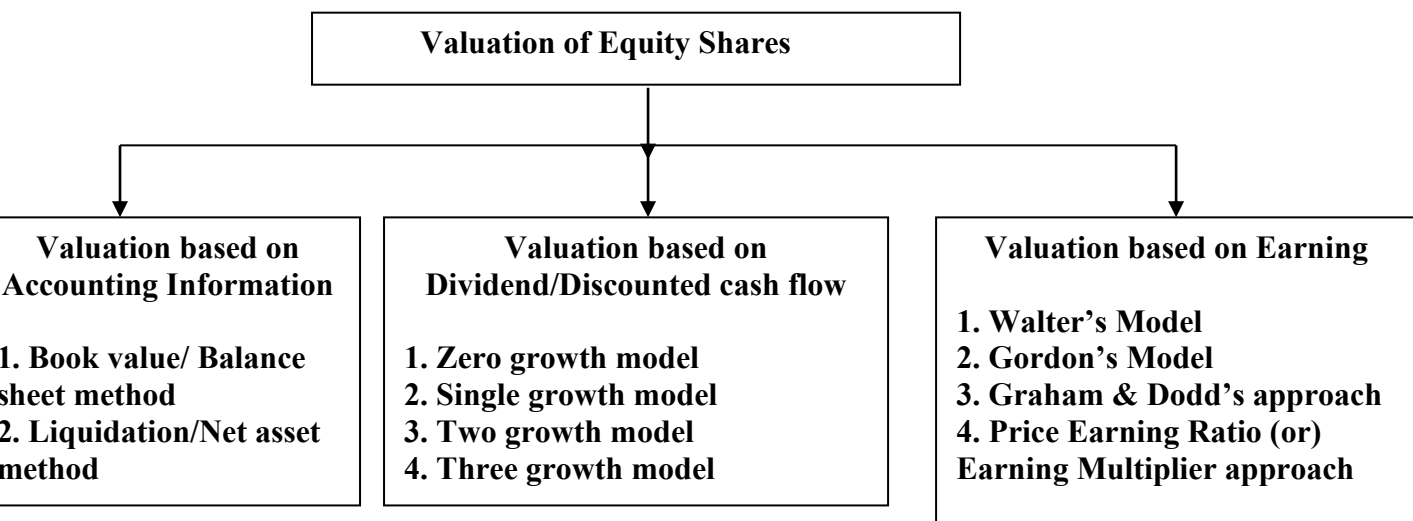
C. Modern Approach:

This theory is based on the cash flows generated by an investment. There are two approaches for cash flow theories

a. Managerial Approach: It is based on the assumption that managers are interested in Maximizing the size of the business and its profits only. They do not aim at maximization of shareholders wealth. This theory seeks to separate ownership and shareholders.

b. Information Approach: It is based on the assumption that managers are well informed about the company return stream and investment Opportunities.

METHODS OF VALUATION OF EQUITY SHARES:



A. Valuation based on Accounting Information:

1. Book value/ Balance Sheet Method:

- In this method, book value as per balance sheet is considered the value of equity.
- Book value means net worth of the company.
- Net worth is calculated using the formula

Networth = Equity share capital + Preference share capital + Reserve & Surplus - accumulated losses



2. Liquidation/ Net Asset Method:

- In this method, liquidation value is considered the value of equity.
- Liquidation value is the value realized if the firm is liquidated today.
- Liquidation is calculated using the formula
Liquidation = Net value of all assets – Amount paid to all creditors

B. Valuation based on Dividend/ Discounted cash flow methods:

1. Zero growth model:

The dividend per share remains constant forever, implying that growth rate is nil. If we assume that dividend per share remains constant after year at a value of D, then

$$P_o = \frac{D}{K_e}$$

Where P_o = Present value of Equity Shares
 D = Dividend per share
 K_e = cost of equity capital \ capitalization rate \ Rate of Return

2. Constant growth \ single model \ Gordon model:

One of the most popular dividend discount models, called Gordon model as it was originally proposed by Gordon assumes that the dividend per share grows at a constant (g) then

$$P_o = \frac{D(1+g)}{K_e - g}$$

Where g = growth rate.

3. Progrowth \ two growth model:

The dividend per share grows at a constant extraordinary rate for a finite period followed by constant normal rate of growth forever. This model is known as progrowth model.

$$P_o = \sum_{i=1}^n \frac{D_i(1+g_1)}{(1+K_e)^i} + \left[\frac{D_n(1+g_2)}{(K_e - g_2)} * \frac{1}{(1+K_e)^n} \right]$$



4. Three \ Multi growth \ h- model:

The dividend per share currently growing at an above normal rate, experiences a gradually declining rates of growth for a while. Thereafter it grows at a constant normal rate. This is known as h-model.

C. Valuation based on Earning:

1. Walters Model:

- According to this model, the dividend policy and investment policy of the firm are interlinked and hence the dividend decision always affects the value of the firm.
- According to this model, the dividend policy depends on the internal rate of return/rate of return on investment (r) and cost of equity capital/capitalization rate/minimum rate of return (K_e).
- It is based on Payout ratio.

Formula:

$$P_0 = \frac{D + r \{EPS - D\}}{K_e}$$

Where P_0 ----- Market price /Price of equity share.

D -----Dividend per share

R ----- Internal rate of return/rate of return on investment

EPS ----- Earning per share

K_e ----- cost of equity capital/capitalization rate/minimum rate of return.

2. Gordon's Model:

- According to this model, the dividend policy of the firm has a direct bearing on the market value of shares.
- According to this model, the market value of the shares is equal to the present value of infinite stream of dividends to be received by the share.
- It is based on Retention ratio

Formula:

$$P_0 = \frac{D (1 + g)}{K_e - g}$$

Where P_0 ----- Market price /Price of equity share.

D -----Dividend per share

K_e ----- Cost of equity capital/capitalization rate/minimum rate of return.

g ----- Growth rate (i.e.) { $g = r * \text{retention ratio}$ }

3. Graham & Dodd's Approach:

- According to this model, market price of the shares will increase, when a company declares dividend rather than when it does not.
- This model indicate the dividend determine the share value.



Formula:

$$P_0 = M \{ D + E/3 \}$$

P_0 ----- Market price /Price of equity share.

M ----- Firms Earning value

D -----Dividend per share

E -----Earning per share

4. Price Earning Ratio (P/E Ratio) / Earning Multiplier Approach:

- It is the ratio of market price a share to its earning per share.
- It is the ratio between the market price of a share and its earning per share.

Formula:

$$P/E = \frac{\text{Market Price Share}}{\text{Earnings per share}}$$

Example: A share having a market price of Rs 300/- gives an earning of Rs30/ per share. Therefore $P/E = 300/30 = 10$ times. It means that market price of share is 10 times that of EPS.

Factors influencing Price Earning Ratios:

1. The profit earnings ratio indicates future expected earnings of the company.
2. The level of profit earning ratio is not absolute value but a relative.
3. The P/E ratio of speculative and cyclical companies is generally lower.
4. The P/E ratio of growth companies is comparatively higher.
5. Inflationary trend expected to reduce P/E Ratios.
6. Higher interest rates are likely to reduce P/E Ratios.
7. A company which pays a higher dividend has a higher P/E ratio.
8. P/E ratio varies from industry to industry.



**4. Explain the method of valuation of financial asset by applying the concept of time value of money?
(or) Explain the methodology for valuation of firms?**

TIME VALUE OF MONEY:

- ✓ The time value of money is that the rupees received today is more valuable than a rupees received tomorrow.
- ✓ It makes the rupees invested today grow more than rupees in future. To quantify this concept mathematically, compounding and discounting principles are used.
- ✓ It is give by the Formula:
$$\text{Future value} = \text{present value} (1 + \text{interest rate})$$
- ✓ Normally people prefer to received money today is more than its value received after some time because of the following reasons:
 - ❖ Uncertainty and loss
 - ❖ To satisfy present needs
 - ❖ Investment opportunities

Method dealing with Time value of Money:

1. Present value of an annuity: An annuity is a series of equal payments or receipts that occur at evenly spaced intervals. Leases and rental payments are examples. The payments or receipts occur at the end of each period for an ordinary annuity while they occur at the beginning of each period for an annuity due. The Present value is calculated by the following formula.

$$\text{Present value (PV)} = \text{FV} / (1+i)^n$$

Where,

FV = the future sum or cash flow to be received

i = Rate of interest

n = No. of years

2. Future value of an annuity: It is the future value of a stream of payments (annuity), assuming the payments are invested at a given rate of interest. The following formula is applied for the computation of future value under this method.

$$\text{Future Value (FV)} = P \{1+i/m\}^{mxn}$$

Where,

FV = Future value

p = Principal amount in the beginning of the period

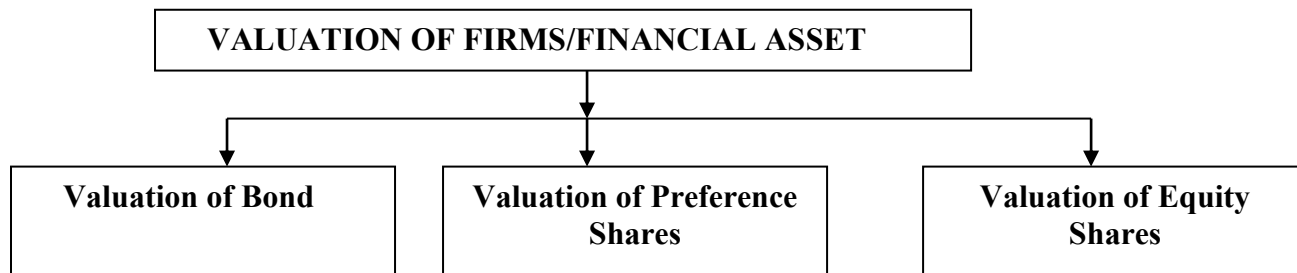
i = Rate of Interest

m = Number of times per year compounding is made

n = number of year

VALUATION OF THE FIRM:

- The objectives of the corporate finance are to maximize the shareholders wealth or maximize the value of the shares in the market.
- The financial aim at in the firm is also to maximize the market value per share in the market.
- In order to achieve this objectives, there is need to develop a model.



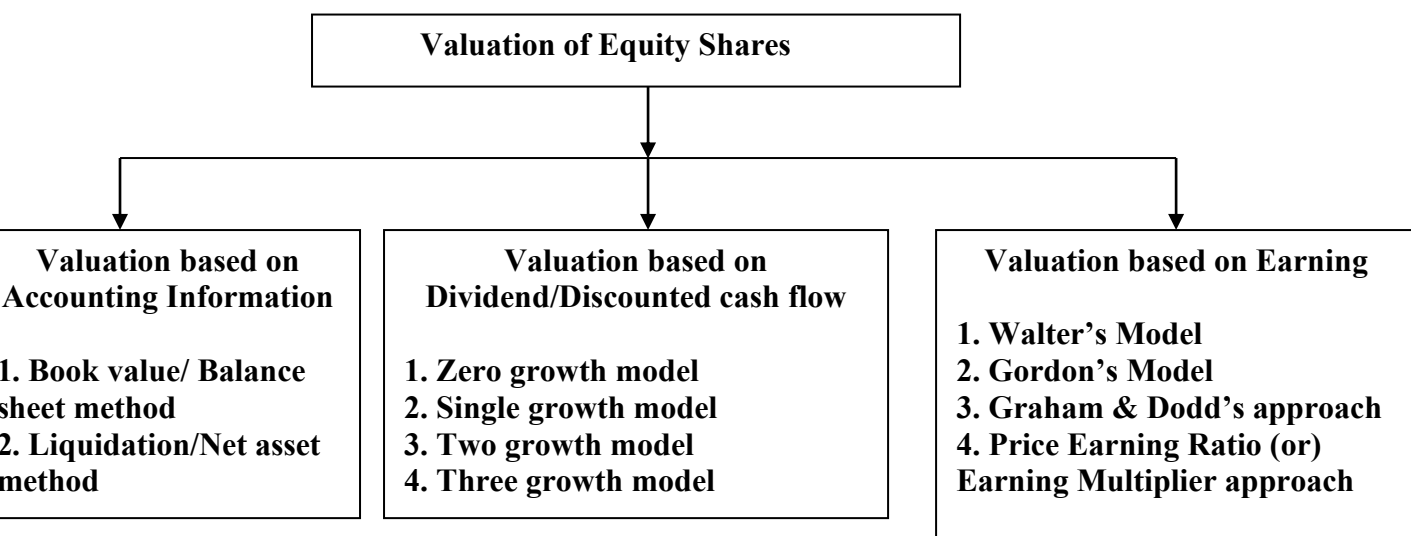
A. Valuation of Bond:

1. Valuation of Bonds current yield
2. Valuation of bonds holding period yield
3. Valuation of Market Price of Bonds
4. Valuation of Zero coupon Bonds
5. Valuation of Semi annual interest bonds

B. Valuation of Preference Shares:

1. Valuation of preference yield
2. Valuation of Market Price of preference shares

C. Valuation of Equity Shares:



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2. Security analysis and portfolio management, Preeti Singh, Himalaya publications
3. Investment management, V.K.Bhalla, S.chand & Company ltd.
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UNIT- II

SECURITIES MARKET/CAPITAL MARKET

Structure:

1. Introduction
- 2 Financial Markets Segments and Regulatory Environment
3. New issue market & Secondary Market
- 4 .Role of Stock Exchanges in India
5. Trading System in Stock Exchanges
6. Security Exchange Board of India

PART- A (ONE MARKS)

Financial Market:

- Financial market is a mechanism that allows people to easily buy and sell financial securities such as stocks and bonds, commodities such as precious metals or agricultural goods, and other items of value at low transaction costs.
- A market where in financial instruments such as financial claims, assets and securities are traded is known as a “financial market”.
- The system through which financial assets are created and transferred is known as financial market.

Capital Market/Securities Market:

- It may be defined as a market for borrowing and lending long term capital funds required by business enterprises.
- It deals with the raising of finance by various institutions through the issue of various securities.
- When the financial assets transferred are corporate securities and government securities, the mechanism of transfer is known as Securities market.

Book Building:

- It is a process of price discovery used in public offers.
- The issuer sets a base price and a band within which the investor is allowed to bid for shares.
- It is a process used by companies raising capital through Public Offerings-both IPO and FPO to aid price and demand discovery.

IPO:

- **It stands for Initial Public Offer.**
- The public issues made by a corporate entity for the first time in its life are called Initial Public Offer.
- When a company whose stock is not publicly traded wants to offer that stock to the general public, it takes the form Initial Public Offer.



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FPO:

- **It stands for Follow on Public Offer.**
- It is also called secondary public offering.
- When the company raises capital after an IPO has already been made and shares of company are held by public and are already listed on the stock exchange.

Underwriting:

- It is insurance to the company which proposes to make public offer against risk of under subscription.
- The agreement between issuing the company and financial intermediary is called underwriters.

Shares: A share is one of a finite number of equal portions in the capital of a company, entitling the owner to a proportion of distributed, non-reinvested profits known as dividends and to a portion of the value of the company.

Stock: stock refers to a supply of money that a company has raised. This supply comes from people who have given the company money in the hope that the company will make their money grow.

Stock Market\stock Exchange: A stock market, or equity market, is a private or public market for the trading of company stock and derivatives of company stock at an agreed price; these are securities listed on a stock exchange.

Stock trader \stock investor: it individual firm who buys and sells stock or bonds and other financial assets in the financial markets.

Shareholder\stockholder: it is an individual or company that legally owns one or more shares of stock in a joint stock company. Companies listed at the stock market are expected to strive to enhance shareholder value.

Stock broker: is a qualified and regulated professional who buys and sells shares and other securities through market makers or agency Only Firms on behalf of investors.

Jobber: He is a person who buys and sells securities in his own name. He gives two Quotations as a dealer in securities, lower quotation for buying and higher quotation for selling.

Arbitrage: It is the difference between price common in two different markets. It may be buying in one market at lower price and selling at higher price in different market.

Stock Quotations:

- A stock quote is the price of a stock as quoted on an exchange.
- It is an estimate of price or a price at which one party is willing to buy or sell a certain number of shares of stock from the other



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Stock market indicator\ index:

- It is a method of measuring a section of the stock market.
- It is a list of figures and stocks that are used to indicate the combined value of its constituents.

Badla Trading:

- The process of buying stock with borrowed money is called badla trading.

BSE:

- **It stands for Bombay Stock Exchange.**
- It is the oldest stock exchanges in Asia & 10th largest in the world.
- It was established by “Native Share & Stock brokers Association” in 1875.
- It is located in Dalal Street, Mumbai.

NSE:

- It stands for **National stock exchange**
- It is a Mumbai-based stock exchange.
- It is the largest stock exchange in India in terms of daily turnover and number of trades, for both equities and derivative trading.

BOLT:

- **It stands for Bombay Online Trading System.**
- It enabled the oldest stock exchange in India to expand trading activities to 118 cities across the country.
- It has at present capacity to handle 5, 00,000 trades in a seven hour trading session per day.

NEAT:

- **It stands for National Exchange for Automated Trading.**
- It is a fully automated screen based trading system, which adopts the principle of an order driven market.
- NSE is the first exchange in the world to use satellite communication technology for trading.

SENSEX:

- It is the popular name for the Bombay Stock Exchange Sensitive Index.
- It is the oldest stock market index /indicator currently in use.
- Sensex is the index of market capitalisation.
- Senscx consists of only 30 representative stocks.

NIFTY:

- It is the popular name for the National Stock Exchange Sensitive Index.
- It is the oldest stock market index /indicator currently in use.
- Nifty is the index of market capitalisation.
- Nifty consists of only 50 representative stocks.

NSDL:

- It stands for **National Securities Depository Limited**

NSCCL:

- It stands for **National Securities Clearing Corporation Ltd in India.**



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Market maker:

- It is a company that quotes both a buy and sells prices in a financial instrument hoping to make profit on the bid offer.

Brokerage:

- The maximum brokerage that can be charged by the broker is 2.5 % of the trade value.
- The maximum brokerage that can be charged by the sub- broker is 1.5%.
- Any additional charges that member can charge are service tax @5%
- Any penalties arising on behalf of the investor.

OTCEI:

- It stands for **Over the Counter Exchange of India.**
- It is a floorless and ring less trading system, equipped with electronic and communication network for transacting business nationally and internationally.
- This exchange was promoted by a group of financial institutions owned by the govt of India, consisting of UTI, ICICI, IDBI, SBI CAPITAL MARKET, IFCI, LIC, GIC, Can Bank Financial services.

| OTCEI | Regular Stock Exchange |
|--|--|
| 1. Trading is done through network or computer system. | Trading is done on floor. |
| 2. Minimum paid up capital is Rs 2 crores | For listing of companies, minimum paid up capital Rs 5 crores. |
| 3. Membership is spread throughout the country. | Membership is restricted to region or location. |
| 4. Trading in securities of all companies throughout India. | Trading in securities belonging to that region and also in other permitted securities. |
| 5. Settlement as per the rules of OTCEI. | .Settlement of transactions on the basis of T+5 |
| 6. The primary object is to help small companies to raise funds. | The primary objective being the improvement of capital market. |

Inter Connected Stock Exchange of India (ISE)

- It is a national-level stock exchange, providing trading, clearing, settlement, risk management and surveillance support to its Trading Members.
- It aims to address the needs of small companies and retail investors by harnessing the potential of regional markets, so as to transform them into a liquid and vibrant market using state-of-the art technology and networking.
- The ISE was promoted by 12 regional stock exchanges namely at Bangalore, Bhubaneshwar, Chennai, Kochi, Coimbatore, Guwahati, Indore, Jaipur, Kanpur, Mangalore, Magadh and Vadodara.



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STRIPS:

- It stands for Separately Traded registered Interest and principal of securities.
- It is a process in which coupon rate and principal are separated and traded independently.

Listing:

- It is the process of taking a privately-owned organization and making the transition to a publicly-owned entity whose shares can be traded on a stock exchange.

Listing Agreement:

- Listing Agreement is the basic document which is executed between companies and the Stock Exchange when companies are listed on the stock exchange.

Listed Securities:

- It means the admission of *securities* of a company to trading on a stock exchange.
- Listed Securities are shares, debentures or any other securities that is traded through an exchange such as BSE, NSE, etc.

Unlisted Securities:

- Unlisted Securities are shares, debentures or any other securities that is not traded on an exchange but through the over-the-counter (OTC) market. Unlisted securities are also called OTC securities

Permitted Securities:

- A stock Exchange sometimes permits trading in certain securities which are not listed at the exchange but are actively traded in other stock exchanges. Such securities are known as permitted securities.

Trading system

- A trading system is a set of rules that formulate buy and sell signals without any ambiguity or any subjective elements.

Floor Trading system:

- It is a system in which buyers and sellers transact business face to face using a variety of signals.

Screen based Trading system:

- It is a transparent electronic trading in securities through the mechanism of OTCEI and NSE, where by quotations for securities and volume of those transactions is made publicly available after each quotation.
- It is of two types
 - a. Quote driven system
 - b. Order driven system

Quote Driven Market/ System:

- A quote-driven market is an electronic stock exchange system in which prices are determined from bid and ask quotations made by market makers, dealers, or specialists.
- The market participants then place their order based on the bid offer quotes.
- It also known as a price-driven market



Order-driven market/System:

- An order-driven market is a financial market where all buyers and sellers display the prices at which they wish to buy or sell a particular security, as well as the amounts of the security desired to be bought or sold.

Order:

- An order is an instruction to buy or sell on a trading venue such as a stock market, bond market, commodity market, financial derivative market or crypto currency exchange.
- These instructions can be simple or complicated, and can be sent to either a broker or directly to a trading venue via direct market access.

Types of order:

- a. **Market orders**
- b. **Limit orders**
- c. **Stop orders**
- d. **Stop limit orders**

Market orders:

- It is a buy or sell order to be executed immediately at the current market prices.
- Market orders are used when certainty of execution is a priority over the price of execution.

Limit orders:

- It is an order to buy a security at no more than a specific price, or to sell a security at no less than a specific price.
- Limit orders are used when the trader wishes to control price rather than certainty of execution.

Stop orders:

- It is an order to buy or sell a stock once the price of the stock reaches the specified price, known as the stop price. When the stop price is reached, a stop order becomes a market order.

Stop Limit orders:

- It is a conditional type of stock trading that combines the features of a stop order and a limit order.

Procedures for Buying and Selling Shares:

Locate a Broker:

- Typically, shares are bought through a stock broker.
- submit a client registration form
- A member constituent form.
- Terms and conditions relating to order, brokerage charged by a trading member and delivery of securities and funds.



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Placement of order:

- After locating a suitable broker, place your order to buy.
- Your order should clearly specify the name of the company and the type of securities
- So you must have a Demat account with an authorized depository before you place an order.
 - ✓ Day order
 - ✓ Week order
 - ✓ Month order

Execution of order:

- On receiving your order, the broker will feed the same on his terminal.
- Once the order is executed, the broker will inform you and send you a contract notes.
- “A contract notes contains relevant details of the transactions”.
- The above procedure is applicable for selling the shares.

Day order:

- It is an order that is valid only for the trading day on which the order is placed.

Open order/ Good till Cancelled (GTC Order):

- It is an order to buy or sell a security at a specified price which remains in effect until executed or cancelled by the investor

Fill or Kill order (FOK order):

- It is an order to buy or sell a stock that must be executed immediately a few seconds customarily otherwise, the entire order is cancelled.

Trade Settlement:

- It is the process of transferring securities into the account of a buyer and cash into the seller's account following a trade of stocks, bonds, futures or other financial assets

SPECULATORS

- He is a person or an entity that trades securities essentially as bets that the price will go up or down, and as such, typically has an above-average risk tolerance.
- There are four kinds of Speculators
 1. Bull- Fearless Speculator
 2. Bear- Fearful Speculator
 3. Stag- Crowded Speculator
 4. Lame Duck- Failed Speculator

1. Bull:-He is a speculator who purchases various types of shares. He purchases to sell them on higher prices in future. He may sell the shares and securities before coming in possession. If the price falls then he suffers a loss.

2. Bear:-He is always in a position to dispose of securities which he does not possess. He makes profit on each transaction. He sells the various securities for the objective of taking advantages of an expected fall in prices.



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3. Stag:- He purchases the shares of newly floated company and shown himself a genuine investor. He is not willing to become an actual shareholder of the company

4. Lame Duck: When a bear is unable to meet his commitment immediately, he is said to be struggling like a lame duck.

Margin trading

- It is a method of trading assets or purchasing securities using funds provided by a third party such as banker or broker.

Depository System

- It is a system whereby the transfer and settlement of scrips take place not through the traditional method of transfer deeds and physical delivery of scrips but through the modern system of effecting transfer of ownership of securities by means of book entry on the ledgers or the depository without the physical movement of scrips.

Depository

- A depository is a firm wherein the securities of an investor are held in electronic form and who carries out the transactions of securities by means of book entry.
- At present there are two depositories in India:
 - a. National Securities Depository Ltd. (NSDL)
 - b. Central Depository Services (India) Ltd. (CDSL).

Depository Participant

- Depository Participant (DP) is described as an Agent (law) of the depository.
- They are the intermediaries between the depository and the investors

Free Pricing:

- A price determined purely by the forces of supply and demand without interference from an outside source, such as a government.
- This concept assumes that markets are efficient, which is not always true in practice.

Demutualization of Stock:

- It is the process of converting a mutual life insurance company, which is owned by its policyholders, into a publicly traded stock company owned by shareholders.

Dematerialization Process:

- It is the process of converting securities from physical form so as to facilitate faster trading and settlement of transactions.

-

Carry forward transaction:

- It is a stock trading practices which allows a wholly fake kind of share trading in which neither the buyer has the money to pay for the shares nor the seller has the shares to deliver.



ESG Stocks:

- Environmental, social, and governance (ESG) investing refers to a set of standards for a company's behavior used by socially conscious investors to screen potential investments.
- ESG stocks are company stocks that focus on sustainability and environmental concerns rather than just considering its bottom line.
- It is known as socially responsible investing or impact investing or sustainable investing.

Stop-loss:

- Stop-loss can be defined as an advance order to sell an asset when it reaches a particular price point. It is used to limit loss or gain in a trade.
- Stop-loss is also known as 'stop order' or 'stop-market order'.

Fat finger trades:

- A fat finger trade occurs when a trader mistakenly enters an incorrect order, such as buying or selling too many shares or entering the wrong price.

Circuit breaker:

- It refers to an emergency-use regulatory measure that temporarily halts trading on an exchange.
- A circuit breaker is a regulatory instrument that halts the trading of a security or an index for a certain period.

T+1 and T+2 settlement:

- T+1, T+2, and T+3 refer to the settlement dates of security transactions that occur on a transaction date plus one day, plus two days, and plus three days.

Funding of Social Sector:

- It is funded by a diverse range of stakeholders including the public sector, foreign funders, and domestic philanthropy.



Open interest volume and prices:

- Open interest is the total number of futures contracts held by market participants at the end of the trading day. It is used as an indicator to determine market sentiment and the strength behind price trends.
- Open interest and volume are related concepts, one key difference is that volume counts all contracts that have been traded, while open interest is a total of contracts that remain open in the market

Free float in listed companies:

- It is used to describe the number of shares that is available to the public for trading in the secondary market.
- Free float, also known as public float, refers to the shares of a company that can be publicly traded and are not restricted

Algo trading:

- Algorithmic trading is a process for executing orders utilizing automated and pre-programmed trading instructions to account for variables such as price, timing, and volume.
- Algorithmic trading is the use of process- and rules-based algorithms to employ strategies for executing trades.
- Algo trading, also known as algorithmic trading, is a method of executing orders by providing a predefined set of rules to a computer program.

Block Chain Technology:

- A blockchain is a digitally distributed, decentralized, public ledger that exists across a network.
- It is a type of shared database that differs from a typical database in the way it stores information; blockchains store data in blocks linked together via cryptography. Different types of information can be stored on a blockchain, but the most common use for transactions has been as a ledger.



PART- B (5 MARKS)

1. Explain the role, segments, types, participants and regulatory environment of Financial Market?

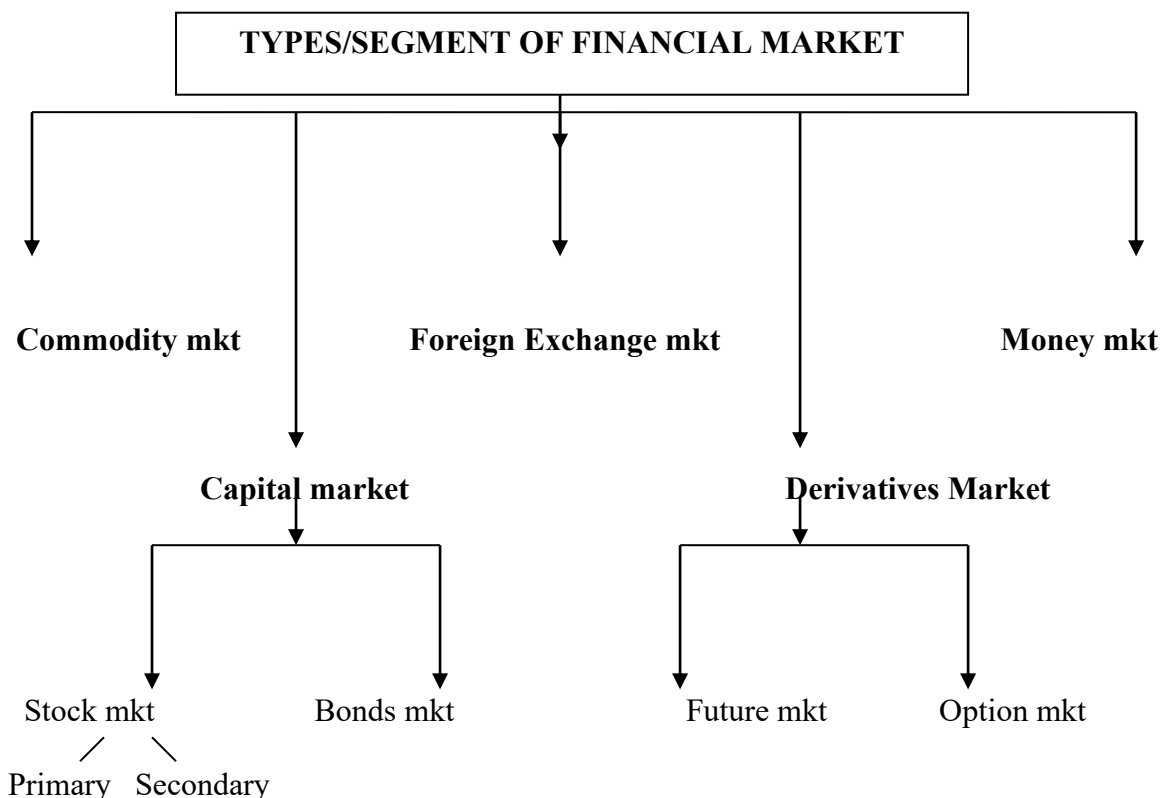
FINANCIAL MARKET:

- Financial market is a mechanism that allows people to easily buy and sell financial securities such as stocks and bonds, commodities such as precious metals or agricultural goods, and other items of value at low transaction costs.
- A market where in financial instruments such as financial claims, assets and securities are traded is known as a “financial market”.
- The system through which financial assets are created and transferred is known as financial market.

Role of Financial Market:

- Saving mobilization
- Investment
- National growth
- Entrepreneurship growth
- Industrial development

Types/Segments of Financial Market:





(I) Commodity market:

- Commodity markets are markets where raw or primary products are exchanged.
- These raw commodities are traded on regulated commodities exchanges, in which they are bought and sold in standardized contracts.

(II) Foreign Exchange market:

- The foreign exchange market exists wherever one currency is traded for another.
- It is the largest and most liquid financial market in the world, and includes trading between large banks, central banks, currency speculators, multinational corporations, governments, and other financial markets and institutions.

(III) Capital market:

- It may be defined as a market for borrowing and lending long term capital funds required by business enterprises.
- It deals with the raising of finance by various institutions through the issue of various securities.

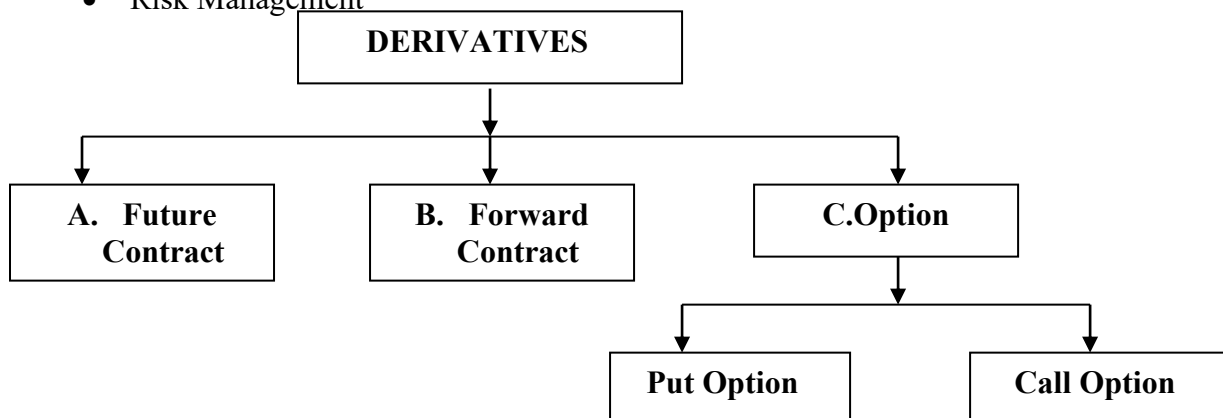
(IV) Derivatives market:

Derivatives:

- It is a financial instrument whose value is based on on the performance of underlying assets such as stocks, bonds, currency exchange rates and real estate.
- Derivatives are financial instruments whose value changes in response to the changes in underlying variables.
- The Derivatives can be classified into four types:
 1. Futures Contract
 2. Forwards Contract
 3. Options
 4. Swaps

Importance of derivatives:

- It helps to improve market efficiencies
- Efficient Allocation of Risk
- Lower Cost of Hedging
- Liquidity
- Risk Management





A. Future Contract:

- It is a standardized and exchangeable contract between two parties to buy or sell an asset at specified future time at a price agreed upon today.

B. Forward Contract:

- It is a private agreement between two parties to buy or sell an asset at specified future time at a price agreed upon today.

C. Option:

- It is a contract between two parties to buy sell or sell specific number of shares at a later date for an agreed price.

1. Put Option:

- It is a contract giving the rights to sell the shares.

2. Call Option:

- It is a contract giving the rights to buy the shares.

(V) Money market:

- It is the global financial market for short-term borrowing and lending.
- It is debt instruments which have a maturity of less than one year are called money market.
- It is a collective name given to all institutions that are dealing in short term funds.
- The money market is where short-term obligations such as Treasury bills, commercial paper and banker's acceptances are bought and sold.
- Short term funds are required for working capital requirements both in agriculture as well as industry.
- Without money market, agriculture and industries will come to a halt. When agriculture and industries affected, they affect production, trade, business, employment and income.

Instruments of money market:

A. Certificate of Deposits:

- A marketable document of title deposit for a specified period may be referred to as a certificate of deposit.
- It is a short term deposits which are transferred from one party to another party.
- Its maturity period varies from 3 months to 1 year.

B. Treasury Bills:

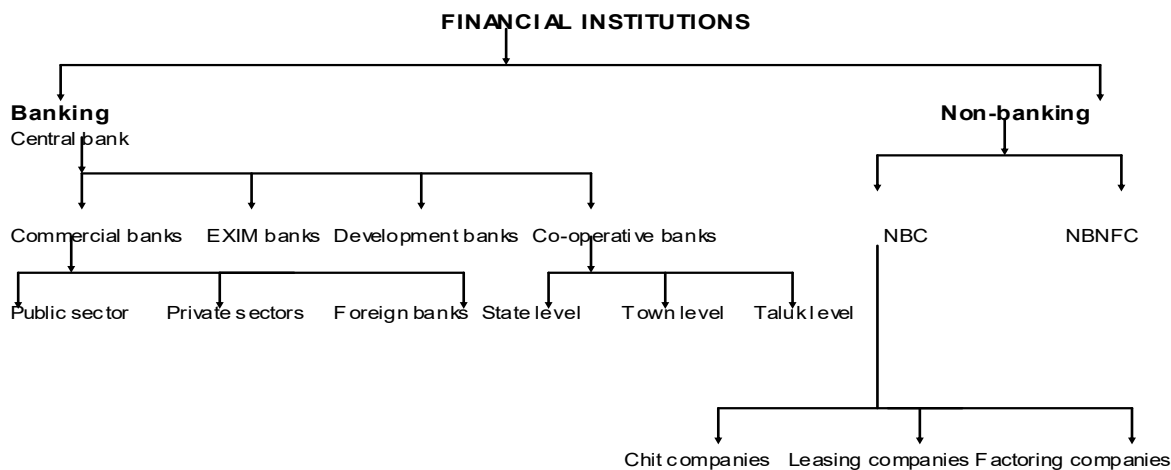
- It is an instrument that do not pay interest rates
- T-bills are 28 days, 91 days, 364 days.
- Its maturity period varies from 6 to 12 months.

C. Commercial Paper:

- Debt instruments that are issued by corporate houses for raising short term financial resources from the money market are called commercial houses.
- It is one which is issued by a leading commercial house and it will enable businessman to borrow money in the market.
- Its maturity period from 90 to 180 days.



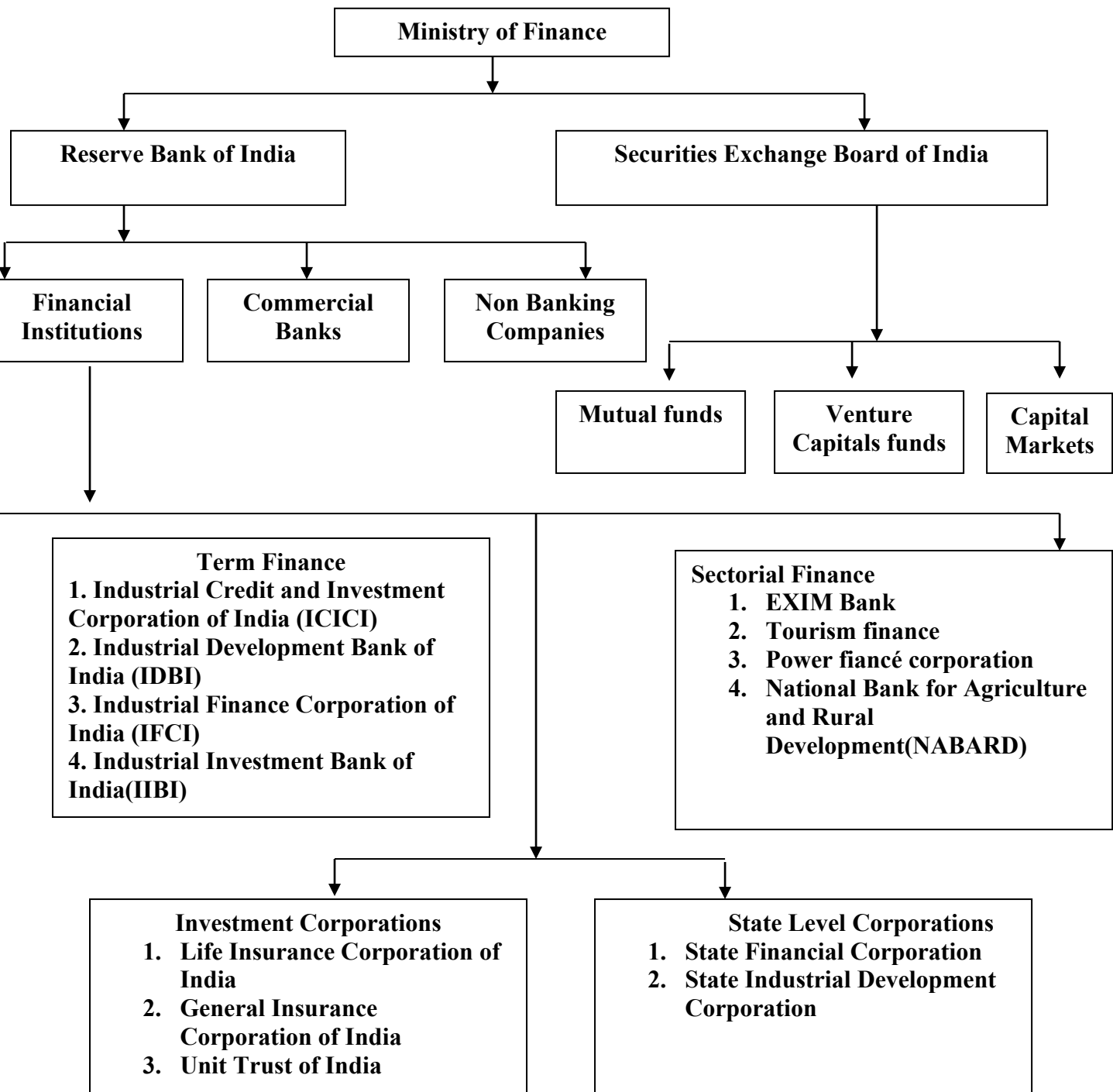
PARTICIPANTS IN FINANCIAL MARKET:



| S.NO | Commercial bank | Co-operative bank | Development bank | EXIM bank |
|------|--|--|--|--|
| 1 | To earn profit motive | To provide service motive | To provide long term loans | integrate the country's foreign trade |
| 2 | Deal with account of the people. | Deal with higher interest, agriculture, industrial activities. | Deal with industrial growth and capital market. | Deal with project finance, corporate finance and retailing banking |
| 3 | Owned by govt/ private | By govt | Central and state govt | Government of India |
| 4 | Massive funds are available at the disposal of Commercial Banks. | Limited funds are available at the disposal of Co-operative Banks. | Massive funds are available | Massive funds are available |
| 5 | They operate at national and international level | They operate at rural and semi urban level | They operate at national and international level | They operate at national |



FINANCIAL MARKET REGULATORY ENVIRONMENT





2. Explain the role of Securities/ capital market in the Economy? \ Explain the recent reforms\ improvement\ development\changes and structure of Securities/ capital market?

CAPITAL MARKET:

- It may be defined as a market for borrowing and lending long term capital funds required by business enterprises.
- The dealing in a capital market is done through the securities like shares, debentures and bonds. The capital market is called securities market.
- Any business require two types of capital namely
 1. Working capital or short term capital
 2. Fixed capital or long term capital
- **Working capital** is raised in the **money market** through the issues of different securities such as bills, certificate of deposits.
- **Fixed capital** is raised through **capital market** by the issue of shares, debentures and bonds.

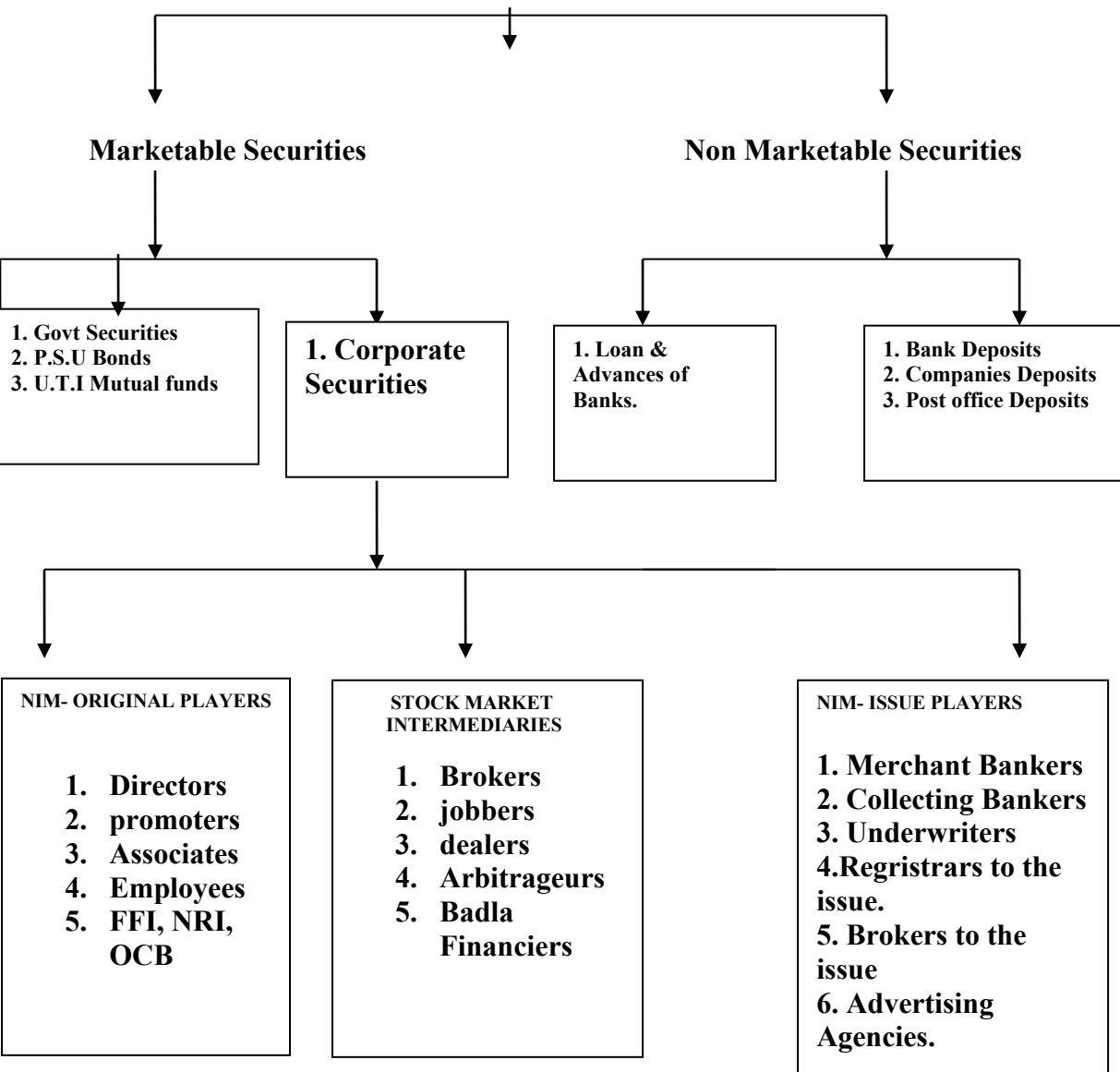
| Capital Market | Money Market |
|---|---|
| 1. A market where long term funds are borrowed and lent is called Capital market. | A market where short term funds are borrowed and lent is called Money market. |
| 2.Capital used for fixed and working capital needs | Capital used for working capital needs. |
| 3. Shares, debentures, bonds, preference are capital market instrument | Cheques, bills, promissory notes are money market instrument. |
| 4. It has fixed place called stock market or stock exchanges. | It has no fixed place as it spread throughout the country. |
| 5. The main function is mobilization and effective utilization through lending. | The main function is lending and borrowing to facilitate liquidity adjustment |

Recent reforms\ improvement\ development\changes of Capital market in India

1. Economic liberalization
2. Promoting more private banks
3. Promotion of mutual funds
4. Regulation of NRI investments
5. Direct foreign investment
6. National stock exchange
7. Market maker
8. Settlement period
9. Sensitivity Index
10. Online trading
11. Merchant banker
12. Penalty for insider trading

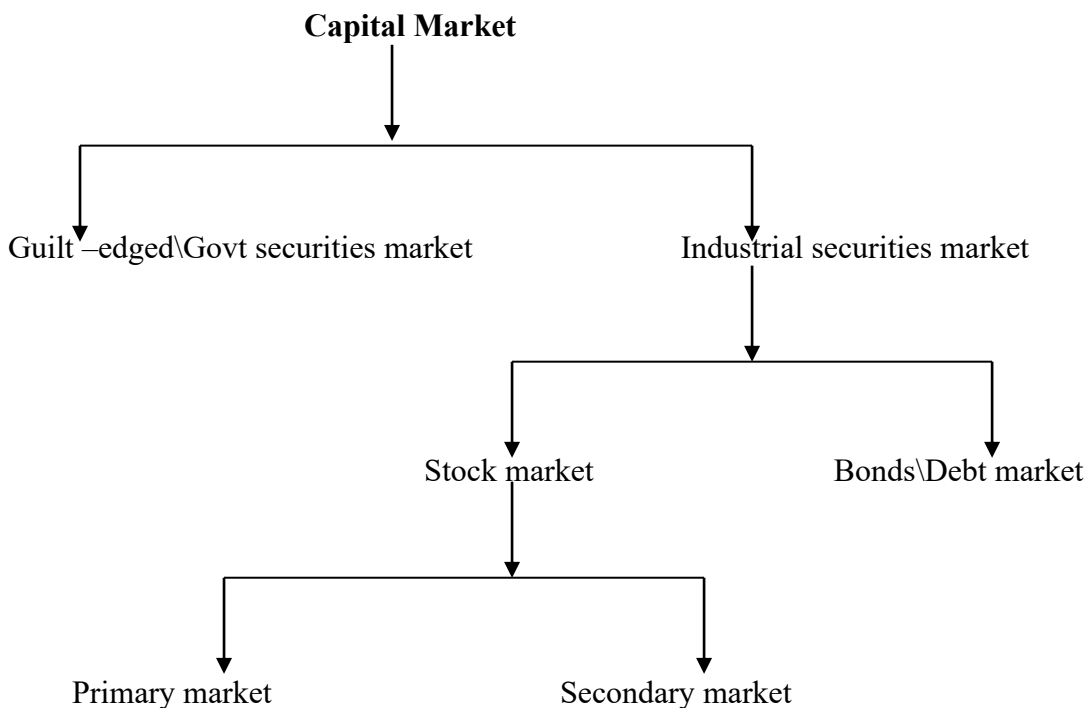


CAPITAL MARKET STRUCTURE





Constituents of Capital Market:



A. Gilt –edged market:

- The marketable debt issued by the government or semi government bodies, which represents a claim on the government, is known as government or guilty securities market.
- They are issued for the purposes of refunding the maturing securities, for advances refunding of securities and for cash financing.
- They are called gilt-edged because the document will have **yellow border** on the sides.

B. Industrial securities market:

- This refers to the securities of the companies consisting of shares and debentures of old and new companies.
- This is further dividend into stock market and bond market; further sub-dividend into primary and secondary market.

Stock Market:

- It is a private or public market for the trading of company stock and derivatives of company stock at an agreed price.
- these are securities listed on a stock exchange as well as those only traded privately

Bond market:

- The bond market or debt or credit or fixed income market is a financial market where participants buy and sell debt, securities in the form of bonds



3. Discuss the history and present position of stock Exchanges?

(Or)

Trace the growth and development of the stock market in India?

(Or)

Describe the role and index of Bombay Stock Exchange (BSE)?

Introduction of Stock Exchanges:

- It is a private or public market for the trading of company stock and derivatives of company stock at an agreed price; these are securities listed on a stock exchange.
- The **first stock exchange** was established in **HAMBURG in 1538** which how ere was concerned with bills transactions.
- It was followed by Amsterdam stock exchanges in the year 1611.
- The London stock ex change was during 17th century followed by Vienna stock exchange in 1771.
- Milan stock exchange which was created in 1808 in Italy

Present position of Stock Exchanges in India:

- In 18th century, East Indian Company issues shares and bonds.
- In 1860, the American civil war broke out, which caused a stoppage of cotton supply from U.S.A and marketing beginning of the “Share Mania in India”.
- In 1875, “the native share & Stock brokers Association “called as BSE was established.
- At present (2020)there are 3 stock exchanges are active and more than 6000 stock brokers.
- The three major stocks exchanges namely Bombay, Calcutta, NSE are responsible for 90 % of the transactions from the stock market.
- In 1992, SEBI was passed and it gave enormous power to the board to regulate transactions in stock exchanges in India.
- The List of Stock Exchanges are not active in India:
 - Bangalore Stock Exchanges
 - Bhubaneshwar Stock Exchanges
 - Calcutta Stock Exchanges
 - Cochin Stock Exchanges
 - Delhi Stock Exchanges
 - Coimbatore Stock Exchanges
 - Guwathi Stock Exchanges
 - Hyderabad Stock Exchanges
 - Jaipur Stock Exchanges
 - Ludhiana Stock Exchanges
 - Madhya Pradesh Stock Exchanges
 - Madras Stock Exchanges
 - Magadh Stock Exchanges Mangalore
 - Meerut Stock Exchanges
 - OTC Stock Exchanges
 - Pune Stock Exchanges
 - Saurashtra Kutch Stock Exchanges



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Bombay Stock Exchange (BSE):

- It is the oldest stock exchanges in Asia & 10th largest in the world.
- It was established by “Native Share & Stock brokers Association” in 1875.
- It is located in Dalal Street, Mumbai.
- Madhu kannan & Mahesh Soneji are the key people for Bombay stock Exchanges.
- It has greatest number of listed companies in the world with 10, 000 companies and companies are classified according to A, B, S, T, Z Group.
- It is 1st stock exchanges in the country to get recognition under security contract act 1956.
- It is 2nd in the world to obtain ISO 9001:2000 Certification.
- It is 2nd in the world to receive information security management system standard certificate for Bse Online Trading System (BOLT).

BSE SERVICES:

- It has launched “BSE Broadcast” which enables to provide information to the common man on the street.
- It also launched “Director Database” & “Indian Corporate Electronic Reporting System” to facilitate information flow in the Indian capital market.
- It has provided Investor services in order to safeguard the investor.
- It has launched BSEWEBX.COM which enables investor anywhere in the world to trade on the BSE platform.
- BOLT facilitates on line screen trading in securities. It’s currently operating in 25,000 workstation across 450 cities.
- It has made an agreement with U.S Future Exchange for U.S.Dollar denominated future trading of SENSEX in U.S.
- It has made an agreement with Dutch Stock Exchange. Its implies BSE index available to investors in Europe & America.

BSE HOURS OF OPERATIONS:

- The hours of operation for the BSE quoted above are stated in terms of the local time in Mumbai, India (also known as Bombay).
- This translates into a standard time zone UTC/GMT +5:30.

Beginning of the Day Session....8:00 - 9:00 AM

Login Session....9:00 - 9:30

Trading Session....9:55 - 3:30

Position Transfer Session....3:30 - 3:50

Closing Session....3:50 - 4:05

Option Exercise Session....4:05 - 4:35

Margin Session....4:35 - 4:50

Query Session....4:50 - 5:35

End of Day Session....5:35 PM.



**4. “Stock Market indices are the barometer of Indian Economy?” (Or)
What major factors must be considered, when constructing a market index? (Or)
Describe the features of stock market index by taking into consideration any
Two popular index numbers?**

A. STOCK MARKET INDICATOR\ INDEX:

- It is a method of measuring a section of the stock market.
- It is a list of figures and stocks that are used to indicate the combined value of its constituents.
- It is applied as a device for representing the essentials features of its constituents.
- A national index represents the performance of the nations of the market.
- A specialized index exists tracking the performance of specific sector of the market.
- It helps to recognize the broad trends o in the market.
- It can be used as a bench mark for evaluating the investor’s portfolio.
- It functions as status report on the general economy.
- The investor can use the indices to allocate funds rationally among stocks.

Stock Index in Indian Market:

I. BSE INDEX:

- ✓ BSE30 (SENSEX)
- ✓ BSE 100
- ✓ BSE200
- ✓ BSE500
- ✓ BSE AUTO
- ✓ BSE TECH
- ✓ BSE IT
- ✓ BSE FMCG
- ✓ BSE METAL
- ✓ BSE MID CAP
- ✓ BSE SMALLCAP

II. NSE INDEX:

- ✓ S & P CNX NIFTY
- ✓ NIFTY JUNIOR
- ✓ CNX 100
- ✓ CNX 500
- ✓ CNX MIDCAP
- ✓ CNX BANK INDEX
- ✓ CNX MNC INDEX
- ✓ CNX FMCG INDEX
- ✓ CNX ENERGY INDEX
- ✓ CNX INFRASTRUCTURE
- ✓ CNX REALTY INDEX



B. MAKING SENSE OF SENSEX

I. Basics of Sensex

1. "Sensex" is the popular name for the Bombay Stock Exchange Sensitive Index.
2. It is the oldest stock market index currently in use.
3. Sensex is the index of market capitalisation.
4. The base value is 100 on April 1, 1979.
5. Sensex consists of only 30 representative stocks.
6. These 30 are the most active and representative stocks selected from over 6,300 scrips that are listed on the BSE.

II. Basics of Sensex Scrip Selection:

1. The scrip should have a listing history of at least 3 months at BSE.
2. The scrip should have been traded on each & every trading day in the last 3 months.
3. The scrip should figure in the top 100 companies listed by the rank.
4. The weightage of each scrip should be at least 0.5 % of the index.
5. The company should have an acceptable track record.

III. Basics of Sensex calculation:

1. It is calculated using free float market capitalisation method.
2. The market capitalisation is determined by the multiply the current price of the shares by the number of shares issued by the company.
3. Find market capitalization for all 30 companies.
4. Finally Sensex is calculated using the formula:

$$\text{Sensex} = \text{Previous day sensex points} * \frac{\text{Current Market capitalization}}{\text{Previous day Market capitalization}}$$

C. METHODS OF CALCULATING INDEX:

The general movement of the market is measured by indices representing the entire market. There are various types of index.

1. Price weighted index
2. Equal weighted index
3. Market Value \ Capitalization weighted index
4. Broad base index



5. Ethical investing index

6. Environment stock market indices

1. Price weighted index:

- It is one in which each stock influences the index in proportion to its price per share.
- Stocks with a higher price will be given more weight and, therefore, will have a greater influence over the performance of the index.
- Assume that an index contains only two stocks, one priced at Rs 1 and another priced at Rs10.
- This means that this index is composed of 90% of the Rs10 stocks and 10% of Rs1 stock.
- In this case, a change in the value of the Rs 1 stock will not affect the index's value by a large amount, because it makes up such a small percentage of the index.
- Its calculated by the formula:

$$PWI = \frac{\text{Sum of the prices of the sample shares}}{\text{Sum of the base year price}}$$

2. Equal weighted index:

- It is one in which same weightage is given to each stock in a portfolio fund.
- The smallest companies are given equal weight to the largest companies in the fund.
- It assumes that the investors invest an equal amount of money in each stock included in the index.
- Its calculated by the formula:

$$EWI = \frac{\text{Total price relative}}{\text{No of price relative}}$$

3. Market Value \Capitalization weighted index:

- It is one in which each stock influences the index in proportion to its market value.
- It is index whose components are weighted according to the total market value of their outstanding shares.
- Its calculated by the formula:

$$VWI = \frac{\text{Market capitalization of the shares in a year}}{\text{Market capitalization in the base year}}$$



5. “Explain the Important\ Function\Services\Features\Role of Stock Exchanges?

(Or)

“Secondary Market is the Economic Barometer of a Country”

Function of Stock Exchanges:

1. Ideal meeting place:

A stock exchange provides an ideal convenient meeting places and a common platform for seller and buyer of securities. It is the nerve centre where open offers and bids are made under free competition.

2. Mobilizing savings for investment:

The savings of the public are mobilized through mutual funds, investment trusts and by various other securities. It helps in the mobilization of savings and surplus funds of individual, firms, and other institutions.

3. Providing safety to the investors:

One of the fundamental functions of stock exchanges is to provide adequate safety to the genuine investors from fraud and manipulation caused due to activities of speculators, members, brokers. For this, purpose, adequate rules & regulations have been provided under security contract act 1956.

4. Distribution of new securities:

It helps in the distribution of new securities already established companies, which wish to raise additional capital, may sell their securities through stock exchanges.

5. Ready Market:

An important function of stock exchanges is to provide a continuous, ready, open and broad based market for securities. The advantages of ready market encourage investment of funds in industrial enterprises besides enhancing the value of an investment as a collateral security for obtaining loans.

6. Liquidity:

It is an important indicator for judging the efficiency of exchanges as it concerns with sales and purchase of securities, quickly, easily and at reasonable prices. Thus it is the stock market which provides opportunities for converting securities into cash within a short notice.

7. True market Mechanism:

It provides liquidity and prices continuity only to listed securities. Securities that are listed and allowed to be traded on particular stock exchanges are called listed securities. It facilities free market mechanism providing for marketability, stability, continuity in prices.

8. Control on Companies:

The company listing their securities in the stock market has to submit their annual reports and audited balance sheet to the stock market. Thus only genuine companies can function and the share transaction.



9. Capital formation:

Companies are able to raise funds either by issuing more shares through right shares or bonus shares. But when a company wants to go in for diversification, they can issue the shares and raise more funds. Thus they are able to generate more capital and this promotes economic growth in the country.

10. Attract Foreign Capital:

Due to its dynamism and higher return on capital, the stock market is capable of attracting more foreign funds. Due to this, exchange rate of the currency will improve, when there is more trade undertaken by the govt.

11. Monetary and Fiscal Policies:

The monetary policy of RBI and fiscal policy of the govt have to be favorable to businessman and producers. If they are not so, then through the stock exchanges the govt may indicate and accordingly suitable steps can be taken.

12. Continuous market for Securities:

The investor is able to invest in good securities and in case of any risk .It enable people to switch over from one security to another.

13. Seasoning of Securities:

Stock market players such as underwriter, dealers, brokers, and speculator temporarily hold securities issued by new companies. This is called seasoning of securities.

14. Optimal Resources Allocation:

Stock exchanges serve as an ideal tool of allocating the national savings to various issues and thereby, ensure most effective and optimum allocation and utilization of scarce financial resources in industry and commerce for maximum social advantages. This is made possible by the price mechanism under the free competition

15. Economic Barometer:

A stock market is an economic indicator of condition prevailing in the country. A politically and economically strong govt will have an upward trend in the stock market. Whereas an unstable govt will have borrowing from other countries will have downward trend in the stock market. So, every govt will adopt policies in such a manner that the stock market remains dynamic.



6. Explain the procedure for listing of shares by company in the stock Exchange?

CONDITION FOR LISTING:

Before listing securities, a company has to fulfill the following conditions:

- Shares of the company must be offered to the public through a prospectus and 25 % of each class of securities must be offered.
- The prospectus should clearly mention opening of subscription, receipt of application.
- The capital structure of the company should be broad based and there should be public interest in securities.
- The minimum issued capital must be Rs 3 crores of which Rs 1.80 crores must be offered to the public.
- The auditor or secretary of the company applying for listing should declare that the share certificates have been stamped so that shares belonging to the promoters quota cannot be sold or hypothecated or transfer for a period of 5 years.

PROCEDURE FOR LISTING REQUIREMENTS:

For listing the shares in the stock exchanges, the public limited company will have to submit supporting documents. They are:

- Certified copies of Memorandum, Articles of Association, Prospectus and agreement with the underwriters.
- All particular regarding capital structure.
- Copies of advertisements offering securities for sale during the last 5 years.
- Copies of Balance sheet, audited accounts and auditors report for the last 5 years.
- Specimen copies of shares and debentures, certificate letter of allotment and letter of regret.
- A brief history of the company since incorporation with any changes in capital structure, borrowings.
- Details of shares and debentures issued for consideration other than cash.
- Statement showing distribution of shares and particular of commission, brokerage, discounts or special terms towards the issue of shares.
- Any agreement with financial institutions.
- Particular of shares forfeited.
- Details of shares or debentures for which permission to deal with is applied for.
- Certified Copy of consent from SEBI.

PROCEDURE AT THE STOCK EXCHANGE:

After the application is made the listing committee of the stock exchange will scrutinize the application form of the company. Here, the stock exchange will ensure the following as

- The financial position of the company is sound
- Solvency and liquidity are good
- The issue is large and broad based to generate public interest.



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If the application for listing is accepted, the listed company will be called to execute listing agreement with the stock exchange. The company must follow certain obligations which are:

- The company will treat all the applications with equal fairness.
- In case of over subscription, the allotment will be decided in consultation with the stock exchanges.
- The company will notify to the stock exchange any changes in its management, business, capital structure or bonus issue of shares

BENEFITS OF LISTING:

- A wide publicity is given to the companies as securities prices are quoted in newspapers, television and other magazines.
- It helps the company to diversify its share holders, especially on a distribution.
- By listing its security in a stock exchange, a company is able to raise its required capital easily.
- The interest of investors is now protected as the stock exchange regulates and controls the company.
- The correct value of the securities is given in the press which enables the prospective investor to take a right decision for investment.

DEFECTS OF LISTING:

- It is only an indication of financial soundness.
- It does not guarantee for the securities of the company.
- Listing may encourage speculation in the market.
- Due to speculation, genuine investors may not enter the market.
- Directors and promoters may take advantages of listing and may go in personal gain.

7. Explain the provision relating to market intermediaries aimed at investor protection cell? \ Explain the investor protection cell?

Investor service cell (ISC)

- The main objective of SEBI is to protect the interest of the investors. In pursuit this objectives, Bombay stock exchanges set up an Investor service cell (ISC) in 1986.
- The grievances of investors against listed companies and members of the exchange are redressed by the exchanges. With a view to ensure speedy and effective resolution of claims, differences, and disputes between non-members, the exchange has laid down a set of procedures.

Safeguards for investors:

Some of the safeguard that need to by adhere to by the investors before trading in the securities market are as follows:

(1)Selecting the broker\ sub broker:

- Investors should deal with only SEBI registered broker\ sub broker.
- List of brokers can be procured from the member's list published by the exchange.



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(2) Formal agreement:

An investor is expected to enter into a formal agreement with the broker before transacting business.

A. registration:

- Fill in a client registration form with broker\ sub broker.

B. agreement:

- Enter into broker\ sub broker client agreement.
- This agreement is for all investors as a client of a BSE trading member.
- Before entering into the agreement, the client is expected to read and understand the terms and condition of the agreement.
- The client and the member who has the authority to sign the agreement
- Agreement signed by witness, name and address.

(3) Transacting business:

The following are to be borne in mind by the investors before transacting business.

A. Specifying exchanges:

- Specify to the broker\ sub broker, exchange through which your trade is to be executed and maintain separate account per exchange.

B.Contract note:

- Obtain a valid contract note (from broker)\confirmation memo (from sub-broker) within 24 hours of the execution of the trade.
- Contract notes is a confirmation of trade done on a particularly day for and on behalf of a client in a format prescribed by the exchanges.
- Contract notes are made in duplicate and the members and the client keep one copy each.
- The client is expected to sign on the duplicate copy.
- Contract notes\ confirmation memo contains SEBI register number, order number, trade number, trade time, quantity, price, brokerage, settlement number and other levies.

(4)Brokerage:

- The maximum brokerage that can be charged by the broker is 2.5 % of the trade value.
- The maximum brokerage that can be charged by the sub- broker is 1.5%.
- Any additional charges that member can charge are service tax @5%
- Any penalties arising on behalf of the investor.



(5) Ensuring settlement:

E. Delivery:

- Delivery of securities \ payment of money to the broker is to be ensured immediately upon getting the contract note.
- The member should pay the money or deliver the securities to the investor within 48 hours of the payout.

B. Demat account:

- It option for buying and selling demated securities.

C. Depoistory participant:

- For delivery of shares from demat a\c, give the depository participant (DP) “Delivery out” instructions to transfer the same from beneficiary account to the pool account of broker through whom the shares and securities have been sold.
- For receiving shares in the demat a\c, give the depository participant (DP) “Delivery in” instructions to accept shares in beneficiary account from the pool account of broker through whom the shares and securities have been purchased.

(6) Delivery:

- All registration of shares for ownership of physical shares should be executed by a valid, duly completed and stamped transfer deed.

8. Explain SEBI guidelines for protecting the interest of investors? \ what are the recent measures taken by SEBI to protect the investors?

SEBI guidelines for protecting the interest of investors:

- SEBI has been encouraging investor education. For this purpose, certain investors associations Like FIE, SIFMA, FINRA have been registered.
- Companies raising public deposits as well as huge capital must undergo credit rating.
- SEBI has taken the responsibility of disclosing fair and adequate information for investors for the purpose of investment decisions.
- For the benefit of the investors, company has to disclose its capacity utilization, adverse events and material changes of key personnel.
- For the benefits of the individual investors, a new schemes called stock invest account has been introduced in banks.
 - ✓ Cash account
 - ✓ Margin account
 - ✓ Discretionary account
- Disclose on market prices for listed company.
- Arrangement for disclosing investor’s grievances and redressal system.
- Compulsory disclosure in the prospectus.



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- Contribution by promoters whose name figure in the prospectus.
- Setting up of investor's grievances cell for handling complaints of investors.
- SEBI has right to cancel registration of any underwriter who fails to furnish business details to SEBI.
- Merchant bankers have to attach diligence certificate with the prospectus for extending their accountability to the investors.

9. Explain the various Recent Development / initiatives \ program\ improvement taken by SEBI?

Various Initiatives taken by SEBI:

- The process of buying stock with borrowed money is called badla trading. SEBI ban Badla system.
- PAN was made the identifications number for all transactions in capital market.
- The company issuing debentures & stock exchanges required to circulate information regarding debentures.
- Constitution of a centralized monitoring mechanism to examine the flow of funds from the banking system to the stock markets.
- Formulation of proper norms regarding transactions of overseas corporate bodies in the Indian markets.
- Evolving a mechanism of sharing information among the surveillance departments of exchanges to have a holistic picture of risk profile and trading by members.
- Review of the system of bank guarantees for meeting capital and margin requirements with a view to reduce leverage in trading.
- Standardization of composition of settlement guarantee funds and trade guarantees to work as a cushion for the successful completion of settlements.



PART- C (10 MARKS)

1. Who are the key players \ financial intermediaries involved in new issue market? \ who are the parties involved in the issue of shares in the primary market?

PRIMARY MARKET\ NEW ISSUE MARKET:

- It is one in which new securities are offered to the investing public for the first time. Hence it is called “new issue market”.
- The new issue market deals with the new securities which were not preciously available to the investing public.
- The new issue market encompasses all institutions dealing in fresh claim.
- The form in which these claims created are equity shares, preference shares, debentures.
- It provides opportunity for investors to start new enterprises.
- It helps existing companies to expand their operation and activities.
- Promotion of partnership firm into public limited companies facilitates buy back of shares.

| Primary Market | Secondary Market |
|---|--|
| 1. It deals with only fresh issue of securities. | It deals in existing securities. |
| 2. Securities are created and transferred from corporate to investors for the first time. | Securities are transferred from one investors to other investors through the stock exchange mechanism. |
| 3. All companies can enter NIM and make fresh issue of securities. | For the securities to enter the portals of stock exchange for the purposes of trading, listing is mandatory. |
| 4.it creating long term instrument for borrowings | It provides liquidity through marketability of that instrument. |
| 5. No fixed place geographical location needed. | Needs a fixed place to house the secondary market activities. |
| 6. Depth depends on number and volume of issue. | Depth depends upon the activities of the primary market as it brings into fore more corporate entities. |

Intermediaries' \ Players involved in Primary Market:

1. Merchant banker \ lead manager
2. Underwriters
3. Bankers to issues
4. Brokers to an issue
5. Registrars to the issue
6. Share transfer agent
7. Debentures Trustees.



1. Merchant banker \ lead manager:

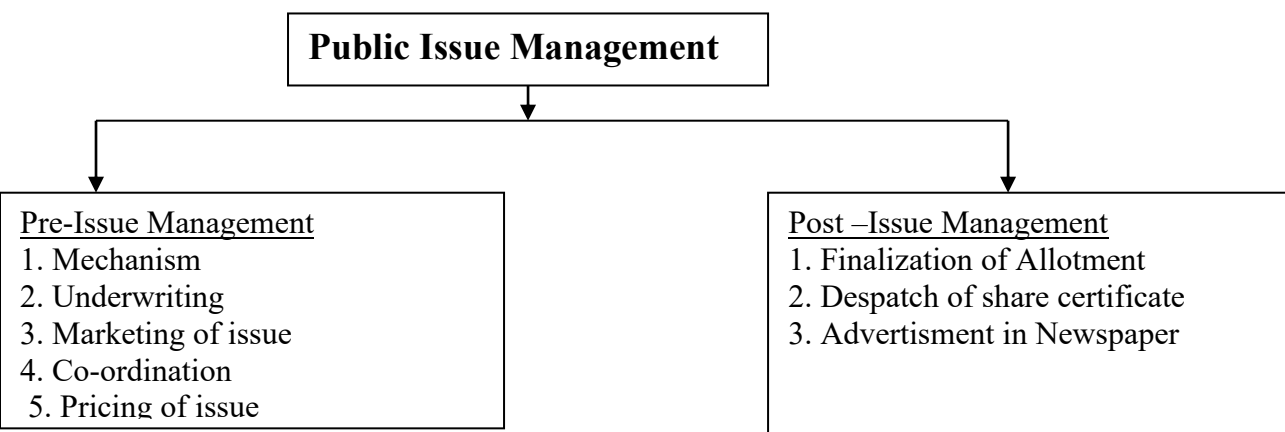
- Any person who is engaged in the business of public issue management by making arrangements, regarding selling, buying, subscribing to securities is called merchant banker.
- A set of function and services rendered by a merchant banker may be termed as merchant banking.
- The merchant banker needs to satisfy the following requirements:
 - ✓ Adequate & necessary infrastructure such as office space, manpower, data processing and communication facilities.
 - ✓ Minimum number of two persons who are qualified in law\ finance.
 - ✓ Fulfill the capital adequacy requirements to Rs 5 crores

• Restriction of Merchant Bankers:

| ISSUE SIZE | NO OF LEAD MANAGERS |
|----------------------|---------------------|
| Less than 50 crores | 2 |
| Less than 100 crores | 3 |
| 100 - 200 crores | 4 |
| 200 - 400 crores | 5 |
| Above 400 crores | More than 5 |

Public issue management Activities by Merchant banker \ lead manager: :

- The management of issue for raising funds through various types of instruments by companies is known as “Issue management ”



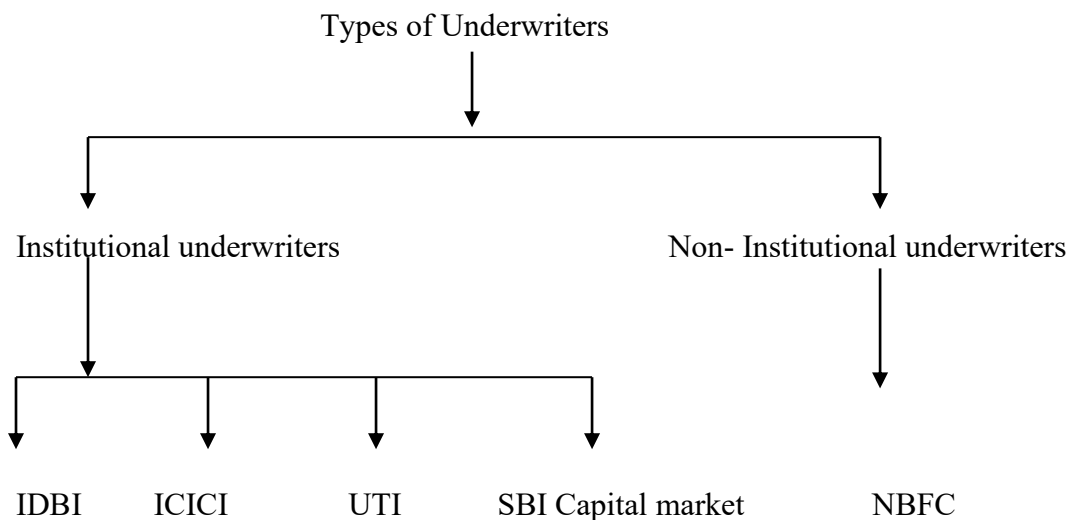
• Function of Merchant Bankers:

- ✓ Corporate counseling
- ✓ Project counseling
- ✓ Project appraisal
- ✓ Public issue management & underwriting
- ✓ Pre issue studies
- ✓ Portfolio management
- ✓ Working capital finance
- ✓ Mergers & Takeover
- ✓ Venture financing
- ✓ Leasing financing.
- ✓ Mutual funds



2. Underwriters:

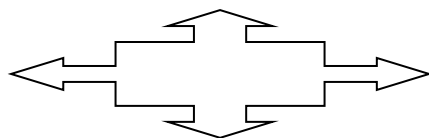
- It is insurance to the company which proposes to make public offer against risk of under subscription.
- The agreement between issuing the company and financial intermediary is called underwriters.
- The underwriter's works for a commission called as "underwriter's commission".
- The underwriters needs to satisfy the following requirements:
 - ✓ Adequate & necessary infrastructure such as office space, manpower, data processing and communication facilities.
 - ✓ Prescribed fees for registration certificate and renewal is Rs 2 lakhs
 - ✓ Fulfill the capital adequacy requirements to Rs 20 lakhs.
- Types of underwriting:
 - a. Firm underwriting: the underwriters agree to take up a specified no of securities irrespective of the security being offered to the public.
 - b. Sub underwriting: When a large issue of securities is made and underwriters is contract to other underwriters is called sub underwriting.
 - c. Joint underwriting: When an large issue of securities is underwritten by two or more joint institutions is called joint underwriting.



UNDERWRITER AGENCIES:

PRIVATE FIRMS

BANKS



FINANCIAL INSTITUTION

PROPRIETARY FIRMS



3. Bankers to issues:

- Bankers who are engaged in the function of acceptance of application for shares and debentures along with the application money from investors.
- Bankers who refund the application money to the applicant to whom securities are not be allotted are called banker to the issue.
- There are two types bankers involved in the issues. They are
 - a. Collecting Bankers
 - b. Co-coordinating Bankers
- The collecting bankers collect the subscriptions in cash, cheques, stock invest and coordinating bankers collect the information on subscriptions.
- The annual registration fees for banker activities are Rs 2.5 lakhs.
- The banker should maintain book of accounts, records for 3 years.
- The banker should give daily statement regarding applicant to the company and SEBI.

4. Brokers to an issue:

- Intermediaries who are responsible for procuring the subscription to the issue from the investors are called brokers to the issue.
- Brokers along with remisers market the new issue by their own circulars, sending the application form and follow up recommendations.
- They act a link between the investor and issuers.

5. Registrars to the issue & share transfer agent:

- They collect the application of new issue, their cheques, stock invests classify and computerize them.
- They keep a proper record of application and money received from investors.
- They have to dispatch letter of allotment, refund order, share and debentures certificates.
- They have to assist the finalization of allotment of securities.
- The annual registration fees for registrar's activities are Rs 3 lakhs.

6. Share transfer agent:

- Their function is to maintain the records of holders of securities of the company.
- They handle all matters related to transfer and redemption of securities of the company.

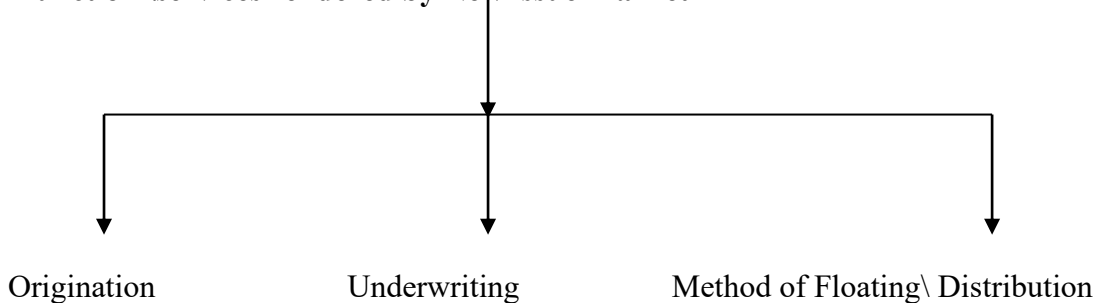
7. Debenture Trustees:

- Trustees who are appointed to safeguard the interest of debentures holders are called Debenture Trustees.
- They are to be appointed before issuing of bonds by the company.
- Insurance company, commercial banks, public financial institutions can acts a Debentures trustees.



2. Explain the function \ Services provided by New issue Market? \ Explain the methods of marketing new issue market? \ Explain the floating of new issue market?/Explain the Role of Primary Market?

Function \services rendered by New issue Market:



A. Origination:

The new issue market is to allow the transfer of resources from savers to entrepreneurs who establish new companies. It is called the function of origination.

(i) **Investigation:** it involves a study of technical, economics, financial, and legal aspects of the issuing company. Based on this, Issue house (MB) will back the company for issues of shares.

(ii) **Analysis:** the quantity and quality of capital is analysed.this includes determination of the class of security, price of the issue on the basis of market condition.

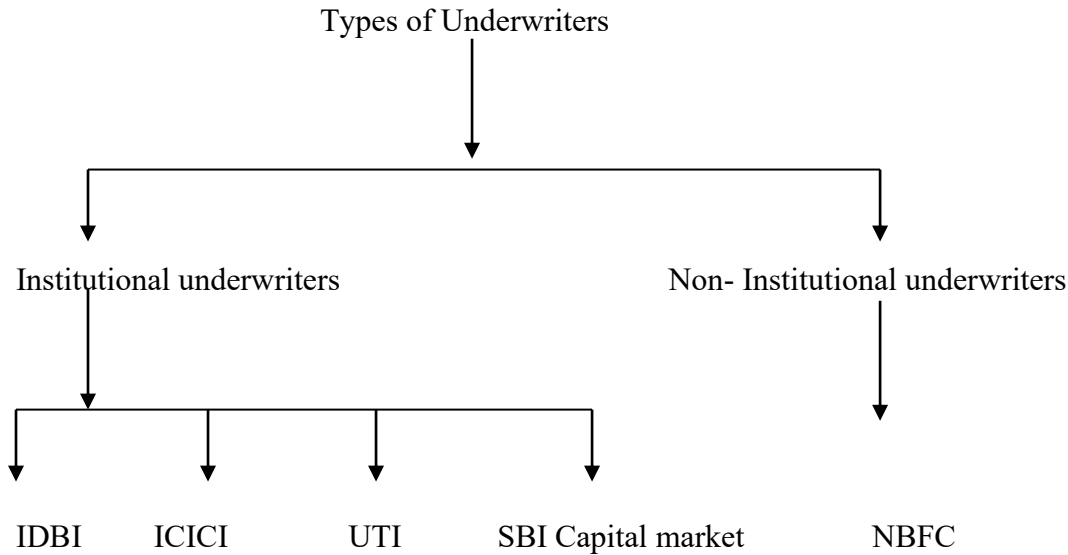
(iii) **Processing of new proposals:** it involves the study of timing and magnitude of issue, method of flotation and techniques of selling.

B.Underwriting:

- It is insurance to the company which proposes to make public offer against risk of under subscription.
- The agreement between issuing the company and financial intermediary is called underwriters.
- The underwriter's works for a commission called as "underwriter's commission".
- The underwriters needs to satisfy the following requirements:
 - ✓ Adequate & necessary infrastructure such as office space, manpower, data processing and communication facilities.
 - ✓ Prescribed fees for registration certificate and renewal is Rs 2 lakhs
 - ✓ Fulfill the capital adequacy requirements to Rs 20 lakhs.
- Types of underwriting:
 - a. Firm underwriting: the underwriters agree to take up a specified no of securities irrespective of the security being offered to the public.
 - b. Sub underwriting: When a large issue of securities is made and underwriters is contract to other underwriters is called sub underwriting.

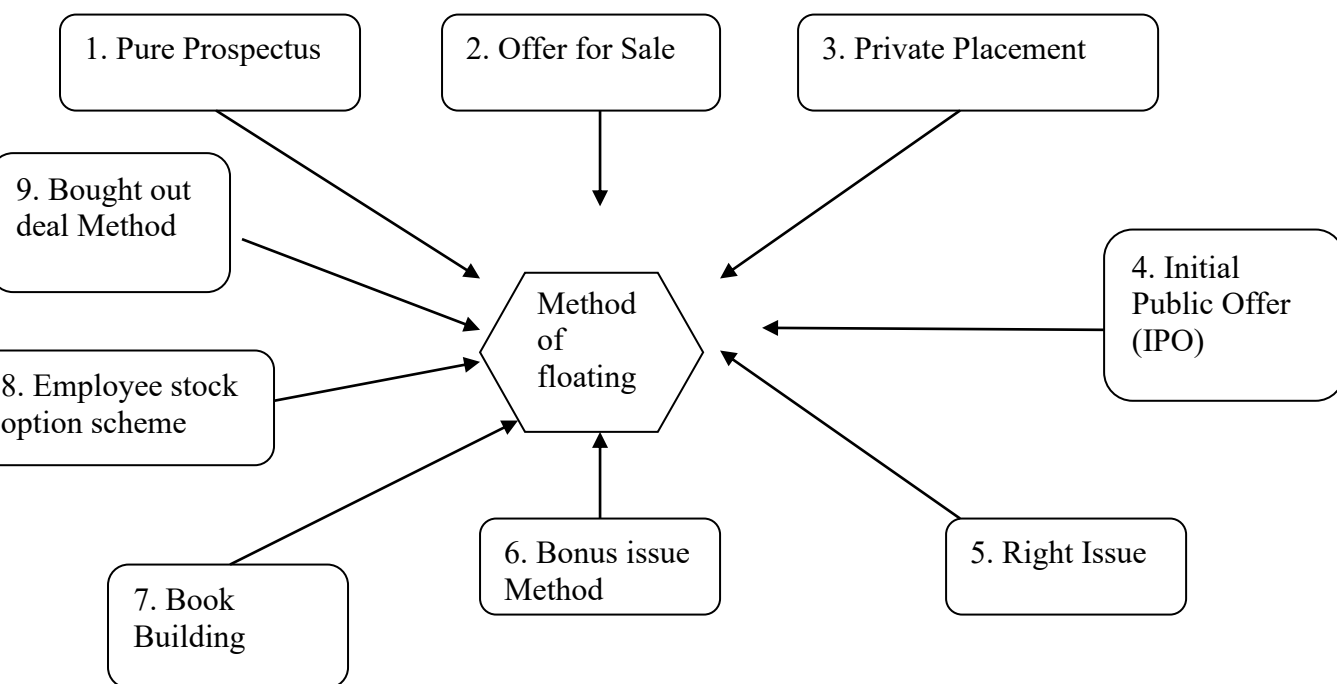


c. Joint underwriting: When an large issue of securities is underwritten by two or more joint institutions is called joint underwriting.



C. Method of Floating\ Distribution:

The following are various methods being adopted by corporate entities for marketing the securities in the new issues market.





1. Pure Prospectus method\ Red Herring Prospectus method:

- The issuing company directly offers to the general public\ institutions a fixed number of shares at a stated price through a document called Prospectus.
- This is the most common method followed by joint stock companies to raise capital through the issue of securities.
- The Contents of a prospectus:
 - ✓ General Information
 - ✓ Capital Structure of the company
 - ✓ Details of the issues
 - ✓ Details about the company management
 - ✓ Details about the Project
 - ✓ Financial Information
 - ✓ Statutory & other Information

2. Offer for Sale method:

- When the marketing of securities takes place through intermediaries such as issue house, stockbrokers and other it is called Offer for Sale method. There are 2 stages:
- The first stage is a direct sale by the issuing company to the issue house and brokers at an agreed price.
- In the second stage intermediaries resell the above securities to the ultimate investors.

3. Private Placement method:

- The direct sale of securities by a company to institutional investors is called private placement. The investors include LIC, UTI, GIC and SFC.
- The financial intermediary plays a vital role in preparing an offer memorandum and negotiating with the investors.
- This is the most popular method gaining momentum in recent times among corporate enterprises

4. Initial Public Offer (IPO) method:

- It stands for Initial Public Offer.
- The public issues made by a corporate entity for the first time in its life are called Initial Public Offer.
- When a company whose stock is not publicly traded wants to offer that stock to the general public, it takes the form Initial Public Offer.
- It stands for Follow on Public Offer.
- It is also called secondary public offering.
- When the company raises capital after an IPO has already been made and shares of company are held by public and are already listed on the stock exchange.

5. Right Issue method:

- When the shares of an existing company are offered to its existing share holders, it takes the form of right issue.
- The existing company issue shares to its existing shareholders in proportion to the number of share already held by them.
- It prevents the directors from issuing new shares in their own shares or to their relatives at a lower price and get controlling right.



6. Bonus Issue Method:

- When the accumulated and surplus of profits of a company are converted into paid up capital, it takes in the form of “Bonus Shares”.
- It is regulated by the provision of Company articles and SEBI guidelines.

7. Book Building method:

- It is a process of price discovery used in public offers.
- The issuer sets a base price and a band within which the investor is allowed to bid for shares.
- It is a process used by companies raising capital through Public Offerings-both IPO and FPO to aid price and demand discovery.
- The merchant bankers will take the full responsibility for the issue of the shares.
- The option of 100% book building shall be available only to those issuer companies which propose to make an issue of capital and above Rs 100 crores.

8. Employees Stock option Method:

- Marketing the shares of a company whereby its employees are encouraged to take up shares and subscribed, its called “Stock option”.
- It is a voluntary scheme.
- It offers incentive to the employee to stay in the company.

9. Bought Out Deals Method:

- A method where the promoters of an unlisted company make sales of equity share to Single sponsor is known as “Bought out Deals Method”.
- It has the following features as
 - ✓ Fund based activity
 - ✓ Outright sale
 - ✓ Quality offer
 - ✓ Speedy sale
 - ✓ Investor protection
 - ✓ Lock in period is 18 months.



3. Explain the Origin, Objectives, Function and role of National stock exchange (NSE)?

NATIONAL STOCK EXCHANGE (NSE):

1. The establishment of national stock exchanges is a step to overcome the deficiencies of the existing market and to bring Indian financial market in line with International market.
2. NSE was set up by leading institutions to provide a modern, fully automated screen-based trading system with national reach.
3. The National Stock Exchange of India Limited (NSE) is a Mumbai-based stock exchange.
4. It is the largest stock exchange in India in terms of daily turnover and number of trades, for both equities and derivative trading.
5. NSE of India incorporated in Nov 92, with an equity capital of Rs 25 crores.

OBJECTIVES /FEATURES OF NSE:

1. Establishing a nation-wide trading facility for equities, debt instruments and hybrids.
2. Ensuring equal access to investors all over the country through an appropriate communication network.
3. Providing a fair, efficient and transparent securities market to investors using electronic trading systems.
4. It enables shorter settlement cycles and book entry settlements systems.
5. To meet the current international standards of securities markets.
6. NSE exceeds geographical barriers and overcome fragmentation.
7. To brought about unparalleled transparency, speed & efficiency, safety and market integrity.

PROMOTERS OF NSE:

1. SBI Capital Market Ltd.
2. IDBI-Industrial development Bank of India
3. LIC-Life Insurance Corporation of India
4. GIC-General Insurance Corporation of India
5. ICICI-Industrial Credit and Investment Corporation of India
6. SBI –State Bank of India.

COMMITTEES OF NSE:

1. Executive committee
2. Settlement issue committee
3. Dispute Resolution Committee
4. Trade related issue committee
5. Advisory committee

TRADING STEP IN NSE:

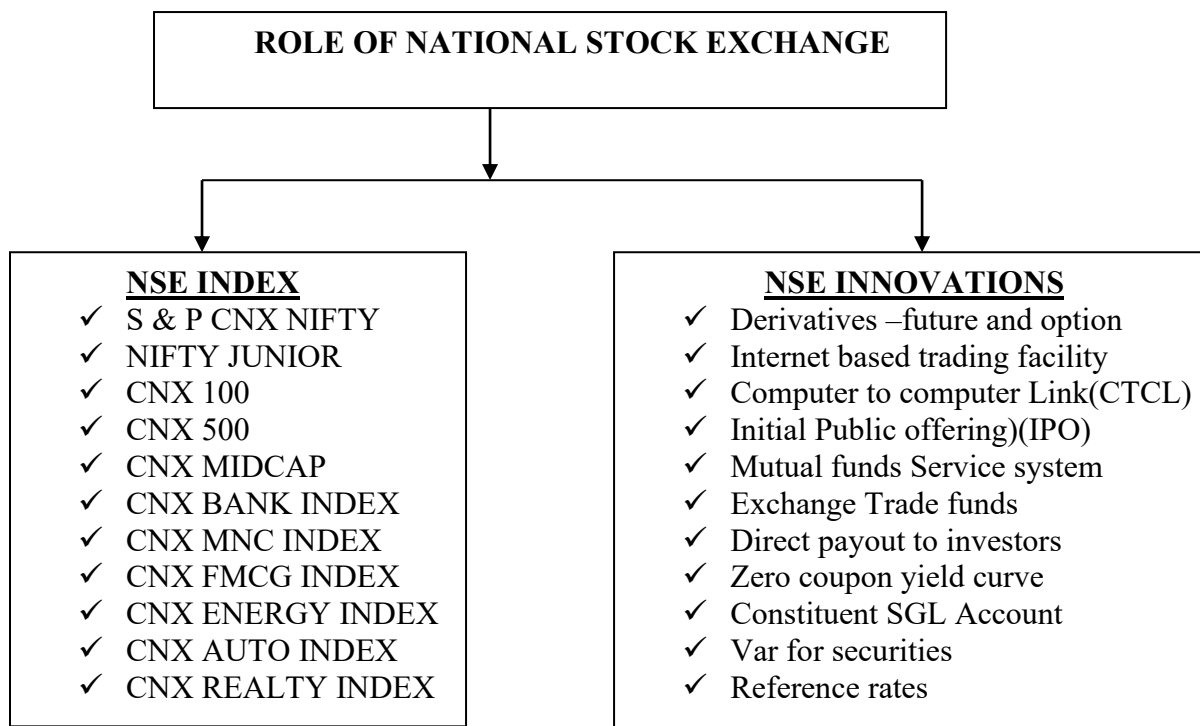
1. Client registration
2. Order Placing
3. Order confirmation
4. Trade confirmation
5. Contract notes



SETTLEMENT MECHANISM AT NSE:

| | | |
|--------|-----------|---|
| Day 1 | Wednesday | Trade cycle commences |
| Day 7 | Tuesday | Trade cycle ends |
| Day 8 | Wednesday | Obligations worked out and communicate to brokers |
| Day 13 | Monday | Seller deliver shares to the clearing house |
| Day 14 | Tuesday | Purchasers pay amounts for purchase |
| Day 15 | Wednesday | Seller gets amounts due and purchasers get their shares |

ROLE OF NATIONAL STOCK EXCHANGE



ACHIEVEMENTS OF NSE:

- Being the first national, anonymous, electronic limit order book (LOB) exchange to trade securities in India.
- Being the first exchange that, in 1996, proposed exchange traded derivatives, particularly on an equity index, in India.
- Being the first and the only exchange to trade GOLD ETFs (exchange traded funds) in India.
- Setting up the first clearing corporation "National Securities Clearing Corporation Ltd (NSCCL)" in India.
- Co-promoting and setting up of National Securities Depository Limited (NSDL), first depository in India.
- NSE pioneered commencement of Internet Trading in February 2000, which led to the wide popularization of the NSE in the broker community.



FUNCTIONS OF NSE:

- The NSE employs a fully automated screen based trading system.
- It has three segments: The capital market segment, sale debt segment and derivatives market.
- The NSE market is a fully market automated screen based environment.
- The market operates with all participants stationed at their offices and making use of their computer terminals, to receive market information, to enter orders and to execute trade. Through 1777 satellite, there are 3000 computers terminals connected to NSE.
- The trading member in the capital market segment is connected to the central computer in Bombay through a satellites link up using VSATS.
- The NSE has opted for an order driven system. The system provides enormous flexibility to trading members.
- When a trade takes, a trade confirmation slip is printed at the trading members work station. It gives details like price, qty, code, number of the party and so on.
- It is a total transparency in trading operations as the opening and closing prices are available for the investors. They are also able to see their orders being executed.
- It helps by providing a suitable match with reasonable interest and period of repayment. This exposure is available throughout India for the sale of debt instruments.
- The automated trade matching system secures the best prices available in the market to the investor. The trading member can transact a high volume of business efficiently.
- The members are required to deliver securities and cash by the 13th and 14th day respectively. The 15th day is the pay out day.

4. Explain the Origin, Objectives, Function and Role of Over the Counter Exchange of India (OTCEI)?

OVER THE COUNTER EXCHANGE OF INDIA (OTCEI):

- It was promoted by a group of financial institutions owned by the govt of India consisting of UTI, IDBI, ICICI, SBI, LIC, GIC, & CAN BANK SRVICES.
- OTCEI was incorporated in October 1990 and is recognized as Stock exchanged under Securities contract Regulation Act, 1956.
- It is primarily meant for small size, medium size companies and small investors.
- It is a way of trading securities otherwise than on organized stock exchange.
- It is traded out by brokers, dealers, scattered over different locations and regions with the help of telephone, telex, fax and computers.
- Communication network lines every dealer and allow the investors to select among the Market maker.

OBJECTIVES /FEATURES OF OTCEI:

- National ringless trading
- Nation wide trading
- computerized exchange trading
- Trading through telephone line



- Compulsory investor registration
- Closeness to investors
- Price Display
- Trading in derivatives
- Instant Execution of orders
- Exclusive Listing

DIFFERENCE BETWEEN OTCEI AND REGULAR STOK EXCHANGE:

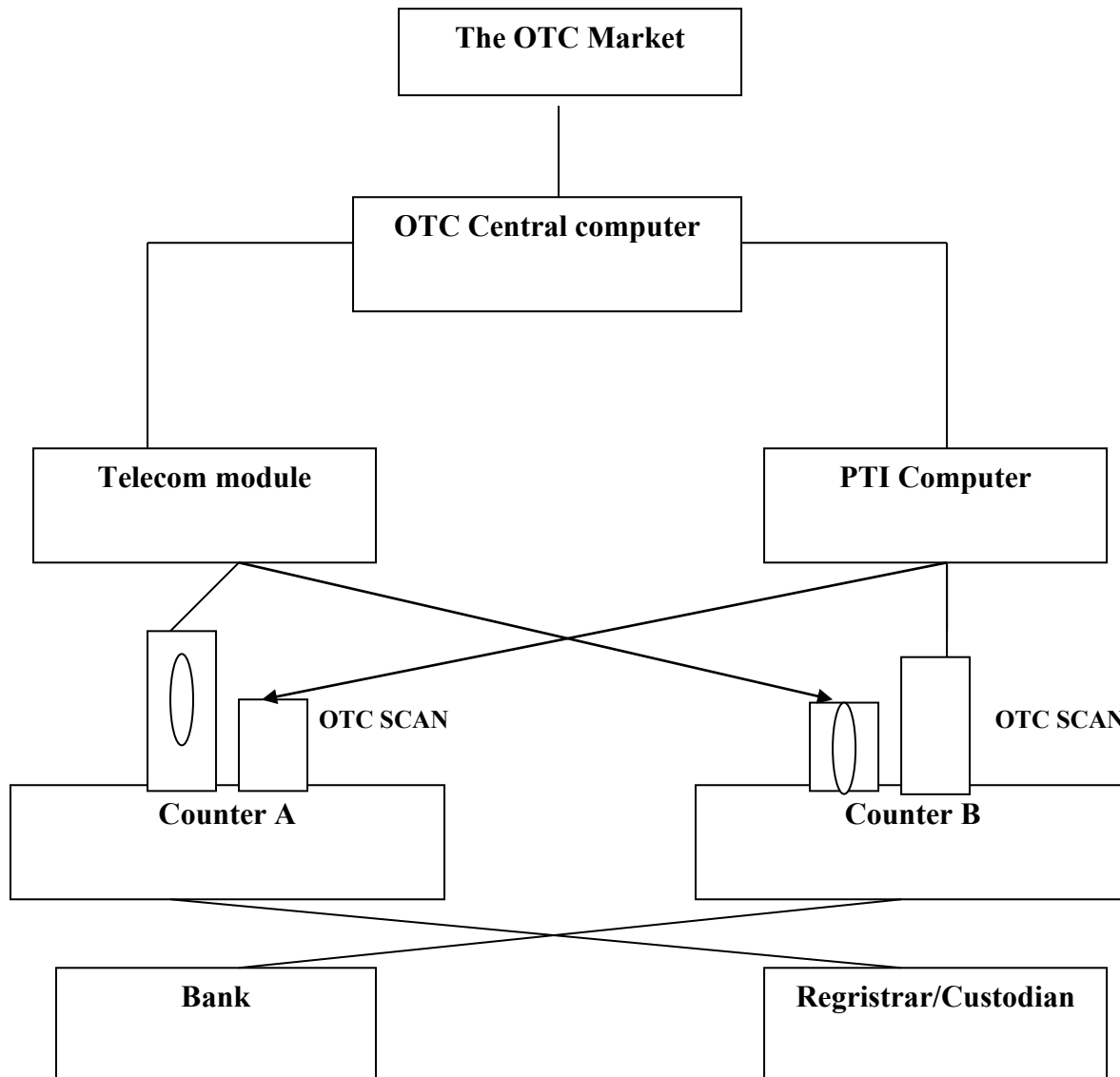
| OTCEI | Regular Stock Exchange |
|---|--|
| 1. Trading is done through network or computer system. | Trading is done on floor or hall by ring |
| 2. Daily settlement system | Weekly settlement system |
| 3. Decentralised Exchange | Centralized Exchange |
| 4. Only one Exchange | More than 21 Exchange |
| 5. Securities are transferred through “Counter Receipt” | Securities are transferred through “Share certificate” |
| 6. Market Makers offer 2 way Quotes | Jobber may or may not offer 2 way Quotes |
| 7. Minimum paid up capital is Rs 2 crores | Minimum paid up capital Rs 5 crores. |
| 8. Companies between 25lakhs-30crores are listed | Companies with 3 crores are listed |
| 9. Trading in securities of all companies throughout India. | Trading in securities belonging to that region and also in other permitted securities. |
| 10. The primary object is to help small companies to raise funds. | The primary objective being the improvement of capital market. |

TRADING STEP IN OTCEI:

1. Issue of Customer Receipt (CRs)
2. Transfer
3. Compilation
4. Selling securities
5. Counter details
6. Automatic transfer
7. Consolidated statement

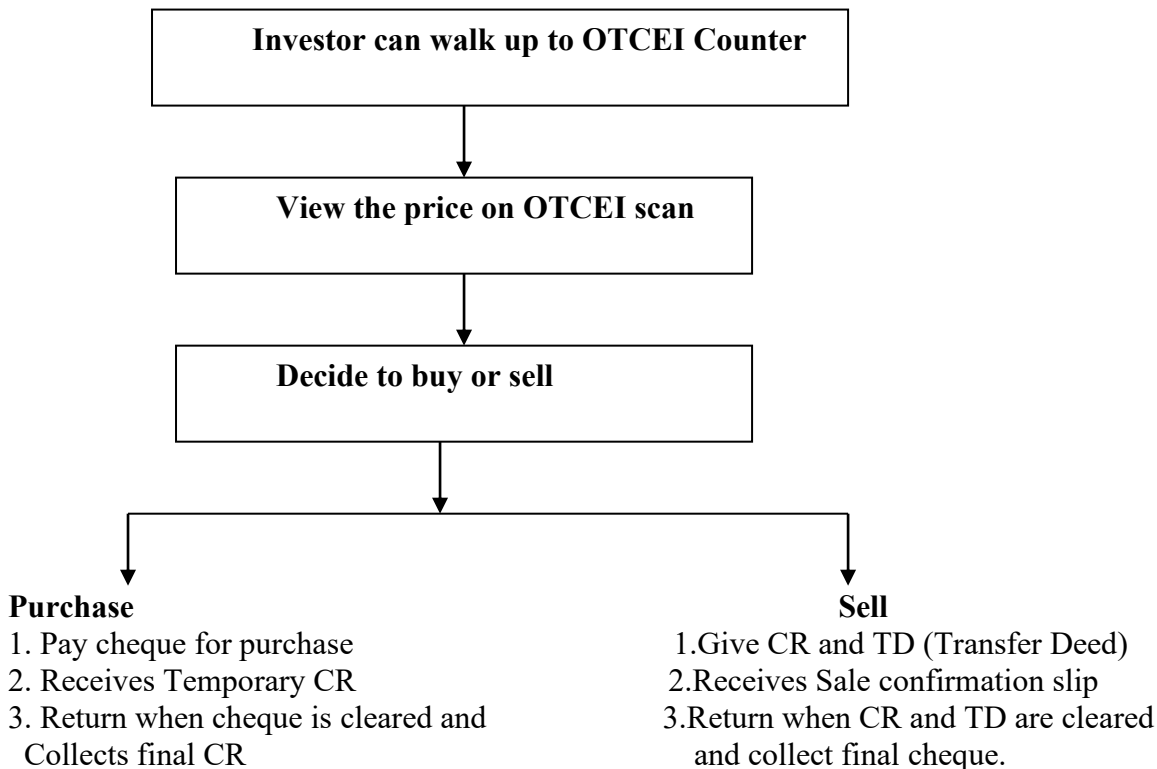


VIEW OF OTCEI MARKET:

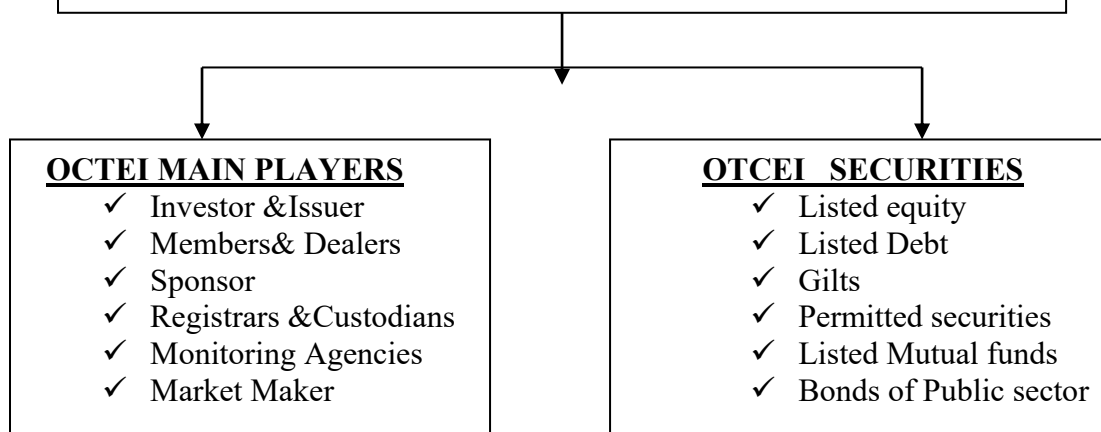




OTCEI SECONDARY MARKET OPERATIONS:



ROLE OF OVER THE COUNTER EXCHANGE OF INDIA



FUNCTIONS OF OTCEI:

- It deals with equity shares, preferences shares, debentures & warrants.
- Provide a source of valuation for securities traded
- Provide efficient avenue of capital market investment for small investors
- Promote organized trading in unlisted securities
- The trading takes places through telephone lines.



5. Explain the objectives, function, powers and organization structure of SEBI?

INTRODUCTION:

- SEBI Stands for SECURITY EXCHANGE BOARD OF INDIA.
- It was established in the year 1992, in accordance with SEBI Act.
- The government of India set up the securities and exchange board of India (SEBI) on the basis of the recommendations of the high powered committee on stock exchange reforms headed by G.S.Patel.
- The Chairman and Board members are appointed by the central government
- Its headquarters is situated in “Bandra Kurla complex” in Mumbai.
- Its regional offices are situated in New Delhi, Kolkata, and Chennai.

Objective of SEBI:

- To deal with development and regulation of stock market in India.
- To promote fair dealings by the issue of securities and ensure a market place where they can raise funds.
- To regulate and develop a code of conduct for brokers, merchant bankers.
- To verify listing requirements, listing procedures and ensure compliance of the same by the companies so that only financially sound companies are listed.
- To provide protection to the investors.
- To promote healthy growth of security market for the development of capital market in the country.

Features \Functions of SEBI:

SEBI has two major functions. They are as follows:

(I)Regulatory Function:

- Registering the brokers and sub-brokers
- Registering of mutual funds
- Regulation of stock exchanges
- Prohibition of fraudulent and unfair trade practice
- Controlling insider trading, take over bids and imposing penalties.

(II) Developmental Function:

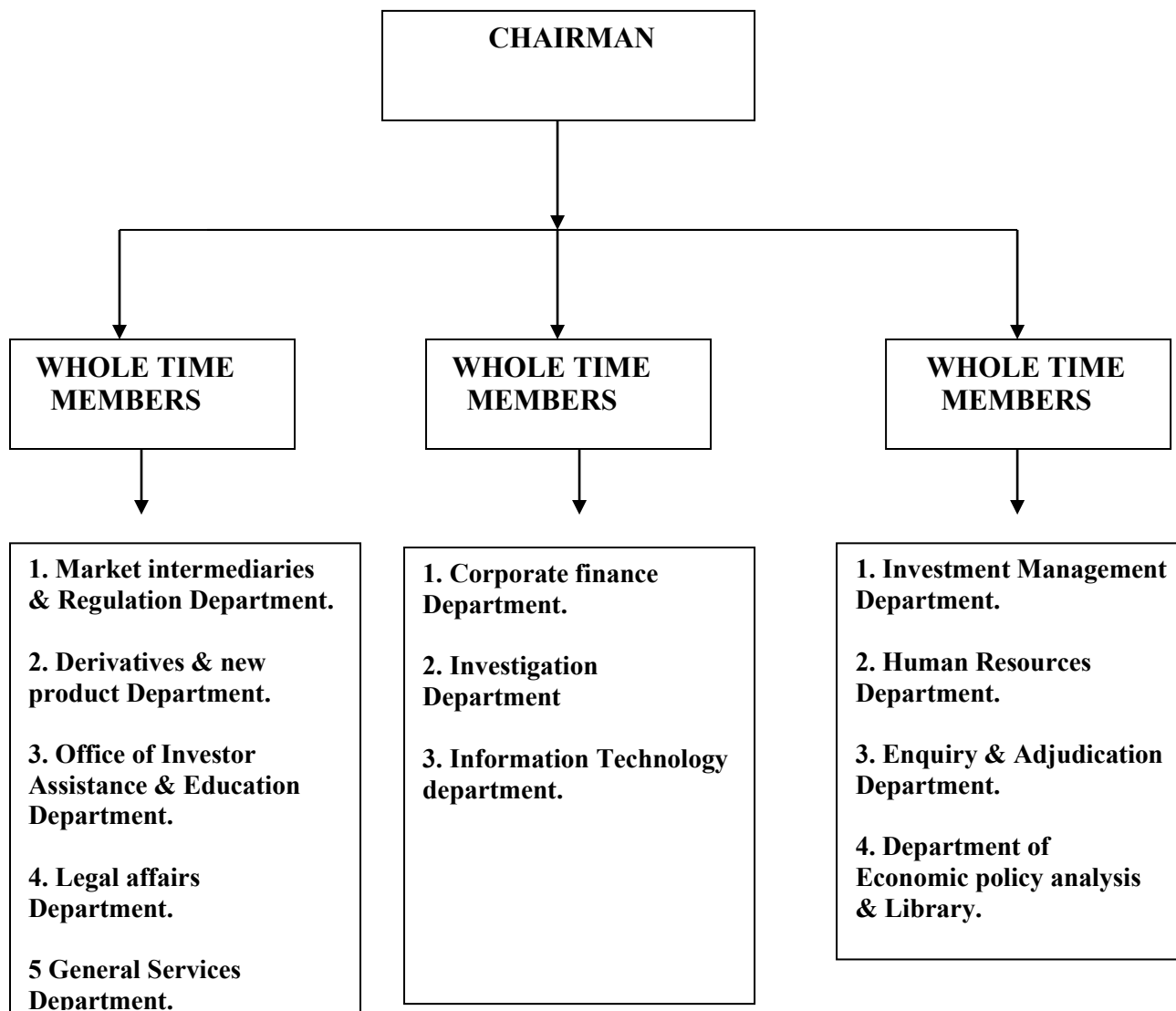
- Educating investors
- Training intermediaries in stock market transactions
- Promoting fair transactions
- Undertaking research and publishing useful information to all.



Power of SEBI:

- To regulate companies in the issue and transfer of shares including bonus shares and right issues.
- It can levy penalties on companies and on brokers for violating transactions.
- It can issue directions to all brokers for protecting the interests of investors.
- It has power to summon any broker or intermediaries and call for documents.
- To file complaints in a court.
- It can call for periodical return from stock exchanges.
- It can seek any information and enquire into the functioning of stock exchanges.
- It can compel listing of securities of public company.
- It promoting investors education and trading of intermediaries in capital market.
- It regulating purchases of shares and take over of companies.

Organization Structure of SEBI:





**6. Explain the role of SEBI in regulating the Primary & Secondary Market? OR
Examine the Major activities of SEBI regards regulation of stock Exchange?**

A. SEBI GUIDELINES FOR ISSUE OF FRESH SHARE CAPITAL:

- All applications should be submitted to SEBI in the prescribed.
- Applications should be accomplished by true copies of industrial license.
- The cost of the project should be furnished with schemes of finance.
- The company should have the shares be furnished issued to the public and listed in one or more recognized stock exchanges.
- Where the issues of equity shares capital involves offer for subscription by the public for the first time, the value of equity capital, subscribed capital privately held by promoters shall be not less than 15% of the total issued equity capital.
- New company cannot issues shares at a premium. The dividend on preference shares should within the prescribed list.
- All the details of the underwriting agreement.
- Allotment of shares to NRI is not allowed without the approval of RBI.
- Declaration by secretary or director of the company.

B. SEBI GUIDELINES FOR SECONDARY MARKET:

- All the companies entering the capital market should give a statement regarding fund utilization of previous issue.
- Brokers are to satisfy capital adequacy norms so that the members firms maintain adequate capital in relation to outstanding positions.
- The stock exchange authorities have to alter bye-laws with regard to capital adequacy norms.
- All the brokers should submit with SEBI their audited accounts.
- The brokers must also disclose clearly the transactions price of securities and the commission earned by them.
- The brokers should issue within 24 hours of the transaction contract notes to the clients.
- The brokers must clearly mention their account details of funds belonging to clients and that of their own.
- A broker cannot underwrite more than 5% of the public issues.
- The brokers of Bombay and Calcutta must have a capital adequacy of Rs 5 lakhs.
- Members who are brokers have to pay security deposit (70 lakhs) deposit and this fixed by SEBI.
- All transaction in the market must be reported within 24 hours to SEBI.
- Margin money on certain securities has to be paid by claims so that investment is prevented.
- Market makers are introduced for certain scrip's by which brokers become responsible for the supply and demand of the securities and the price of the securities is maintained.

C. SEBI GUIDELINES FOR REGULATION OF STOCK EXCHANGE:



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1. MAJOR DEPARTMENT IN STOCK EXCHANGE:

- Listing Department
- Operations department
- Computer and EDP department
- Inspection and Audit department
- Investor service Department

2. BASIC GUIDELINES:

- Inspection of stock Exchange
- Disclosure and investors protection
- Allotment of shares
- New financial instrument
- Free pricing for public issue
- Insider trading norms
- Penal powers over companies

3. MAJOR RULES AND REGULATION:

- SEBI (Stock brokers and Sub-brokers), Regulation 1992
- SEBI (Insider Trading), Regulation 1992.
- SEBI (Portfolio Managers), Regulation 1992
- SEBI (Merchant Banker), Regulation 1992
- SEBI (Mutual funds), Regulation 1993
- SEBI (Underwriter), Rules and regulation 1993
- SEBI (Registrars to Issue), Rules and regulation 1993
- SEBI (Bankers to an issue), 1993

4. POWER OF SEBI OVER STOCK EXCHANGE:

- Prescribed hour of trading
- Settlement Days
- Brokerage commission and fees
- Limited number of securities for transaction
- Qualification for membership of stock Exchange
- Procedure for listing of securities in stock Exchange
- Submission of Reports by stock Exchange to SEBI.

References Books:

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2. **Security analysis and portfolio management, Preeti Singh, Himalaya publications**
3. **Investment management, V.K.Bhalla, S.chand & Company ltd.**
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UNIT- III

FUNDAMENTAL ANALYSIS

Structure:

1. Introduction
2. Fundamental Analysis
3. Economic Analysis
4. Industry Analysis
5. Company Analysis

PART-A (ONE MARKS)

Fundamental Analysis:

- It is a method of evaluating a security that requires to measure its intrinsic value by examining related economic, industry and company factors.
- The objective is to analysis the intrinsic value of the security.
- It implies “ WHAT TO BUY”

Obstacles/Disadvantages / Limitation/ Drawbacks of Fundamental Analysis:

1. Time consuming
2. Market sentiment
3. Based on assumptions
4. Subjectivity
5. Data intensive
6. labor intensive

Sunrise industries:

- It is one that is new or relatively new, is growing fast and is expected to become important in the future.
- Example: Telecommunication & online encyclopedias.

Defensive Industries:

- Industries selling products or services that people demand regardless of the economic cycle are defensive industries.
- Those industries where profits are not sensitive to the growth level in the economy are called defensive industries.
- **Example:** Food & Banking Industry.

Cyclical Industries:

- The growth and profitability of the industry move along with the business cycle.
- During boom period, they enjoy growth and during recession period, they suffer.
- **Example:** Electricity, Electronic Industry.



Earning Per Share (EPS):

- It is a company's profit divided by its number of common outstanding shares.
- It is given by the formula

$$\text{EPS} = \frac{\text{PAT / EAT}}{\text{NO OF OUTSTANDING SHARES}}$$

Diluted Earnings per Share (diluted EPS):

- It is earnings per share that fully reflects the impact the firm's dilutive securities may have on earnings per share.
- It is a company's earnings per share calculated using fully diluted shares outstanding (i.e. including the impact of stock option grants and convertible bonds).

P\ E Ratio:

- It is the ratio of market price a share to its earning per share.
- It is the ratio between the market price of a share and its earning per share.

$$\text{P/E} = \frac{\text{Market Price Share}}{\text{Earnings per share}}$$

Walters Model:

- According to this model, the dividend policy and investment policy of the firm are interlinked and hence the dividend decision always affects the value of the firm.
- According to this model, the dividend policy depends on the internal rate of return/rate of return on investment (r) and cost of equity capital/capitalization rate/minimum rate of return (K_e).
- It is based on Payout ratio.

Formula:

$$P_0 = \frac{D + r \{EPS - D\}}{K_e}$$

Where P_0 ----- Market price /Price of equity share.

D -----Dividend per share

R ----- Internal rate of return/rate of return on investment

EPS ----- Earning per share

K_e ----- cost of equity capital/capitalization rate/minimum rate of return.

2. Gordon's Model:

- According to this model, the dividend policy of the firm has a direct bearing on the market value of shares.
- According to this model, the market value of the shares is equal to the present value of infinite stream of dividends to be received by the share.
- It is based on Retention ratio

Formula:

$$P_0 = \frac{D (1 + g)}{K_e - g}$$



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Where P_0 ----- Market price /Price of equity share.

D -----Dividend per share

K_e ----- Cost of equity capital/capitalization rate/minimum rate of return.

g ----- Growth rate (i.e.) { $g = r * \text{retention ratio}$ }

PART- B (5 MARKS)

1. Explain Economic Forecasting Techniques in fundamental analysis?

Introduction:

- It is a measure to find out the future prosperity of a pattern of investment.
- It is used to measure long term and short term economic developments well in advances.
- Long term forecasts usually for a period of 5- 10 years & study to be made in advance and Short term forecasts usually for a period of 1- 3 years.

Economic Forecasting Techniques:

1. Surveys method
2. Economic indicator
3. Diffusion index
4. Economic model building
5. opposite model building

1. Surveys method:

- It is a fact finding study.
- It involves collection of data directly from a population or a sample at a time.
- The main object is devoted to the study of characteristics of the population under investigations.
- They are common in political polling and government, health, social science and marketing research.
- There are several ways of administering a survey including telephone, personnel, online survey.

2. Economic Indicators:

- It gives indication of the economy process through cyclical timings.
- It is a method of getting indications of the future relating to business depressions and business prosperity.
- There are 3 types of economic indicators
 - ✓ Leading indicator
 - ✓ Coincidental indicator
 - ✓ Lagging indicator

i. Leading Indicators:

- It indicates what is going to happen in the economy and help to predict the path of economy.
- It relates to country fiscal policy, monetary policy, stock prices, labour productivity, GDP, rainfall.



ii. Coincidental indicator:

- It indicates what the economy is.
- It relates to employment position in a country, corporate profits, and interest rates.

iii. Lagging indicators:

- The changes that are occurring in the leading and coincidental indicators are reflected in the lagging indicators.
- These indicators work geographically through different weekly and monthly period.

3. Diffusion index:

- It is a composite index and it consists of leading, coincidental and lagging indicators.
- It is an index that indicates how constant a particular stock is on economic conditions or a forecast of price levels.
- It is also called advance \ decline diffusion index.
- It was constructed by National Bureau of Economic Research(NBER) in U.S.A

4. Economic Model Building:

- It is a mathematical and statistical application to forecast the future trend of the economy.
- It is used by trained technicians.
- The limitation of this model are great deal of time, delay in formulating data collection.

5. Opposite Model building:

- It is to find total income and total demand for the forecast period.
- It can be used in the form of matrix to find out the savings as well as investments.
- It is also called “Gross National Product Model Building”.

2. Describe the classification of Industry in India?

- It is a homogeneous group of people doing a similar kind of activity.

Classification of Industry:

1. Automobile industry
2. Banking industry
3. biscuits industry
4. bus industry
5. cement industry
6. cable & Electrical industry
7. chemical & pharmaceuticals industry
8. Electricity
9. electronic industry
10. fertilizer industry
11. food industry
12. Jute industry
13. leather industry
14. Machinery industry



3. Describe Porter model of Industrial Analysis?

- **Porter five forces analysis** is a framework to analyze level of competition within an industry and strategy development.
- Porter's five forces model of competitive analysis is a powerful and popular tool for assessing the main competitive forces in any industry and their strength and importance to an organization.
- This model holds that the state of competition in an industry is the sum of competitive pressures operating in five areas of the overall market.



a) Rivalry among current players:

There is always a tough fight in any industry among current players. Rivalry among existing players can affect the prices, quality, profitability etc. to a great extent.

All existing firms try to do their best in terms of products, prices, costs, services to customers, production facilities, product development, advertising, sales force, etc.



b) Threat of new entrants/Barrier to Entry:

New entrants are always a powerful source of competition because they generally enter with new products/offers/capacities /product range, etc.

The bigger the new entrant, the more severe the competitive effect new entrants also place a limit on prices and affect the profitability of existing players.

c) Bargaining power of Buyers:

There is always a threat to the loyalty of a customer. Particularly in competitive markets, the customer always has a dominating position. The bargaining power of a customer increases when there are new entrants or substitutes in market.

d) Bargaining power of suppliers:

If the suppliers are limited in number or if they have other buyers then they can show their bargaining power. They may demand better prices for raw materials and other inputs of the industry and, therefore determine industry attractiveness and profitability.

e) Threats from substitutes:

Substitute products offering a better price and/or performance to the consumer can drastically change the competition in an industry. For example, expensive cotton clothes are mainly replaced by inexpensive and durable polyester clothes. Substitutes usually limit the sales, prices and profits in an industry.

The five forces together determine industry attractiveness/profitability because these forces influence the causes that underlie industry attractiveness/profitability.

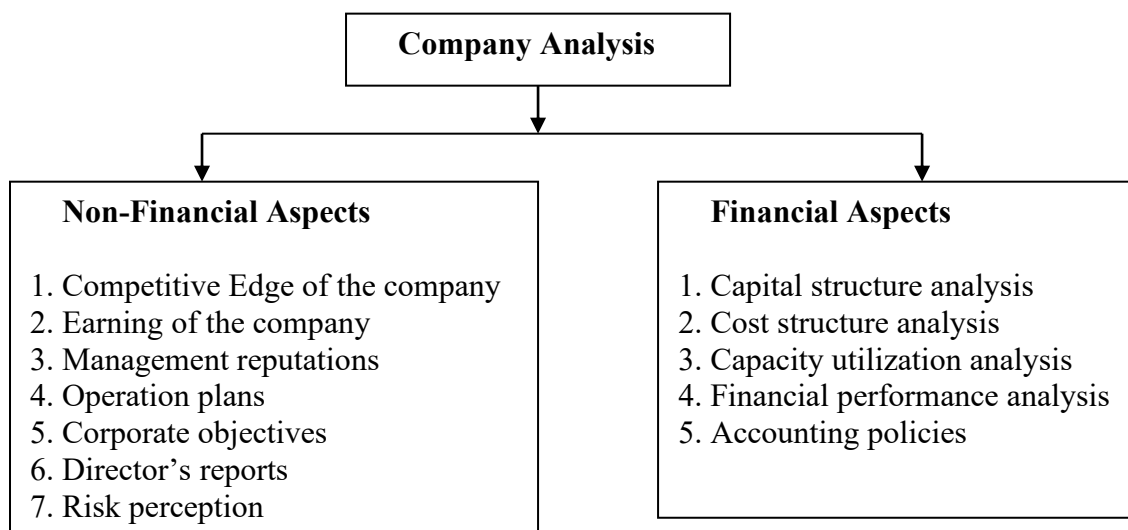
4. Explain the non-financial and financial aspects of company Analysis?

Or

How does Ratio Analysis reflect the financial health of a company?

Or

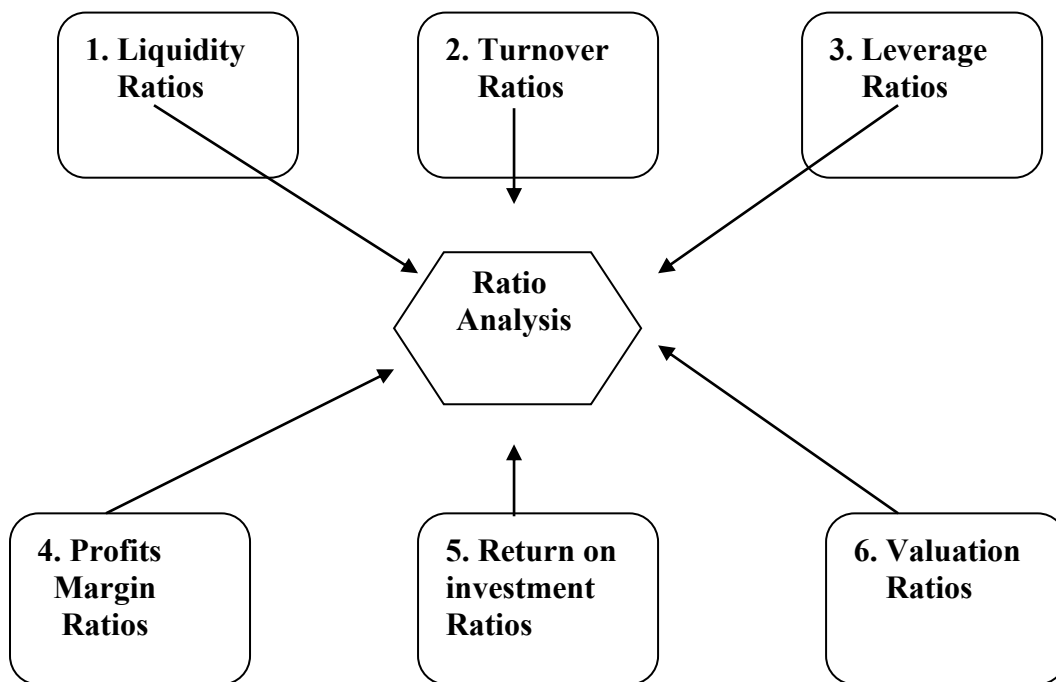
What are the ratios calculated by investor before making investment?





Ratio Analysis:

- The study and interpretation of the relationship between various financial variables by investors are called as Ratio analysis.
- It is the calculation and comparison of ratios which are derived from the company financial statements.
- It can be used to make inference about a company financial condition, its operations and attractiveness as an investment.
- It is a relationship between two figures expressed mathematically.
- It provides numerical relationship between relevant financial data.



1. Liquidity Ratios:

- It gives a picture of a company short term financial situations.
- It measures the firm ability to meets its short term financial obligations.

a. Current Ratio:

- ✓ It is financial ratios that measures whether or not firm enough resources to pay its debts over the next 12 months.
- ✓ It is also called Working capital ratios.
- ✓ It is given by Current ratio = $\frac{\text{Current Asset}}{\text{Current Liabilities}}$.

b. Quick Ratios:

- ✓ It is the ratios of liquid asset to Current liabilities.
- ✓ It is also called Acid test ratio.
- ✓ It is given by Quick ratio = $\frac{\text{Liquid Asset}}{\text{Current Liabilities}}$.



2. Turnover Ratios:

- It is a ratio showing how many times a company inventory is sold and replaced over a period.
- A high turnover ratio is a sign that the company is producing and selling its goods and services very quickly.

a. Stock turnover ratio:

- ✓ It is a relationship between the cost of goods sold during a particular period of time and cost of average inventory during a period.
- ✓ It indicates whether the investment in stock is within proper limit or not.

3. Leverage Ratios:

- Any ratio used to calculate the financial leverage of a company to get an idea of the company methods of financing.
- Ratios that indicate the level of risk taken by a company as a result of its capital structure.

a. Debt to Equity Ratio:

- ✓ It compares the creditor's funds with owner's funds.
- ✓ It is given by $DER = \frac{\text{Total Debt}}{\text{Net worth}}$

b. Debt to Asset Ratio:

- ✓ It indicates the percentage of borrowed funds in the firm's assets.
- ✓ It is given by $DAR = \frac{\text{Total Debt}}{\text{Total Asset}}$

4. Profits Margin Ratios:

- It measures the overall efficiency of the firm.
- It is used to measure business ability to generate earning as compared to expenses over a specific period of time.

a. Net Profit Ratios:

- ✓ It is the ratios of net profit to net sales.
- ✓ It also indicates the firm capacity to face poor economic conditions such as price, competition, low demand.

5. Return on investment Ratios:

- It is the percentage of return on funds invested in the business by its owners.
- It is given by $RIR = \frac{PBT}{\text{Net worth}}$

6. Valuation Ratios:

- It indicates the performance of the equity stock of a company in the stock market.
- It is a measure of how cheap \ expensive a security is compared to some profit value.

a. P \ E Ratio:

- ✓ It is the ratios of the market price of a common stock to its earning per share.
- ✓ It is given by $P \ E = \frac{\text{Market per share}}{\text{Earning per share}}$

b. Book value per share:

- ✓ It compares a share price to the value of the company assets.
- ✓ It is given by $\text{Book value} = \frac{\text{Newt worth}}{\text{Total no. of. Outstanding shares}}$



5. Describe the Applied Valuation Techniques for analysis the value of a stock?/Describe Graham and Dodd's investor Ratios?

APPLIED VALUATION TECHNIQUES

1. Earnings per Share (EPS)
2. Price to Earnings Ratio (P/E)
3. Projected Earnings Growth (PEG)
4. Price to Sales (P/S)
5. Price to Book (P/B)
6. Dividend Payout Ratio
7. Dividend Yield
8. Book Value per share
9. Return on Equity

1. Earning Per Share (EPS):

- It is a company's profit divided by its number of common outstanding shares.
- It is given by the formula

$$\text{EPS} = \frac{\text{PAT/EAT}}{\text{No of outstanding Shares}}$$

2. Price to Earning Ratio P\ E Ratio:

- It is the ratio of market price a share to its earning per share.
- It is the ratio between the market price of a share and its earning per share.

$$\text{P/E} = \frac{\text{Market Price Share}}{\text{Earnings per share}}$$

3. Projected Earnings Growth PEG

- A ratio used to determine a stock's value while taking into account earnings growth. The calculation is as follows:

$$\text{PEG} = \frac{\text{Price/Earning Ratio}}{\text{Annual EPS Growth}}$$



4. Price to Sales (P/S)

- The Price to Sales ratio (P/S) is a useful tool for judging new companies.
- It is calculated by dividing the market cap (stock price times number of outstanding shares) by total revenues.
- An alternate method is to divide current share price by sales per share. P/S indicates the value the market places on sales.

$$\text{PSR} = \frac{\text{Share Price}}{\text{Revenue Per share}}$$

5. Price to Book (P/B)

- The price to book ratio (P/B) is the value the market places on the book value of the company.
- It is calculated by dividing the current price per share by the book value per share .
- It is also known as the "price-equity ratio".

$$\text{P/B Ratio} = \frac{\text{Share Price}}{\text{Book Value Per share}}$$

6. Dividend Payout Ratio

- It is the fraction of net income a firm pays to its stockholders in dividends.
- The payout ratio provides an idea of how well earnings support the dividend payments.

$$\text{Dividend Payout Ratio} = \frac{\text{Dividend}}{\text{Net Income for the same period}}$$

7. Dividend Yield

- It is the ratio of a company's annual dividend compared to its share price
- It is useful for determining the percentage return a company pays in the form of dividends

$$\text{Dividend Yield} = \frac{\text{Annual Dividend Per Share}}{\text{Price per share}}$$

8. Book V



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- It is based on value stated in the books of records.
- It is an accounting concept and historical in nature.
- It is the net worth of the company as decided by the number of shares outstanding.

$$\text{Book Value} = \frac{\text{Equity Capital} + \text{Free Reserves}}{\text{No of Shares Outstanding}}$$

9. Return on Equity

- It is a measure of how much, in earnings a company generates in a time period compared to its shareholders' equity.
- ROE is often used to compare a company to its competitors and the overall market.

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Shareholder Equity}}$$

10. Graham and Dodd Investor Ratio:

- He advocated important concept of “Margin of Safety”.
- He also advocates finding stocks with low price earnings ratios.
- Graham and Dodd believed that investors should buy stocks in corporations that have undervalued assets that will inevitably appreciate to their true value.
- According to Graham and Dodd model, the dividends of a firm determine its share value and the equation can be set out as

$$P = M (D + E \times 3) + A$$

M – Total earning of firm, D – Dividend per share.

E- Earnings per share

A – Adjustment for asset value (say book Value per share)

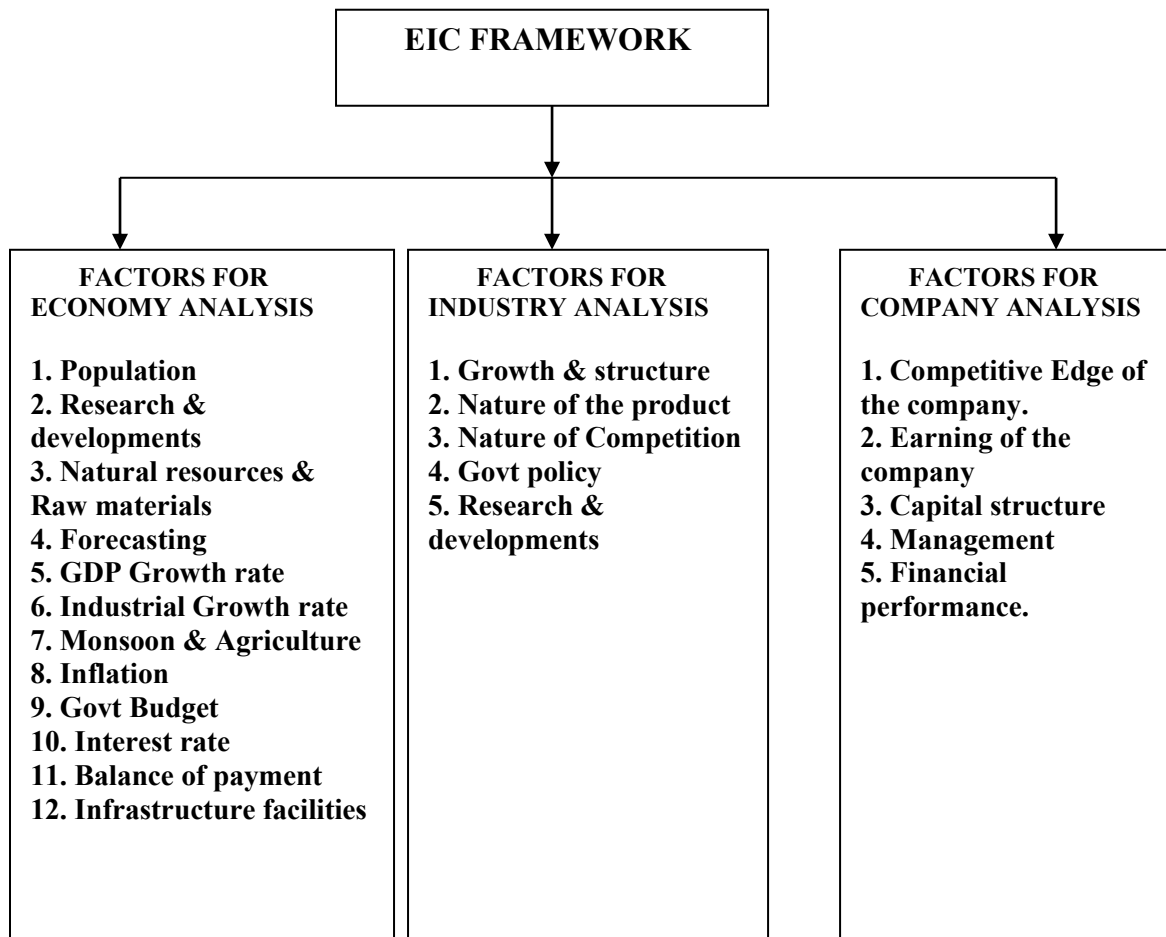


PART-C (10 MARKS)

1. Describe the various steps involves in fundamental Analysis? (or) Explain the factors considered in EIC (Economy, Industry, and Company) framework?

Fundamental Analysis:

- It is a method of evaluating a security that requires to measure its intrinsic value by examining related economic, industry and company factors.
- The objective is to analysis the intrinsic value of the security.
- Fundamentalists found that stock price changes to the following factors
 - ✓ Economy factor -30%
 - ✓ Industry factor - 15%
 - ✓ Company factor – 30%
 - ✓ Other factors - 15%
- The fundamental analysis involves three analysis
STEP 1: ANALYSIS OF ECONOMY
STEP 2: ANALYSIS OF INDUSTRY
STEP 3: ANALYSIS OF COMPANY





A.FACTORS FOR ECONOMY ANALYSIS:

- The system by which a country produces and uses goods and money is called economy.
- Its aim is to determine the economic climate of the country which is directly or indirectly related to the corporate stock performance.

1. Population:

- ❖ Population gives an idea of the kind of labour force in a country.
- ❖ Increase in population shows a greater need for economic development of the country.
- ❖ Due to population, industries will have a generation of demand for labour.
- ❖ Likewise investors should prefer to invest in industries which have a large amount of labour force.

2. Research & developments:

- ❖ Investment also depends on the resources spent by the government on the technological affecting future.
- ❖ There are 3960 Research & developments institutions in India.
- ❖ The department of science & Technology has introduced TIFAC (Technology Information Forecasting & Council).
- ❖ TIFAC have made 280 specialized reports on road construction, agro food sector, transport and textile industry.

3. Natural resources & Raw materials:

- ❖ Resources also responsible for country economic development.
- ❖ Discovery of oil in Middle East countries, gas in America created great changes in Economic pattern and Japan government found raw materials in the form of labour force.
- ❖ Indian government found mineral resources in the form of coal, iron, natural gas, diamond, petroleum, and thorium.
- ❖ Therefore investor has an opportunity to invest in valuable resources.

4. Forecasting:

- ❖ All industries in an economy do not grow at the same rate.
- ❖ Timing is crucial because if an investor operates his investment during the time of strikes, then return will be less.
- ❖ Favorable conditions will give good return based on company profits, political climate, and tax treatment.
- ❖ Therefore investor should make an economic forecasting for taking decision on stocks market.

5. GDP Growth rate:

- ❖ It measures total production of goods & services in the economy during a specified period.
- ❖ It is calculated by
$$\text{GDP} = \text{Consumption} + \text{Investment} + \text{Govt Expenditure} + (\text{Exports} - \text{Imports}).$$
- ❖ The growth of GDP is around 9.4% per year in India.

6. Industrial Growth rate:

- ❖ Publicly listed companies play a major role in industrial sector rather than services and agriculture sector.
- ❖ Industrial growth rate is around 7.7% per year in India.
- ❖ Hence stock market focuses more on industrial sector



7. Monsoon & Agriculture:

- ❖ Agriculture is directly & indirectly linked with the industries.
- ❖ Sugar, cotton, textile, food industries depends upon agriculture for raw materials.
- ❖ Fertilizer, Insecticide industries supplying inputs to the agriculture.
- ❖ A good monsoon leads to higher demand for inputs and lead to happy in the stock market.

8. Inflation:

- ❖ It is a rise in the general level of prices of goods and services in an economy over period of time.
- ❖ Inflation in India is based on Wholesale Price Index (WPI) and its focuses on the price of goods traded between corporations, rather than goods bought by consumers.
- ❖ Industries which do not come under government price control policy may benefit & have strong market and Industries which come under the government price control policy may loose the market. So, Middle level of inflation is good for stock market.

9. Govt Budget:

- ❖ Government plays an important role in Indian Economy.
- ❖ The government of India have invested 18, 000 crores in Research & developments.
- ❖ The government of India has implemented new projects for modernization of employment exchanges in PPP launched.

10. Interest rate:

- ❖ It varies with maturity, default risk, inflation rate & productivity of capital.
- ❖ A rise in interest rates depresses corporate profitability and a decrease in interest rates implies lower cost of finance for firms & more profitability.
- ❖ Hence interest rate is the main factor for consider the stock market.

11. Balance of payment:

- ❖ It measures the payments that flow between any individual country and all other countries.
- ❖ It is a systematic record of nation's total payments to foreign countries including the price of imports and outflow of capital & gold.

12. Infrastructure facilities:

- ❖ Infrastructure facilities are essential for the growth of industrial and agriculture sector.
- ❖ Regular supply of power without powercut would boost the production.
- ❖ The government has liberalized its policy regarding transport, power & communication.
- ❖

B. FACTORS FOR INDUSTRY ANALYSIS:

- It a homogeneous group of people doing a similar kind of activity or work.
- It includes all the factors of production, transportation, trading activity and public utilities.

1. Growth & structure:

- ❖ The historical performance of industry is analysed in terms of growth and profitability.
- ❖ Industries wise growth is published by Centre For Monitoring Indian Economy(CMIE)
- ❖ The number of firms in the industry and market share of the firms in the industry is analysed.

2. Nature of the product:

- ❖ The products produced by the industries are demanded by the consumer and other industries.



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- ❖ If industries goods like pig iron, iron sheet, coils are produced, then it demand by construction industry.
- ❖ The investor has to analyse the conditions of goods producing industry and end user industry to find out the demand for industrial goods.

3. Nature of Competition:

- ❖ It is essential factor that determine the demand for the product, its profitability, and the price of the company scrip's.
- ❖ The supplies arise from local producers and multinational companies.
- ❖ The investor should analyse the company products and compare it with top 5 companies.

4. Govt policy:

- ❖ The government policies affect the industry and effect differs from industry to industry.
- ❖ The government regulates the size of production and pricing of products.
- ❖ Tax subsidies and tax holidays are provided for export oriented products.

5. Research & developments:

- ❖ The percentage of expenditure on R & D should be studied before making an investment.
- ❖ Investment also depends on the resources spent by the government on the technological affecting future.
- ❖ There are 3960 Research & developments institutions in India.
- ❖ The department of science & Technology has introduced TIFAC (Technology Information Forecasting & Council).
- ❖ TIFAC have made 280 specialized reports on road construction, agro food sector, and transport and textile industry.

C. FACTORS FOR COMPANY ANALYSIS:

- It is a method of finding out of the worth of the company through an analysis of its financial statements.
- It consists of two factors. they are
 1. Qualitative/ Non financial factors
 - ✓ Competitive Edge of the company
 - ✓ Earning of the company
 - ✓ Management reputations
 - ✓ Operation plans
 - ✓ Corporate objectives
 - ✓ Directors reports
 - ✓ Risk perception
 2. Quantitative/ Financial factors
 - ✓ Capital structure analysis
 - ✓ Cost structure analysis
 - ✓ Capacity utilization analysis
 - ✓ Financial performance analysis
 - ✓ Accounting policies



1. Competitive Edge of the company:

- ❖ The competitiveness of company can be studied with the help of
 - ✓ Market share
 - ✓ Growth of annual sales
 - ✓ Stability of annual sales.
- ❖ The market share of annual sales helps to determine a company relative competitive position within the industry.
- ❖ The growth in sales of company is analysed both in rupees and physical terms.
- ❖ The stability of sales should be compare with competitor's market share.

2. Earning of the company:

- ❖ The sales alone do not increase but the costs and expense spent by the company also influence the earning of the company.
- ❖ The earning of company is generated through operating and non –operating sources.
- ❖ Operating sources is from Interest on loans, investment, income on sales of services & goods.
- ❖ Non –operating sources is from interest from bonds, rent from lease, dividends from securities.
- ❖ Hence, investor should not only on depend sales, but should analyse the earning of the company.

3. Capital structure:

- ❖ It refers to a corporate finance, its assets through sum combination of equity, debt, hybrid securities.
- ❖ It composes of debt finance and equity finance.
- ❖ So, investor should look into the preference share component and debt component of the company.

4. Management Reputation:

- ❖ A good and capable management generates profit to the investor.
- ❖ The management should have effective plan, organize and control the activities of the company.
- ❖ The management is analysed on
 - ✓ Managerial personnel contribution
 - ✓ Management ability to maintain effective production.
 - ✓ Management ability to work with employees
 - ✓ Management quality control techniques.

5. Financial performance analysis:

- ❖ The best source of financial information about the company is its own financial statement.
- ❖ It gives the historical & current information about the company operations.

i. Balance sheet Analysis:

- ✓ It shows the company source of funds and application of funds.
- ✓ It can be either horizontal or vertical form.

ii. Profit & Loss Account Analysis :

- ✓ It lists down items of income and expenditure.
- ✓ The difference between income and expenditure represents profit and loss account for the period.



iii. Comparative financial statement Analysis :

- ✓ The balance sheets are provided for more than one year.
- ✓ The annual data are compared for both years in percentages.

iv. Trend Analysis:

- ✓ It analysis a study of a company performance over a period of time.
- ✓ It is a technique that uses historical results to predict future outcome.

v. Fund flow Analysis:

- ✓ It is concerned with changes in working capital position.
- ✓ It is a statement of sources and application of funds.

vi. Cash flow Analysis:

- ✓ It is concerned with the changes in cash position.
- ✓ It shows the cause of changes in cash balance between two balance sheets.

vii. Ratio Analysis:

- ✓ It is a relationship between two figures expressed mathematically.
- ✓ It provides numerical relationship between relevant financial data.

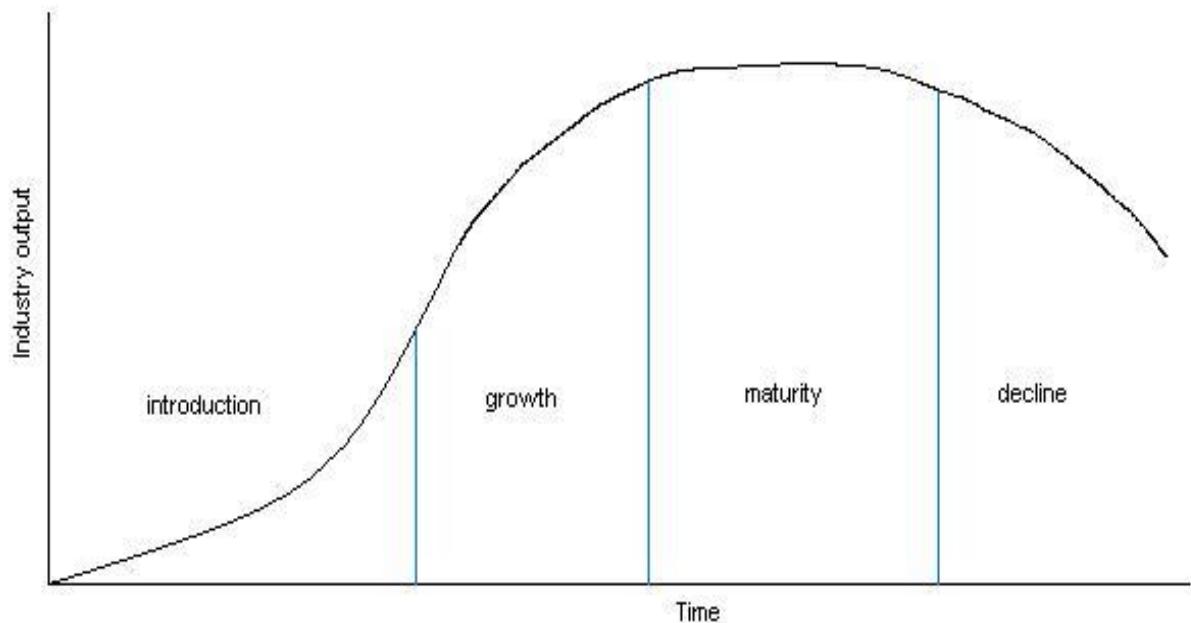


2. Explain the concept of Industrial Life Cycle (ILC) with different stages?

Introduction:

- The industrial life cycle is a term used for classifying industry vitality over time.
- The growth of an industry's sales over time is used to chart the life cycle.
- According to Julius Groden sky, Industrial life cycle is separated into four well defined stages:

Industry Life Cycle



STAGE I: Introduction\ Pioneer Stage:

- In the pioneer stage, the product has not been widely accepted or adopted.
- Producers try to develop brand name, product image and create differentiate.
- Business strategies are developing, and there is high risk of failure.
- There would be several competition and only fittest companies survive this stage.
- Hence, successful companies can grow at extraordinary rates.
- The severe competition often leads to the change of positions in the firms in terms of market share and profit.
- Hence it is difficult for the investor to select the companies because the survival rate is unknown.



STAGE II: Growth stage

- The growth stage also requires a significant amount of capital for the firm.
- The goal of marketing efforts at this stage is to differentiate a firm's offerings from other competitors within the industry.
- Thus the growth stage requires funds to launch a newly focused marketing campaign as well as funds for continued investment in property, plant, and equipment to facilitate the growth required by the market demands.
- However, the industry is experiencing more product standardization at this stage, which may encourage economies of scale and facilitate development of a line-flow layout for production efficiency.
- Research and development funds will be needed to make changes to the product or services to better reflect customer's needs and suggestions.
- In this stage, if the firm is successful in the market, growing demand will create sales growth.
- During the growth stage, the life cycle curve is very steep, indicating fast growth and Firms tend to spread out geographically during this stage of the life cycle.

STAGE III: Maturity Stage

- As the industry approaches maturity, the industry life cycle curve becomes noticeably flatter, indicating slowing growth.
- Some experts have labeled an additional stage, called expansion, between growth and maturity.
- Thus, the marketing effort must remain strong and must stress the unique features of the product or the firm to continue to differentiate a firm's offerings from industry competitors.
- The firm may try a low-cost/low-price strategy to increase the volume of sales and make profits from inventory turnover.
- A firm at this stage may have excess cash to pay dividends to shareholders.
- But in mature industries, there are usually fewer firms and those that survive will be larger and more dominant.

STAGE IV: Decline Stage

- In this stage, demand for the particular products and the earnings of the company decline.
- If new innovations or technological changes have caused the industry to become old-fashioned, sales suffer and the life cycle experiences a decline.
- In this stage, sales are decreasing at an accelerating rate, causing the plotted curve to trend downward.
- There is usually another larger shake-out in the industry as competitors who did not leave during the maturity stage now exit the industry.



Industrial Life Cycle at Glance:

| STAGE | STRATEGIC FOCUS | INVESTMENT NEEDS | REVENUE TRENDS | PROFIT TRENDS |
|-----------------------|--|-------------------------------|------------------------|--------------------------|
| Pioneer stage | -Market Entry - Revenue - growth | Launch and setup costs | growth | Expect losses |
| Growth Stage | -Customer acquisitions -Customer retention | Investment in Working capital | Steady and high growth | Steady and profit emerge |
| Maturity Stage | -Ensuring customer expand - Business diversification -Return to shareholders | Business renewal areas | stable | stable |
| Decline Stage | -Reversal of fortune (luck). -Succession - Exit strategy | Capital Erosion | decline | decline |

References Books:

- 1. Investment Analysis & portfolio Management, Prasanna Chandra.**
- 2. Security analysis and portfolio management, Preeti Singh, Himalaya publications**
- 3. Investment management, V.K.Bhalla, S.chand & Company ltd.**
- 4. Investment Analysis & portfolio Management , R.P. Rustagi.**



UNIT- IV

TECHNICAL ANALYSIS

Structure:

1. Introduction
2. Analyzing Total Market
3. Analyzing Individual Share
- 4 .Chart Patterns
5. RSI & MACD
6. Market Hypotheses

PART-A (ONE MARKS)

Technical Analysis:

- It mainly studies the stock price movement of the security market.
- It involves study of market generated like prices and volume to determine the future direction of price movement.
- It implies “WHEN TO BUY”.

Assumption of TA:

- History tends to repeat itself.
- Market actions or prices discount the future.
- The market has already discounted the news.
- Prices move in trends.

Basic Premises/Principle of TA:

- The market prices are determined by the interaction of supply and demand forces.
- Supply and demand are influenced by rational and irrational factors.
- Shifts in demand and supply bring changes in trends.
- Shifts in demand and supply can be detected with the helps of charts.

Trend & Trend Line:

- Trend is the direction of share price movement.
- Trend lines are straight lines drawn connecting either top \ bottoms of the share price movement.

Bullish Market \ Trend:

- An upward primary trend represents a bullish market.
- A financial market of a group of securities in which prices are rising or are expected to rise.

Bearish Market \ Trend:

- A downward primary trend represents a bullish market.
- A financial market of a group of securities in which prices are falling or are expected to fall.



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Breadth of Market:

- It refers to the number of investment still in the market for the day.
- A technical analysis theory that predicts the strength of the market according to the number of stocks that advance or decline in a particular trading day.
- **Advance** means no. of. Shares whose prices have increased from previous days trading & **Decline** means no. of. Shares whose prices have decreased from previous days trading.

Odd Lot Theory:

- The **odd-lot theory** states that an increase in odd lot activity is a buy signal in market.
- It is a method of trading shares in groups which are less than 100 shares.
- It is given by $\text{Odd lot index} = \frac{\text{Odd lot purchases}}{\text{Total shares}}$
- Example : buying or selling shares in terms of 15, 18, 25 or 35

Round Lot Theory:

- It is a method of trading shares in groups such as 100 shares, 200 Or 500 shares.
-

Short selling:

- It means selling and buying shares without the actual shares on same day.
- It is a technique used by investors who try to profit from the falling price of a stock.

Support level:

- It is a price level where the price tends to find support as it is going down.

Resistance level:

- It is where the price tends to find resistance as it is going up.

Oscillators:

- It indicates the market momentum or scrip momentum.
- It shows the share price movement across a reference from one extreme to another.

Market capitalization

- It is the aggregate valuation of the company based on its current share price and the total number of outstanding shares.

MACD:

- ✓ It stands for Moving average convergence & Divergence.
- ✓ It is an indicator used for disinvestment and investment process.
- ✓ It measures convergence & divergence either between two simple moving average or two Exponential moving average.
- ✓ If short term MA > long term MA, it indicate BULLISH SIGNAL
- ✓ If short term MA < long term MA, it indicate BEARISH SIGNAL



PART-B (5 MARKS)

1. Describe the Assumption, principle, merits and Demerits of Technical Analysis?

Technical Analysis:

- It mainly studies the stock price movement of the security market.
- It involves study of market generated like prices and volume to determine the future direction of price movement.
- It implies “ WHEN TO BUY”.
- It is a method in forecasting behaviour of stock price.
- It can be applied to commodities, currencies, bond and equity stocks

Assumption of TA:

- History tends to repeat itself.
- Market actions or prices discount the future.
- The market has already discounted the news.
- Prices move in trends.

Basic Premises/Principle of TA:

- The market prices are determined by the interaction of supply and demand forces.
- Supply and demand are influenced by rational and irrational factors.
- Shifts in demand and supply bring changes in trends.
- Shifts in demand and supply can be detected with the helps of charts.

Merits of TA:

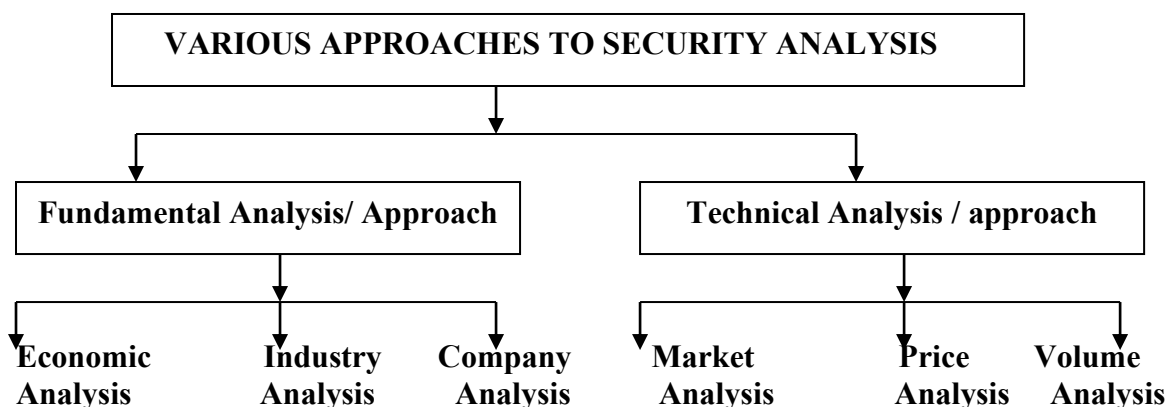
- Entry point and Exit point
- Volume trend
- Short term market indicator
- Visual indication

Demerits of TA:

- Inexpensive
- Biased opinion
- Mixed signals
- Historical prices
- How much it predicts?
- Too many indicators



2. Describe the VARIOUS APPROACHES TO SECURITY ANALYSIS? (or) Explain the difference between fundamental Analysis & Technical Analysis?



Fundamental Analysis:

- It is a method of evaluating a security that requires to measure its intrinsic value by examining related economic, industry and company factors.
- The objective is to analysis the intrinsic value of the security.
- It implies “WHAT TO BUY”.
-
- Fundamentalists found that stock price changes to the following factors
 - ✓ Economy factor -30%
 - ✓ Industry factor - 15%
 - ✓ Company factor – 30%
 - ✓ Other factors - 15%
- The fundamental analysis involves three analysis
 - STEP 1: ANALYSIS OF ECONOMY**
 - STEP 2: ANALYSIS OF INDUSTRY**
 - STEP 3: ANALYSIS OF COMPANY**

Technical Analysis:

- It mainly studies the stock price movement of the security market.
- It involves study of market generated like prices and volume to determine the future direction of price movement.
- It implies “WHEN TO BUY”.
- It is a method in forecasting behaviour of stock price.
- It can be applied to commodities, currencies, bond and equity stocks
- The technical analysis involves three analysis

STEP 1: ANALYSIS OF MARKET
STEP 2: ANALYSIS OF PRICE
STEP 3: ANALYSIS OF VOLUME



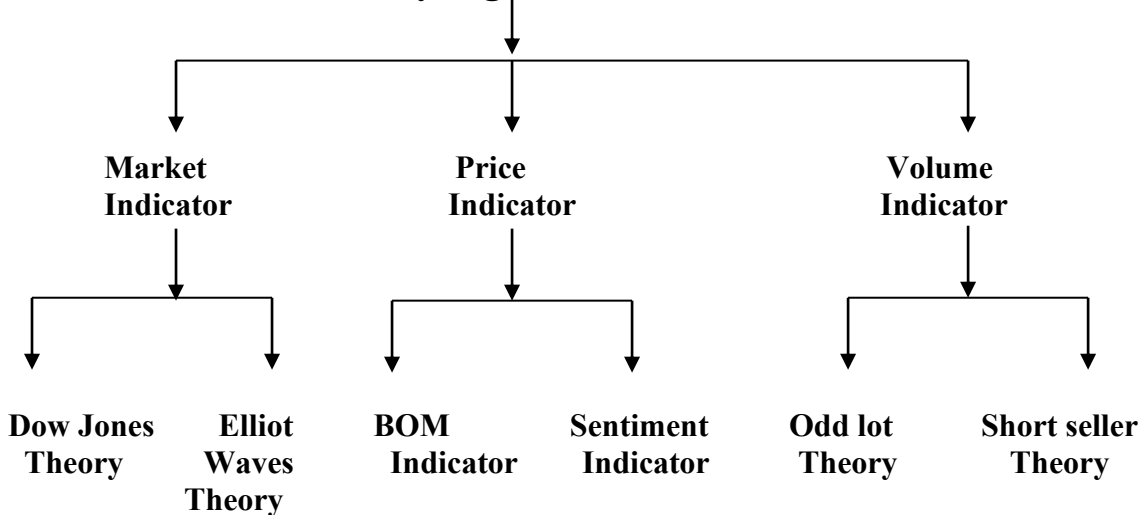
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| S.NO | FUNDAMENTAL ANALYSIS | TECHNICAL ANALYSIS |
|------|--|--|
| 1. | The objective of fundamental analysis is to examine intrinsic value of the security. | The objective of technical analysis is to study the stock price movement of the security. |
| 2. | It is a simple & quick method | It is tedious in nature. |
| 3. | It assumes that Market is efficient | It assumes that Market is not efficient. |
| 4. | It is a long term analysis | It is a short term analysis. |
| 5 | It is useful to long term investors | it is useful to short term investors |
| 6 | It implies what to buy. | It implies when to buy. |
| 7 | History will not repeat | History will repeat. |
| 8 | It involves logical pattern | It involves psychological patterns. |
| 9 | It involves 90% logical 10% psychological | It involves 90% psychological 10% logical |
| | It focuses on factors related to <ul style="list-style-type: none"> • Economy Analysis • Company Analysis • Industry analysis. | It focuses on factor related to <ul style="list-style-type: none"> • Market Analysis • Price Analysis • Volume analysis. |
| 10 | It studies economic forecasting indicators like <ul style="list-style-type: none"> • leading indicator • Lagging indicator • Coincidental indicator | It studies modern forecasting indicators like <ul style="list-style-type: none"> • MACD • RSI • ROC |
| 11 | The fundamental approach will study <ul style="list-style-type: none"> • Ratios analysis • fund flow analysis • cash flow & trend analysis | The Technical approach will study <ul style="list-style-type: none"> • Put\call ratios • bullish\bearish ratios • Short interest ratios |
| 12 | It does not identify trend and trend lines | It is used to identify trend and trend lines |
| 13 | It does not identify bullish and bearish trend | It is used to identify bullish and bearish trend. |
| 14 | It does not identify chart pattern | It is used to identify chart pattern |
| 15 | Examples of FA are Net present values, horizontal analysis. | Examples of TA are line charts, bar charts, candle sticks. |

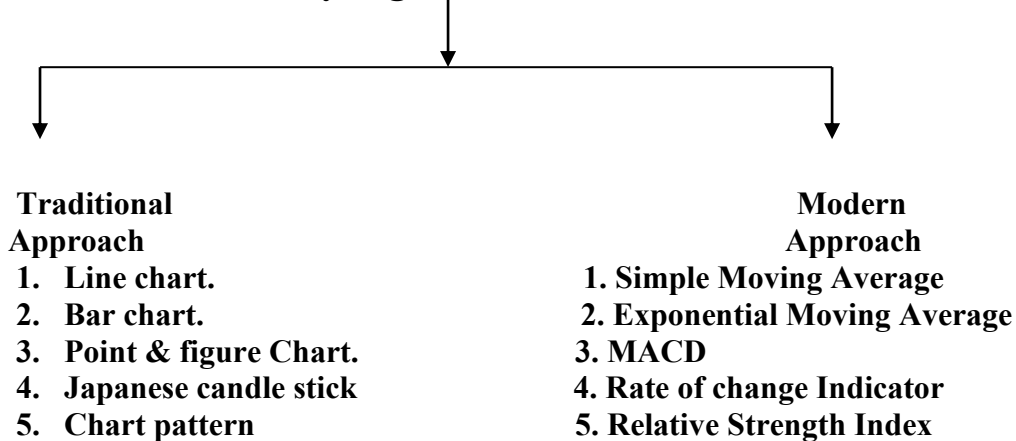


3. Explain the Technical Indicators used for analyzing security price movements? (OR) Explain SECURITY VALUATION TECHNIQUES for analyzing security price movements?

I. Analyzing Total Market



II. Analyzing Individual Share



Examples for Analyzing Market:

1. Elliot waves Theory:

The classification of waves will vary at order of duration.

- Grand supercycle :multi-century
- Supercycle :about 40-70 years
- Cycle :about 1- 5 years
- Primary :3 months – 1 years
- Intermediate : weeks to months(50 days)
- Minor : weeks
- Minute: : days
- Minuette : hours
- Subminuette : minutes



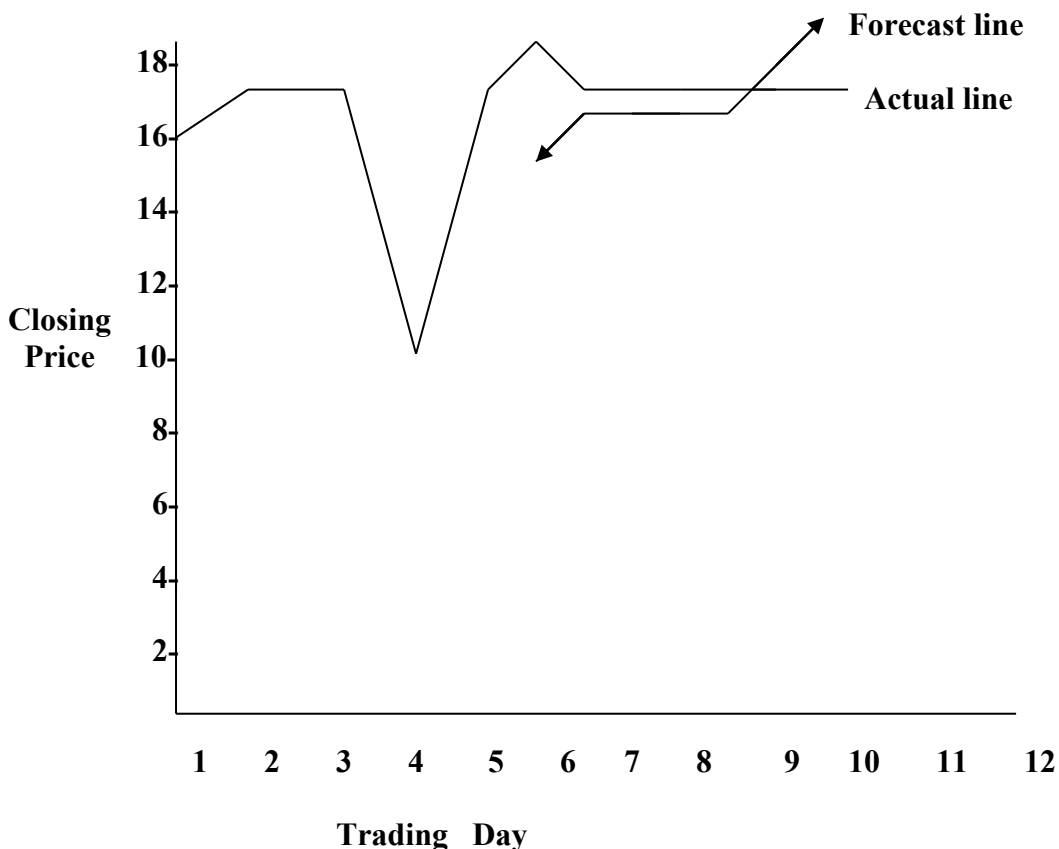
Examples for analyzing individual share:

1. Simple moving Average:

- ✓ It is the sum of prices of shares for specific no of days divided by the number of days.
- ✓ Moving averages provide an objective measure of trend direction by smoothing price data.
- ✓ The moving average trends are as follows
 - Long term trend – 200 days moving average
 - Intermediate term trend - 60 days moving average
 - Short term trend – 5 to 10 days moving average

Example: 5 days moving average

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------------|----|----|----|----|------|------|------|------|------|
| Price of TCS company | 16 | 17 | 17 | 10 | 17 | 18 | 17 | 17 | 17 |
| 5 Day SMA | | | | | 15.4 | 15.8 | 15.8 | 15.8 | 17.2 |



Conclusion:

- From the above, it indicates volatile market is taking place by means of 9 days closing prices.
- We are comparing actual closing price of 9 days (Actual line) with 5 days moving average (Forecasting lines).
- It clearly indicates that BULLISH TRENDS.



4. Explain the relative strength Index indicator (RSI)?

Relative Strength Index (RSI):

- It was developed by J.Welles Wilder in the year 1978.
- It was outlined in his classic book "New Concepts in Technical Trading Systems"
- It is used to identify the strength & weakness of particular scrip.
- It compares upward movements in closing price to downward movements over an selected period.
- It is a method to generate buys and signals with price divergences.
- It is a price-following oscillator that ranges between 0 and 100.
- It is also formulated to fluctuate between 0 and 100, enabling fixed Overbought and Oversold levels.
- When Wilder introduced the Relative Strength Index, he recommended using a 14-day RSI.
- RSI is calculated for 5, 7, 9, 14 days.
- It is calculated using the following formula:

$$RSI = 100 - \left\{ \frac{100}{(1+Rs)} \right\}$$

Where Rs = $\frac{\text{Average gain per day}}{\text{Average close per day}}$.

Calculation of RSI for 14 Days:

Example:

| DAYS | CLOSING PRICE | GAIN | LOSS |
|------|---------------|------|------|
| 1 | 130 | - | - |
| 2 | 132 | 2 | - |
| 3 | 130 | - | 2 |
| 4 | 135 | 5 | - |
| 5 | 137 | 2 | - |
| 6 | 134 | - | 3 |
| 7 | 136 | 2 | - |
| 8 | 140 | 4 | - |
| 9 | 140 | - | - |
| 10 | 142 | 2 | - |
| 11 | 139 | - | 3 |
| 12 | 141 | 2 | - |
| 13 | 145 | 4 | - |
| 14 | 143 | - | 2 |
| 15 | 145 | 2 | - |

TOTAL GAIN = 25 TOTAL LOSS = 14



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It is calculated using the following formula:

$$RSI = 100 - \left\{ \frac{100}{(1+Rs)} \right\}$$

Where $Rs = \frac{\text{Average gain per day}}{\text{Average loss per day}}$.

NOW 14 days, Average gain = $\frac{25}{14} = 1.78$

Average loss = $\frac{10}{14} = 0.71$

$$Rs = \frac{1.78}{0.71} = 2.50$$

$$\text{Hence, } RSI = 100 - \left\{ \frac{100}{(1+2.50)} \right\}$$

$$= 71.73$$

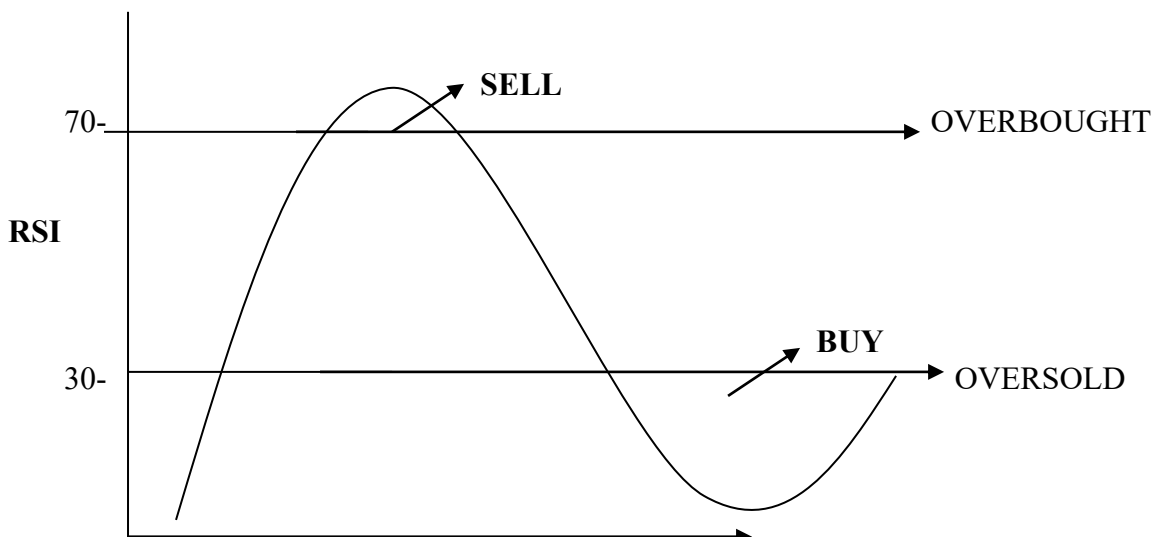
Trading signal for RSI:

1. Overbought Region:

- ✓ It describes the price level at which momentum can no longer be maintained and price has to go down.
- ✓ It indicates "SELL SIGNAL" for investor.

2. Oversold Region:

- ✓ It describes the price level at which momentum can no longer be maintained and price has to go up.
- ✓ It indicates "BUY SIGNAL" for investor.





5.Explain Rate of change of price indicator\ ROC method?

ROC METHOD:

- It is a way of showing how rapidly the price of a particular share is moving.
- It shows how markets advance and decline in wave-like fashion by measuring how much prices have changed over the time period in question.
- It measures the margin between the present price and the one that an existed n-time period ago.
- It is indicated by the oscillator called as the **Rate of Change**.
- It is an oscillator that fluctuates above and below the zero line.
- When the price rises, the ROC moves up.
- When the price declines, the ROC falls.
- The greater the change in the price, the greater is the change in the ROC.
- It can be used to define overbought and oversold markets.
- ROC is calculated for 5, 7, 9, 14 days, 12 weeks.
- It is calculated by the formula

$$\text{ROC} = \frac{\text{Today price} * 100}{\text{Price 'n' days back}}$$

Calculation of ROC for 7 Days:

Example:

| DAYS | CLOSING PRICE | ROC METHOD |
|------|---------------|---------------------------------|
| 1 | 235 | - |
| 2 | 232 | - |
| 3 | 236 | - |
| 4 | 234 | - |
| 5 | 231 | - |
| 6 | 244 | - |
| 7 | 257 | - |
| 8 | 254 | $\frac{254}{235} * 100 = 108.0$ |
| 9 | 249 | 107.32 |
| 10 | 244 | 103.38 |
| 11 | 234 | 100.00 |
| 12 | 234 | 101.29 |
| 13 | 235 | 96.31 |
| 14 | 232 | 110.77 |

- It is calculated by the formula

$$\text{ROC} = \frac{\text{Today price} * 100}{\text{Price 'n' days back}}$$

$$\text{ROC for 8}^{\text{TH}} \text{ day} = \frac{254}{235} * 100 = 108.0$$



Trading signal for ROC:

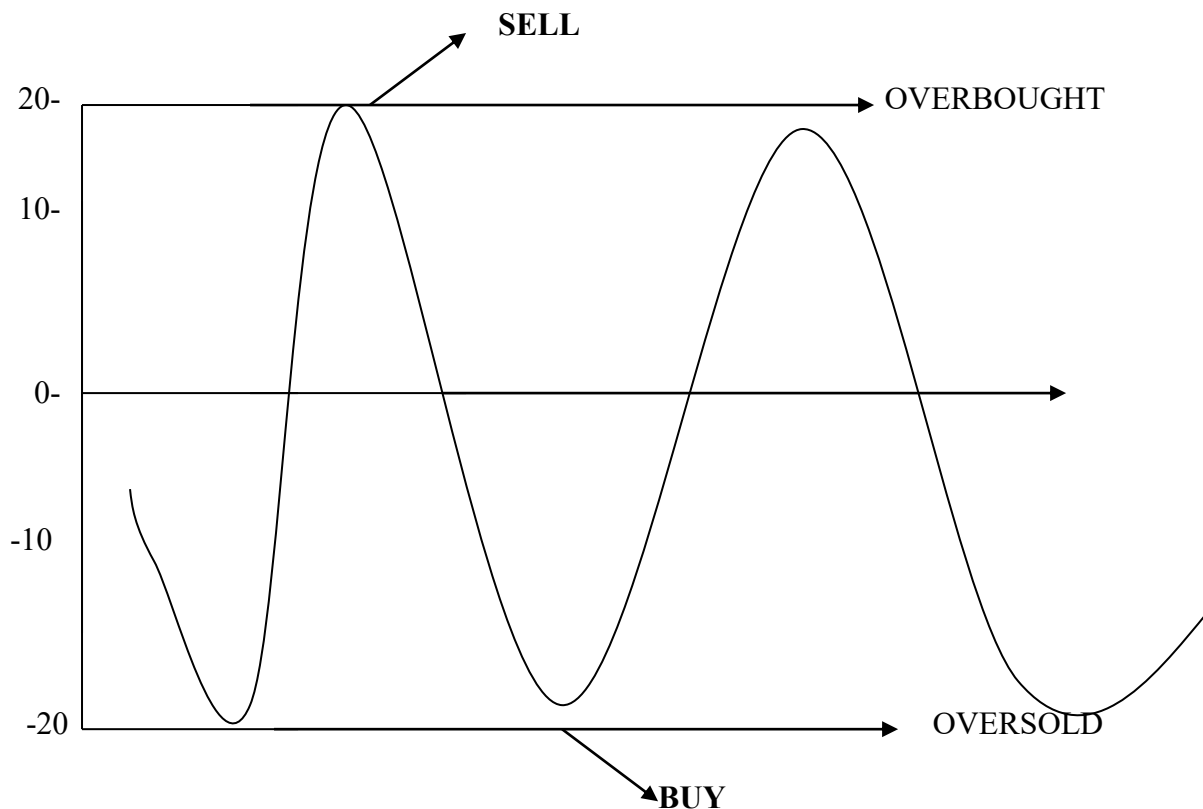
1. Overbought Region:

- ✓ It describes the price level at which momentum can no longer be maintained and price has to go down.
- ✓ It indicates “SELL SIGNAL “for investor.
- ✓ The higher ROC is considered a more overbought security.

2. Oversold Region:

- ✓ It describes the price level at which momentum can no longer be maintained and price has to go up.
- ✓ It indicates “BUY SIGNAL “for investor.
- ✓ The lower ROC is a more oversold security.

BUY





PART-C (10 MARKS)

1. Explain Dow Jones Theory?

Introduction:

- It has been established by Charles Dow.
- It is the oldest and best known theory of technical analysis.
- It was outlined in a Financial Magazine called “Wall street Journal”.
- Dow Jones Theory is the Bible for traders, who want to trade in stock market.
- The theory established by Charles became so famous that NYSE index has been known by his name “DOW JONES”.

Highlights of Dow Jones Theory:

- Trend
- Trend lines
- Trend Reversal
- Trend Periods
- Primary Trends
- Secondary Trends
- Daily Fluctuations Trend

Overview of Dow Jones Theory:

1. Trend:

- ✓ It is the direction of stock price movement.
- ✓ The directions of stock price movement may be rising trend, falling trend & flat trend.

2. Trend lines:

- ✓ They are straight lines connecting from top to bottom of stock price movement.
- ✓ A trend line is a bounding line for the price movement of a security
- ✓ They are commonly used to judge entry and exit investment timing when trading securities.

3. Trend Reversal:

- ✓ The sideways price action of a reversal pattern signifies that upon breaking out of the pattern there will be a turnaround in the current trend.

4. Trend Periods:

- ✓ Primary movements – 1 year to 4 years
- ✓ Secondary movements – 4 week to 12 weeks
- ✓ Narrow movements – day to day.

5. Primary \ Main Trend:

- ✓ It reflects the trend of the stock market from last one year to four years or sometimes even more.



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- ✓ On study of the long range behaviour of market prices, it has been empirically observed that share prices go through definite phases.
- ✓ Where the prices are either consistently rising or falling.
- ✓ These phases are popularly known as bull and bear phases.
- ✓ Bullish Market \ Phase: An upward primary trend represents a bullish market.
- ✓ Bearish Market \ Phase: A downward primary trend represents a bearish market.

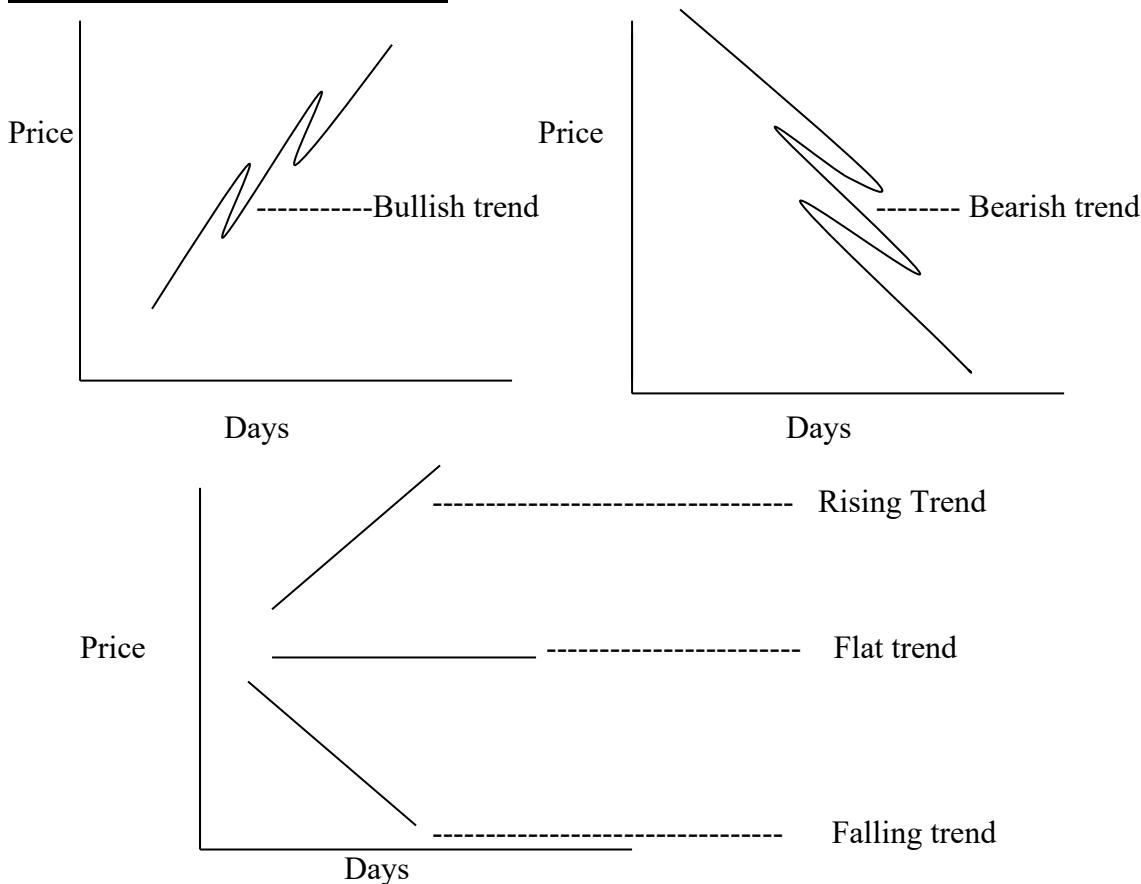
6. Secondary \ Short Swing Trend:

- ✓ It reflects the trend of the stock market from last 4 weeks to 13 weeks
- ✓ The secondary trends are intermediate declines, which occur in bull market and intermediate advances which occur in bear markets.
- ✓ Normally they retrace (repeat) 33.33% or 66.66% of primary movements.

7. Narrow \ Daily Fluctuations:

- ✓ They are irregular fluctuations, which occur every day in the market.
- ✓ These fluctuations are without any definite trend.
- ✓ It will show both upward and downward fluctuations.

Structure of Dow Jones Theory:





2. Explain the different types of chart patterns used in Technical Analysis?

OR

Explain the behaviour of stock prices using Chart pattern?

CHART ANALYSIS:

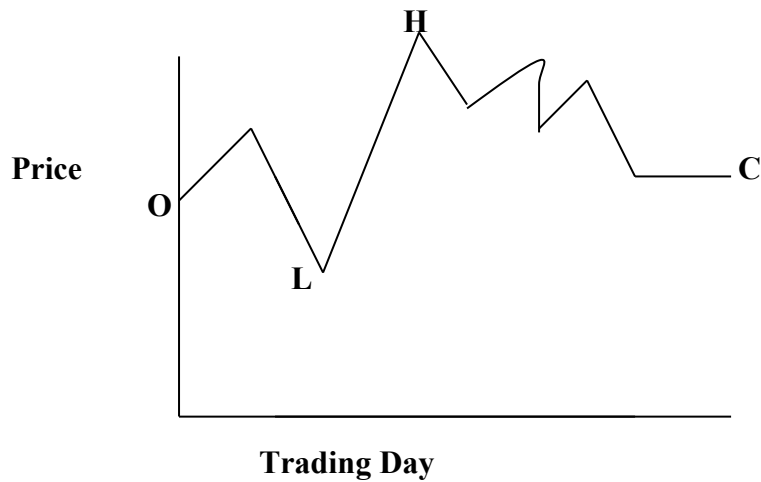
- ✓ It is a graphical representation of technical analysis.
- ✓ It helps the investors to find out the trend of the price without any difficulty.
- ✓ It indicates the areas of resistance and level support.
- ✓ It indicates the past historic movement.
- ✓ The data required for chart presentations are
 - Opening price of the particular day
 - Closing price
 - Highest price
 - Lowest price.

| S.NO | TYPES OF CHART | TREND INDICATION |
|------|---------------------------------|---|
| 1 | Line chart | Closing price of a trading day |
| 2 | Bar chart | Opening price Lowest price Highest price closing price |
| 3 | Head & shoulder top pattern | Bearish trend. |
| 4 | Inverse head & shoulder pattern | Bullish trend |
| 5 | Double top formation | Bearish trend. |
| 6 | Double bottom formation | Bullish trend |
| 7 | Symmetrical triangle pattern | Bearish or Bullish trend |
| 8 | Flag and pennant pattern | Bearish or Bullish trend |
| 9 | Point & figure chart | Bearish or Bullish trend |
| 10 | Japanese candle stick | CP>OP, White candle stick CP<OP, Black candle stick CP=OP, Neutral candle stick |
| 11 | Resistance level support level | Bearish trend Bullish trend |



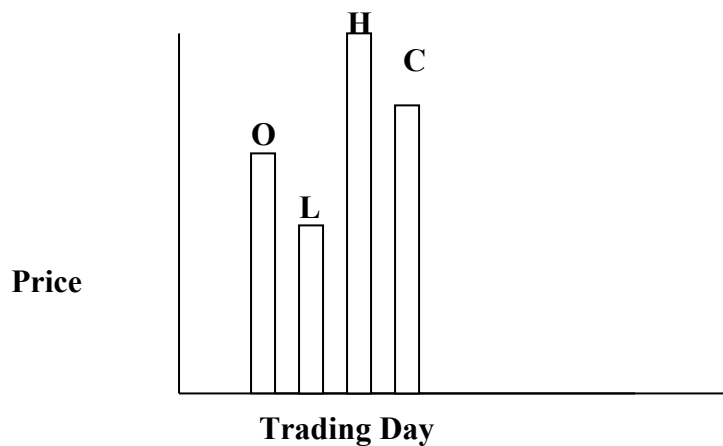
1. Line chart:

- ✓ It is a type of chart which displays information as a series of data points connected by straight line segments.



2. Bar chart:

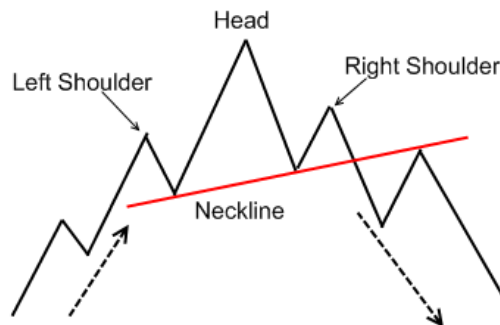
- ✓ It is a chart with rectangular bars with lengths proportional to the values that they represent.





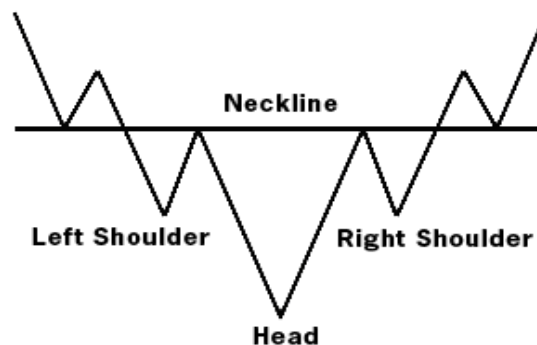
3. Head & Shoulder top pattern:

- ✓ It is a pattern with 3 distinct peaks, the middle peak being taller than the other two.
- ✓ It looks like a human head with shoulders on either side of the head.



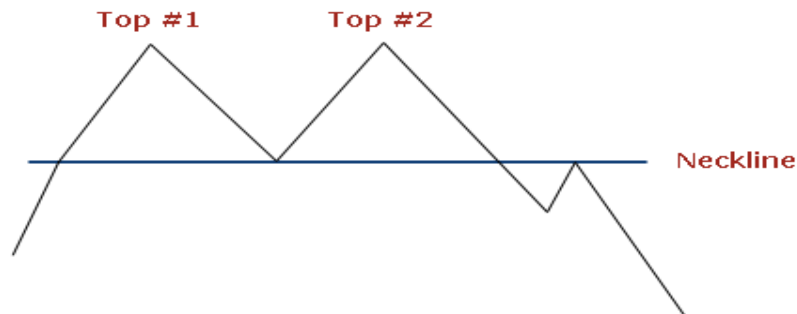
4. Inverse Head & shoulder pattern:

- ✓ It is the opposite of Head & shoulder pattern.
- ✓ It is also known as to The Head and Shoulders bottom.



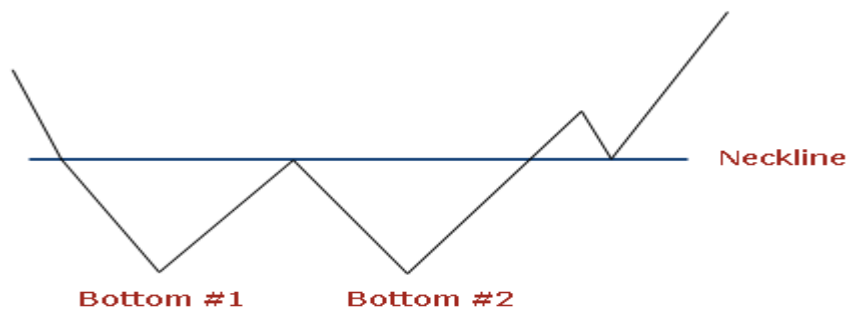
5. Double top Formation:

- ✓ It has two peaks that are approximately equal with a reasonable valley in between.
- ✓ It has **M shaped** formation.



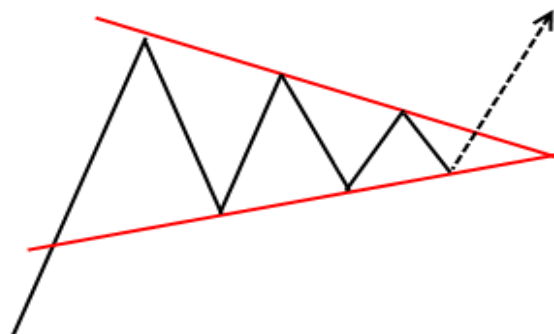
6. Double Bottom Formation:

- ✓ It has two valleys that are approximately equal with a reasonable peak in between.
- ✓ It has **W shaped** formation.



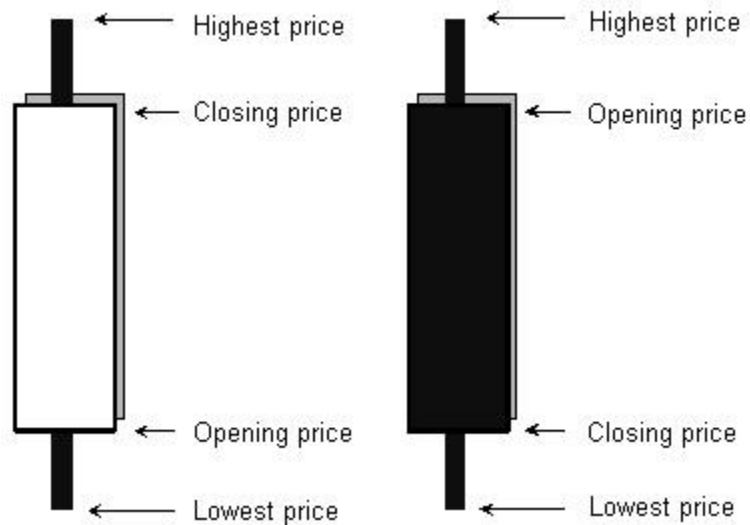
7. Symmetrical Triangle Pattern:

- ✓ It can be characterized as areas of indecision.



8. Flag and Pennant Pattern:

- ✓ They are commonly found patterns in the price charts of financially traded assets stocks, bonds.
- ✓ The flag pattern is covered by two parallel lines



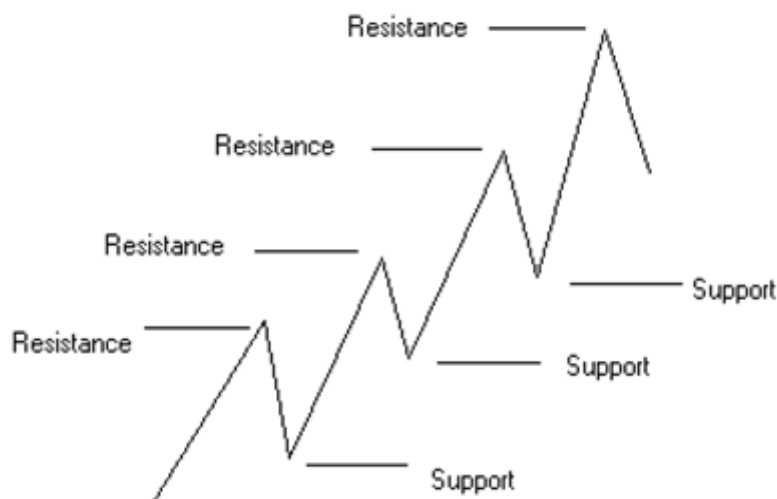
11. Support level and Resistance level:

Resistance level:

- It is where the price tends to find resistance as it is going up.
- This means the price is more likely to "bounce" off this level rather than break through it.

Support level:

- It is a price level where the price tends to find support as it is going down.
- This means the price is more likely to "bounce" off this level rather than break through it.





3. Explain Random Walk Theory \ Efficient Market Theory?

OR

Explain three form of Market Efficiency Hypothesis?

OR

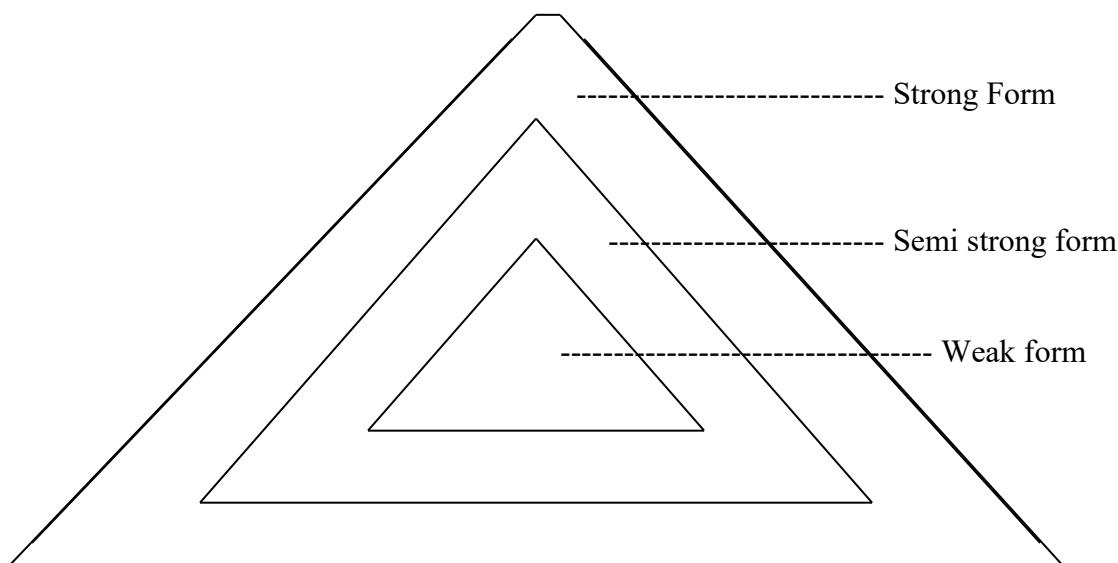
“The Random walk hypothesis resembles the fundamental school of thought but is contrary to their technical analysis” –Discuss?

Efficient Market Hypothesis/Theory(EMH):

- The efficient-market hypothesis was developed by Professor Eugene Fama.
- A small number of studies indicated that US stock prices and related financial series followed a random walk model.
- It is one in which the market price of a security is an unbiased estimate of intrinsic value.
- It states that financial markets are "informationally efficient" or that price on traded assets already reflect all known information, and instantly change to reflect new information.
- There are three forms of the efficient market hypothesis
 1. Weak form efficiency
 2. Semi strong form efficiency
 3. Strong form efficiency.

Assumption of Random Walk Theory:

1. Market absorbs all information quickly.
2. Market is supreme that no investor or group can influence it.
3. The efficient market is based on the flow of free and correction information.
4. Perfect market conditions prevail due to presence of large number of buyers and sellers.
5. There is no scope for insider information.



1. Weak form efficiency:



- It states that all past market prices and data are fully reflected in securities prices.
- In other words, technical analysis is of no use.
- In weak-form efficiency, future prices cannot be predicted by analyzing price from the past.
- It implies that Excess returns cannot be earned in the long run by using investment strategies based on historical share prices.
- It also implies that future price movements are determined entirely by information not contained in the price series.
- Hence, prices must follow a random walk.

2. Semi strong form efficiency:

- It states that all publicly available information is fully reflected in securities prices.
- In other words, fundamental analysis is of no use.
- In semi-strong-form efficiency, it is implied that share prices adjust to publicly available new information very rapidly and in an unbiased fashion.
- It implies that no excess returns can be earned by trading on that information.

3. Strong form efficiency:

- It states that all information is fully reflected in securities prices.
- In other words, even insider information is of no use.
- In strong-form efficiency, share prices reflect all information, public and private.
- It implies that no one can earn excess returns.

Empirical Test for three forms of EMH:

| | Weak form efficiency | Semi strong form efficiency | Strong form efficiency |
|----------------|---|--|-------------------------------------|
| Empirical Test | 1.Run test 2.Serial correlation test 3.Filter test 4.Simulation test Relative strength method | 1.Market reaction test 2.Residual analysis method | 1.Performance of mutual fund method |

References Books:

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2. Security analysis and portfolio management, Preeti Singh, Himalaya publications
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UNIT -V

PORTFOLIO MANAGEMENT

Structure:

1. Introduction
2. Portfolio Construction
3. Portfolio Selection
- 4 .Portfolio Execution
- 5 .Portfolio Revision
- 6 .Portfolio Evaluation

PART- A (ONE MARK)

Portfolio:

- It is a combination of securities such as stocks, bonds and money market instruments.
- Investors like to invest in a group or different collection of securities .Such a group of securities is called portfolio.

Portfolio Risk:

- It is a measure of risk of portfolio.
- In order to estimate the total risk (both systematic and unsystematic) of a portfolio of assets, we use statistical models.

Diversification:

- It is a technique of reducing risk in portfolio management.

Portfolio Return:

- It is the returns of portfolio and it can be termed as expected returns of portfolio.
- The expected return on a portfolio is simply the weighted average of the expected returns on the individual securities in the portfolio

Active Portfolio Strategy:

- Active Revision Strategy involves frequent changes in an existing portfolio over a certain period of time for maximum returns and minimum risks.

Passive Portfolio Strategy:

- Passive Revision Strategy involves rare changes in portfolio only under certain predetermined rules. These predefined rules are known as formula plans.

Feasible set of Portfolios:

- With a limited number of securities an investor can create a very large number of portfolios by combining these securities in different proportions.
- These constitute feasible set of portfolio in which the investor can possible invest.
- This is also known as the portfolio opportunity set.



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Optimal \ Efficient set of Portfolios:

- The portfolio with highest return with lowest risk is called optimal portfolio.

Efficient Frontier:

- It is a concave curve in the risk – return space extends from the minimum variance portfolio to the maximum return portfolio.
- It contains all efficient portfolios.

Assumption of CAPM:

1. Individuals are risk averse.
2. Individual seek to maximize the expected utility of this portfolio over a single period planning horizon.
3. Individual can borrow and lend freely at a riskless rate of interest.
4. The quantity of risky securities in the market is given.

CML:

- It stands for Capital Market Line.
- It finds out the relationship between risk and return for efficient portfolios.

SML:

- It stands for Security Market Line.
- It finds out the relationship between risk and return for individual security, inefficient portfolios.

Risk free rate:

- It is the return on a security that is free from a default risk and that is uncorrelated with the returns from anything else in the economy.
- The rate on a short term government security like 364 days treasury bills. The rate on a long term government bond that has a maturity of 15-20 years.

Beta:

- It is defined commonly as that part of the variability of the return of scrip which is relative to the overall variability of the market return.

$$\beta = \frac{\% \text{ Price change of a scrip return}}{\% \text{ Price change of the market index return}}$$

Capital Growth:

- An increase in the market price of an asset capital growth/appreciation.
- An asset allocation strategy that seeks to maximize *capital* appreciation or the increase in value of a portfolio or asset over the long term.



PART- B (5 MARKS)

1. Describe the importance and role of portfolio Manager?

PORTFOLIO:

- It is a combination of securities such as stocks, bonds and money market instruments. Investors like to invest in a group or different collection of securities .Such a group of securities is called portfolio.
- A collection of investments all owned by the same individual or organization. These investments often include stocks which are investment in individual business, bonds which are investment s in debt that are designed to earn interest, and mutual funds which are essentially pools of money from investors that are invested by professionals.

Importance of Portfolio:

This portfolio helps the securities in following ways:

- To choose the security based on risk-return character
- To choose the high returns oriented securities from different securities available in the market to allocate the funds for maximization of revenues in different proportion.
- To identify the preferred stock to hold, proportion less stock to sell and preferable stock to buy.
- To revise and asses the optimum portfolio mix by considering economics and non-economic environment of stock market.

Portfolio Manager:

- The person responsible for investing a mutual, exchange –traded or closed end funds assets, implementing its investment strategy and managing the day to day portfolio trading.
- He is otherwise called as money manager.
- He is also responsible for the securities portfolio of individual or institutional investors.
- He should have a high standard of integrity, honesty and should not have been convicted of any economics offence or moral turpitude.
- He should not resort to rigging up of prices, insider trading or creating false markets.
- Their books of accounts are subject to inspection and audit by SEBI.
- He has to submit periodical returns and documents as may be required by the SEBI from time to time.

Who can become a Portfolio Manager?

It can be seen that portfolio management is an art and require high degree of expertise.

- The merchant banker has been authorized to do portfolio management services, if they belong to categories licensed by the SEBI.



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- Only those who are registered and pay the required license fee are eligible to operate as portfolio managers.
 - An applicant for this purpose should have necessary infrastructure with professionally qualified persons and with a minimum of two persons with experience in this business and minimum net worth of Rs 50 lakhs.
 - The certificate once granted is valid for three years.
 - Fees payable for registration are Rs 2.5 lakhs every year for two years and Rs 1 lakh for third year.
 - From fourth year onward, renewal fees per annum are Rs 75,000.
 - These fees payable are subject to change by the SEBI.

Method of Operation:

- The professional portfolio managers can be approached by an individual or organization with a minimum amount of invisible funds of Rs 1 lakh or Rs 2 lakhs.
- If the manager is willing to accept him as his client, a contract is entered into for management of his funds either on discretionary basis or non- discretionary basis, specifying the objectives, risk to be tolerated, composition of assets/ securities in the portfolio and their relative proportion, fees payable and time period of management as per the preference of the client.
- The clients data base is collected namely his available income and assets, his needs, his risk preferences, his choice for income or growth or both and host of the personal details of the clients.

SEBI Norms for Portfolio Manager:

- SEBI has prohibited the portfolio manager to assume risk on behalf of the client.
- The portfolio manager is prohibited to do lending, badla financing and bills discounting as per SEBI norms.
- The portfolio manager cannot put the clients funds in any investment not permitted by the contract entered into with the client.
- Client's money has to be kept in a separate account with the public sector bank and cannot be mixed up his own funds or investments.
- All deals done for a clients account are to be entered in his name and contract notes, bills are all passed in his names.
- A separate ledger account is maintained for all purchases\ sales on clients behalf which should be done at the market price.
- Final settlement and termination of contracts is as per the contracts and for the period agreed upon.



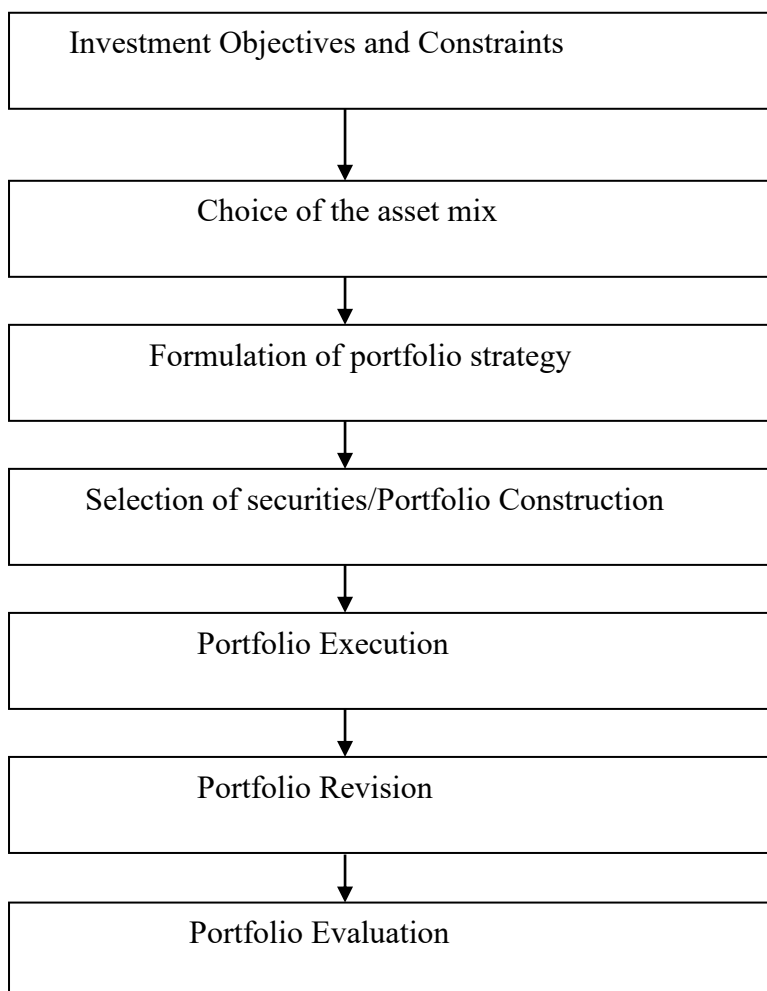
2. Explain the PROCESS OF PORTFOLIO MANAGEMENT?

PORTFOLIO:

It is a combination of securities such as stocks, bonds and money market instruments. Investors like to invest in a group or different collection of securities. Such a group of securities is called portfolio.

Process of Portfolio Management:

It consists of all the steps of or process an investors creates, maintains, analyses in the investment of different securities with different risk- returns characters.



1. Investment Objectives and Constraints:

- The investor policy which summarizes the objectives, constraints and preference of the investor.
- The typical objectives sought by investors are
 - ✓ current income
 - ✓ capital appreciation
 - ✓ fast earnings
 - ✓ Safety of principal.
- Further the constraints arising from time-horizon, tax, liquidity must be identified.



2. Choice of the asset mix:

- The most important decision is the asset mix decision.
- Based on your objectives and constraints, you have to specify the allocation.
- It is concerned with the proportion of stocks and bonds in the portfolio.
- The “appropriate stock bond mix” may be 50:50, 75:25 and 25:75.

3. Formulation of portfolio strategy:

- Once a certain asset mix is chosen, an appropriate portfolio strategy has to be hammered out.
- Two choices are active and passive portfolio strategy.

4. Selection of securities:

- Investors an active stance with respect to security selection.
- For stock selection, investors go by fundamental, technical analysis and Market efficient hypothesis.
- For Bonds selection, you should carefully evaluate the following factors such as yield to maturity, risk of default, tax shield and liquidity.

5. Portfolio Execution:

- This is the phase of portfolio management which is concerned with implementing the portfolio plans by buying and selling securities in give amounts.
- The buying and selling script from the market is done by the following key players.
- They are as follows
 - ✓ Value based Transactors.
 - ✓ Information based transactors.
 - ✓ Liquidity based transactors.

6. Portfolio Revision:

- The value of portfolio as well as its composition may change as stock and bonds fluctuate and It involves
- portfolio Rebalancing
- Portfolio upgrading.
- The portfolio revision is needed
 - ✓ If there is a change in Risk tolerance
 - ✓ If investor changes its investment goal

7. Portfolio Evaluation:

- It is the process of comparing the returns earned on a portfolio with the return earned on one or more portfolio.
- The performance of portfolio should be evaluated periodically.
- The key dimension is risk and return and the key issue is whether portfolio return is commensurate with its risk exposure.
- It comprises two function
 - ✓ Performance Measure
 - ✓ Performance Evaluation



3. Explain the Factors/ ingredient, Principle, Policies, Methods of diversification and Problems of PORTFOLIO MANAGEMENT?

PORTFOLIO:

It is a combination of securities such as stocks, bonds and money market instruments. Investors like to invest in a group or different collection of securities .Such a group of securities is called portfolio.

FACTORS/ ELEMENTS/ INGREDIENTS CONTRIBUTING TO PORTFOLIO MGT:

1. Planning
2. Timing of investment
3. Conservatism and Rationalism
4. Close monitoring of Shares
5. Performance of Appraisal.

PRINCIPLES OF PORTFOLIO MANAGEMENT:

1. Safety of funds
2. Stability of price
3. Liquidity
4. Capital growth
5. Returns
6. Marketability
7. Diversification
8. Taxability

POLICIES OF PORTFOLIO MANAGEMENT:

1. Aggressive policy
2. Defensive policy
3. Aggressive defensive policy
4. Income policy
5. Growth policy

METHODS OF DIVERSIFICATION OF PORTFOLIO MANAGEMENT:

1. Random selection
2. Optimum selection
3. Adequate diversification

PROBLEMS OF PORTFOLIO MANAGEMENT:

1. Problem of constructing an optimal investment portfolio
2. Problem of non availability of securities
3. Problem of measuring Risk



4. Explain the approach in Portfolio Construction/Portfolio Selection?

PORTFOLIO CONSTRUCTION /SELECTION:

- It means determining the actual composition of portfolio.
- It is a critical stage because asset mix in the single most determinant of portfolio performance.
- The goal of portfolio construction would be to generate a portfolio that provides the highest return and the lowest risk.
- The process of finding optimal portfolio is called **Portfolio Selection**.

APPROACHES IN PORTFOLIO CONSTRUCTION/SELECTION:

- A. Traditional Approach
- B. Modern Approach

A. Traditional Approach:

1. This approach focus on investors need in term of income and capital appreciation .These is selected to meet the needs of investor.
2. It involves the following steps
 - Step 1: Analysis of constraints
 - Step 2: Determination of objectives
 - Step 3: Selection of portfolio
 - Step 4: Assessment of Risk
 - Step 5: Diversification

B. Modern Approach:

1. This approach implies portfolios are constructed to maximize the expected return for a given level of risk associated.
2. It involves the following model
 - ✓ Markowitz model
 - ✓ Capital asset Pricing Model

PROBLEMS INVOLVED IN PORTFOLIO SELECTION:

1. Risk of default
2. Tax shield
3. Liquidity or marketability.
4. Hedge against inflation
5. Time horizon of strategy
6. Transaction costs



5. Describe the role of Portfolio Execution?

PORTFOLIO EXECUTION:

This is the step to implement the portfolio plan by buying and selling specified securities in given amounts. This is the phase of portfolio execution which is often glossed over in portfolio management literature. The securities market appears to be thronged by four types of players or transactors. They are value based transactors, information based transactors, liquidity based transactors and pseudo information based transactors. Generally the dealers or the market maker intermediates between these transactors.

(I) Value Based Transactors:

A value based transactor's carries out extensive analysis of publicly available information to establish. He trades when the differences between the values assessed by him and the prevailing market prices so warrants. He places limit orders to buy and sell with a spread that is large enough to provide a cushion against errors of judgment and information lacunae. VBTs generally serve as the anchor for the trading system and establish the framework for the operation of dealers. VBTs are concerned about how much the market will move towards the justified price (the price established by him based on fundamental analysis).

(II) Information Based Transactors:

An information based transactor transacts on the basis of information which is not in public domain and therefore not reflected in security prices. Since he expects this information to have a significant impact on prices, he is keen to transact soon. To him time is a great value. IBT is bothered about how soon the market price will move up or down in response to new information. IBT generally employs incremental fundamental analysis as he is concerned about price movements in response to new information. In addition he uses technical analysis because timing is crucial to his operations.

(III) Liquidity Based Transactors:

A liquidity based transactor however trades or to obtain funds or to rebalance the portfolio. His trades are not based on a detailed valuation exercise or access to some information that is not already reflected in market price. Hence he may be regarded as information less trader who is driven mainly by liquidity considerations.

(IV) Pseudo information Based Transactors:

A pseudo information based transactors believes that he posses information that can be a source of gain even though information is already captured or impounded in the price of the security.



6. Enumerate the Constraints, Need, Strategy and Techniques / Plans of PORTFOLIO REVISION?

PORTFOLIO REVISION:

- The art of changing the mix of securities in a portfolio is called as portfolio revision.
- The process of addition of more assets in an existing portfolio or changing the ratio of funds invested is called as *portfolio revision*.
- It is the process of adjusting the existing portfolio in accordance with the changes in financial Markets and the investor's position so as to ensure maximum return from the portfolio with the minimum of Risk.

Constraints / Problems in Portfolio Revision:

1. Transaction cost
2. Taxes
3. Statutory stipulations
4. Intrinsic difficulty
5. No single formula

Need for Portfolio Revision:

1. Change in Risk tolerance
2. Change in the investment goal
3. Availability of additional funds for investment
4. Financial market is subject to risks and uncertainty
5. Availability of additional wealth
6. Need to liquidate a part of the portfolio to provide funds for some alternative uses.
7. Short term price fluctuations in the market do also exist.

Strategies of Portfolio Revision:

1. Active Revision Strategy

- Active Revision Strategy involves frequent changes in an existing portfolio over a certain period of time for maximum returns and minimum risks.
- Active Revision Strategy helps a portfolio manager to sell and purchase securities on a regular basis for portfolio revision.
- The Factors of Active Portfolio Strategy:
 - ❖ Market timing
 - ❖ Sector rotation
 - ❖ Security selection
 - ❖ Use of a specialized concept.

2. Passive Revision Strategy

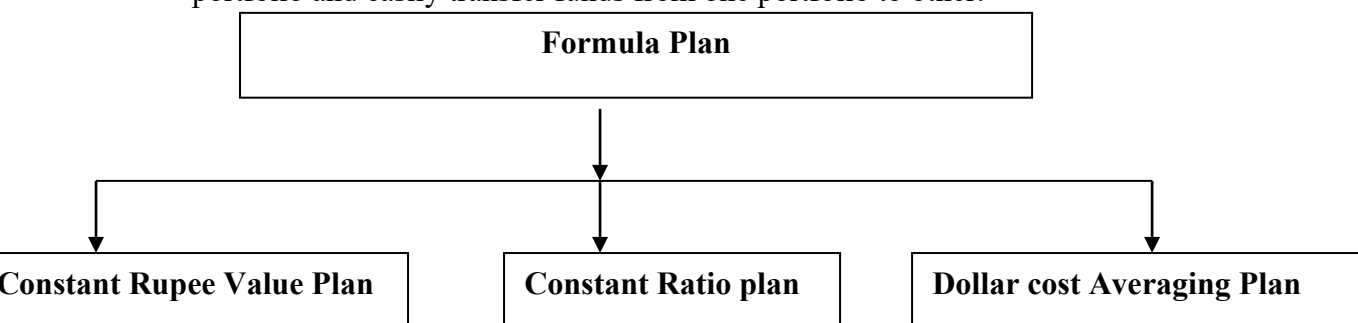
- Passive Revision Strategy involves rare changes in portfolio only under certain predetermined rules. These predefined rules are known as formula plans.
- According to passive revision strategy a portfolio manager can bring changes in the portfolio as per the formula plans only.



Techniques/ Plan of Portfolio Revision:

FORMULA PLANS

- Formula Plans are certain predefined rules and regulations deciding when and how much assets an individual can purchase or sell for portfolio revision.
- Securities can be purchased and sold only when there are changes or fluctuations in the financial market.
- Formula plans help an investor to make the best possible use of fluctuations in the financial market. One can purchase shares when the prices are less and sell off when market prices are higher.
- With the help of Formula plans an investor can divide his funds into aggressive and defensive portfolio and easily transfer funds from one portfolio to other.



A. Constant Rupee Value Plan

- This plan indicates the rupee value which remains constant in the stock portfolio of the total portfolio.
- This formula indicates to the investor that whenever the stock value rises his shares should be sold to maintain a constant portfolio.
- If the price of the stock falls, the investor must buy additional stock to keep the value of aggressive portfolio constant.
- By specifying that the aggressive portfolio will remain constant in money value, the plan also specifies that remainder of the total fund be invested in the conservative fund.

B. Constant Ratio plan

- Under the constant ratio plan, both the aggressive and defensive portions remain in constant percentage of the portfolio's total value.
- This plan method of identifying the ratio of the value in the aggressive portfolio to the value of the conservative portfolio..

C. Dollar cost Averaging Plan

- It is a technique of building up a portfolio over a period of time.
- It utilizes the cyclic movement in share prices to construct a portfolio at low cost.



7. Describe the different methods to measure the Portfolio Performance/Evaluation?

PORTFOLIO EVALUATION:

- It is the process of comparing the return earned on a portfolio with the return earned on one or more other portfolios or on a benchmark portfolio.
- It refers to the performances of the portfolio.
- It comprises of two functions, performances measurement and performances evaluation.

Need for Portfolio Evaluation:

1. Self Evaluation
2. Evaluation of Portfolio Managers
3. Evaluation of Mutual funds

Method Of Portfolio Evaluation:

(I) Sharpe Measure:

The performance measure developed by William Sharpe is referred to as the Sharpe ratio or the **reward to variability ratio**. It is the ratio of the reward or risk premium to the variability of return or risk as measured by the standard deviation of return.

$$SM = \frac{\text{Avg rate of return on portfolio p} - \text{Avg rate of return on risk free investment}}{\text{Standard deviation of return portfolio p}}$$

(II) Treynor Measure:

The performance measures developed by Jack Treynor are referred to as Treynor ratio or **reward to volatility ratio**. It is the ratio of the reward or risk premium to the volatility of return as measured by the portfolio beat.

$$TM = \frac{\text{Excess return on portfolio p}}{\text{Beta of portfolio p}}$$

(OR)

$$= \frac{\text{Avg rate of return on portfolio p} - \text{Avg rate of return on risk free investment}}{\text{Beta of return portfolio p}}$$

(III) Jensen Measure:

Another type of risk adjusted performance measure has been developed by Michael Jensen and is referred to as the **Jensen ratio**. Jensen alpha is based on the capital asset pricing model.

JM = Avg return on portfolio p – [risk free return + portfolio beta (avg return on market portfolio – risk free return)]



PART- C (10 MARKS)

1. Explain Harry Markowitz Theory \ Modern Portfolio theory?

Introduction:

- The conceptual framework and analytical tools **for determining the optimal portfolio** in disciplined and objectives manner have been provided by Harry Markowitz
- This theory implies that investor can use his own funds and no borrowed funds.
- The investor invests his capital in Risky securities such as shares, Derivatives, Mutual funds.
- The investor should not invest in Risk free securities such as Banks, Company saving and Post office savings.
- Therefore this theory concludes that investment in Risky securities and find out the relationship of risk and return in Risky securities.
- Markowitz theory suggests that risk can be reduced by diversification.
- Harry Markowitz Theory of diversification considers the following factors for selection of an efficient portfolio
 1. Risk Tolerance of the investor.
 2. Utility of investment in terms of expected return and risk.

Assumption under Markowitz Model:

n

1. Calculation of portfolio return = $\sum_{i=1} R_i P_i$

i=1

2. Portfolio risk can be calculated by using standard deviation.
3. Investor should invest only on risky securities.
4. No investment should be made in risk free securities.
5. The investor should use his own funds, borrowed funds are not allowed for investment
6. The market is efficient investor known all about the market.
7. Combine maximum return with minimum risk.

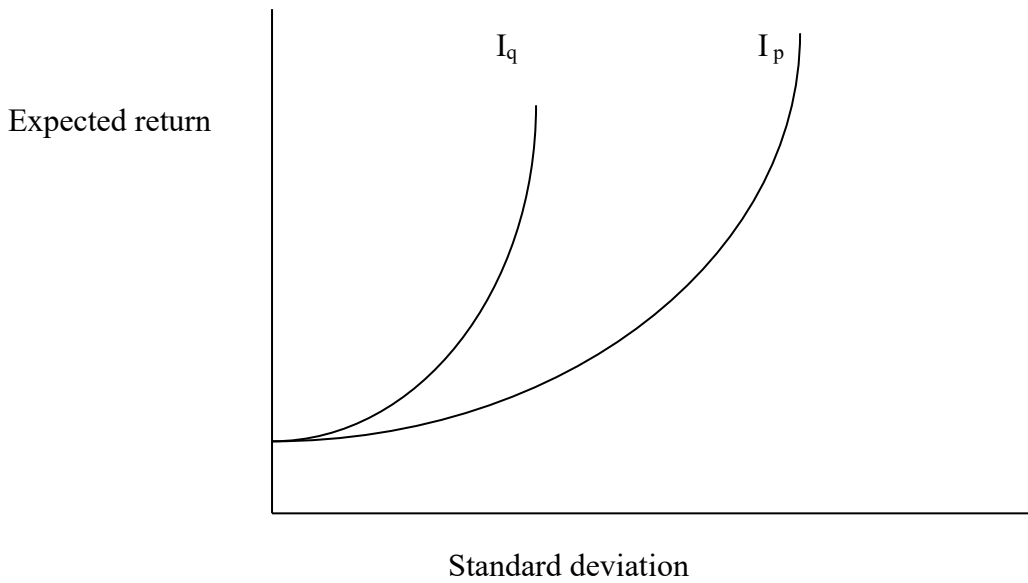
Procedure Developed by Markowitz for choosing Optimal Portfolio:

1. To determine the optimal portfolio on the efficient frontier, the investor risk –return trade off must be known. The following present two illustrative indifference curves which reflect risk return trade off functions. Note that all points lying on an indifference curve provide the same level of satisfaction.

2. The indifference curves I_p and I_q represent the risk return trade off of two hypothetical investors P and Q. Both P and Q like most investors are risk averse. They want higher returns to bear more risk. Q is however more risk averse than P. Q wants a higher expected return for bearing a given amount of risk as compared to P. in general , the steeper the slope of the indifference curve, the greater the degree of risk aversion.



Risk -Return Indifference Curves



Utility Indifference Curves

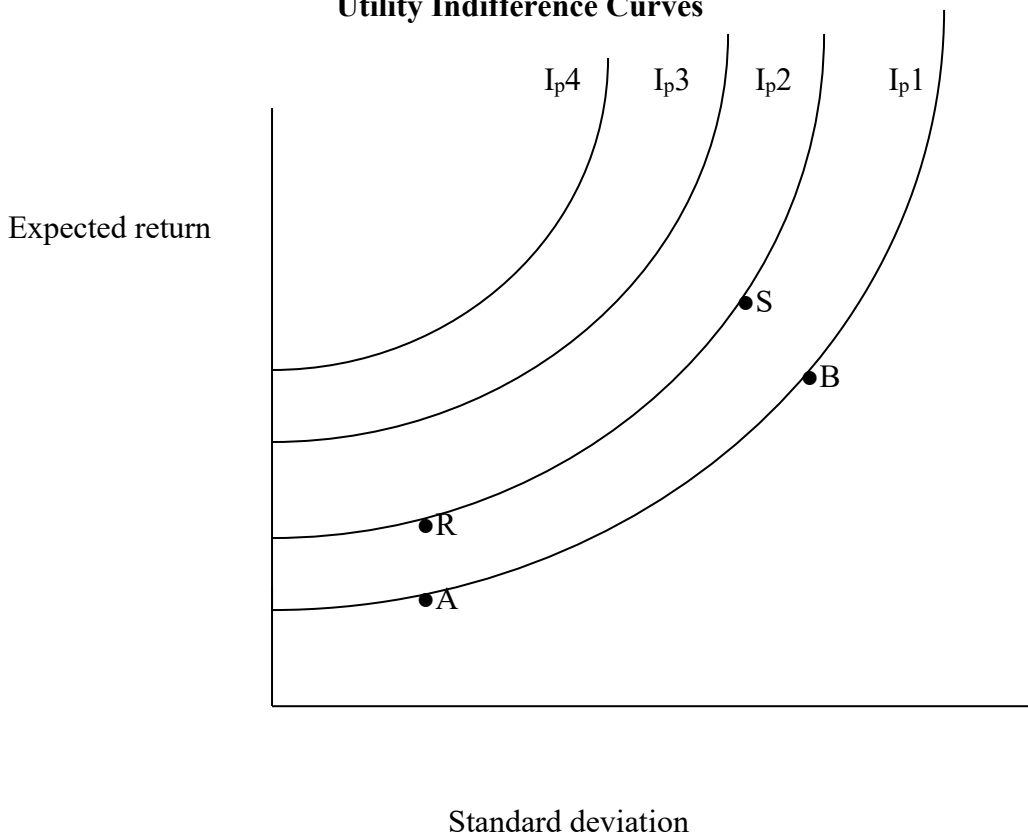


Figure-2

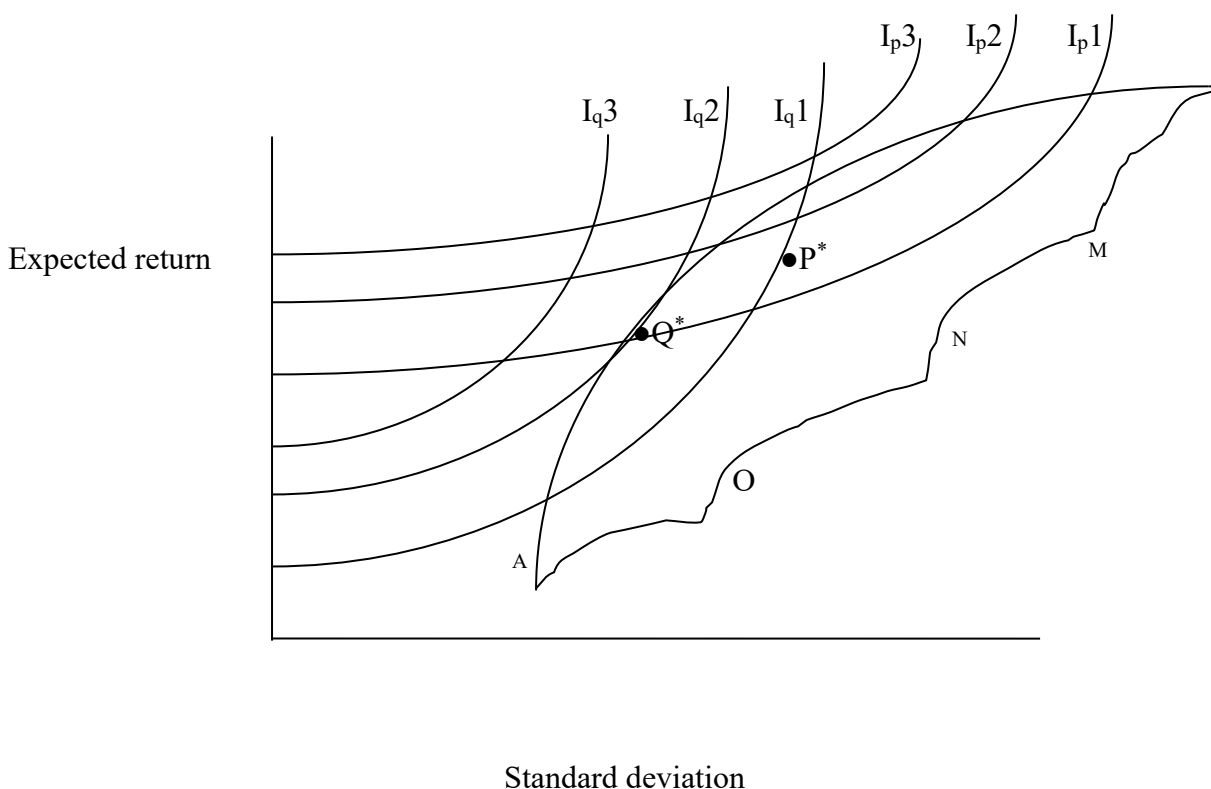


3. Each person has a map of indifference curves. The above figure(2) shows the indifference map for P. In this figure, four risk-return indifference curves I_{P^1} , I_{P^2} , I_{P^3} , I_{P^4} are shown. All the points lying on a given indifference curve offer the same level of satisfaction. For example point A and B which lie on the indifference curve I_{P^1} offer the same level of satisfaction; likewise points R and S, which lie on indifference curve I_{P^2} offer the same level of satisfaction.

4. The level of satisfaction increases as one move leftward. The indifference curve I_{P^2} represents a higher of satisfaction as compared to the indifference curve I_{P^1} . The indifference curve I_{P^3} represents a higher level of satisfaction when compared to the indifference curve I_{P^4} and so on.

Optimal Portfolio:

Given the efficient frontier and the risk- return indifference curves, the optimal portfolio is found curves, the optimal portfolio is found at the point of tangency between the efficient frontier and a utility the highest level of utility the investor can reach. In the following figure, two investors P and Q confronted with the same efficient frontier, but having different utility indifference curves (I_{P^1} , I_{P^2} , I_{P^3} for P) and (I_{Q^1} , I_{Q^2} , I_{Q^3} for Q) are shown to achieve their highest utilities at points P^* and Q^* .





2. Explain Capital Asset Pricing Theory (CAPM)?

Introduction:

- The capital asset pricing model was developed in mid 1960s by three researchers William Sharpe, John Linter and Jan Mossin.
- It is really an extension of the Markowitz theory.
- It is the overlook of Markowitz theory
 - ✓ What about efficient portfolio in CML.
 - ✓ What about inefficient portfolio in SML.
- This theory explain
 - ✓ Investor can use own and borrowed funds
 - ✓ Investor uses his own funds in Risk free securities.
 - ✓ Investor uses his borrowed funds in Risky securities.
- This theory also explain
 - ✓ concept of Beta (Market risk)
 - ✓ What is the relationship between risk and return for an efficient portfolio?
 - ✓ What is the relationship between risk and return for an individual security and inefficient portfolio?

Assumption of CAPM:

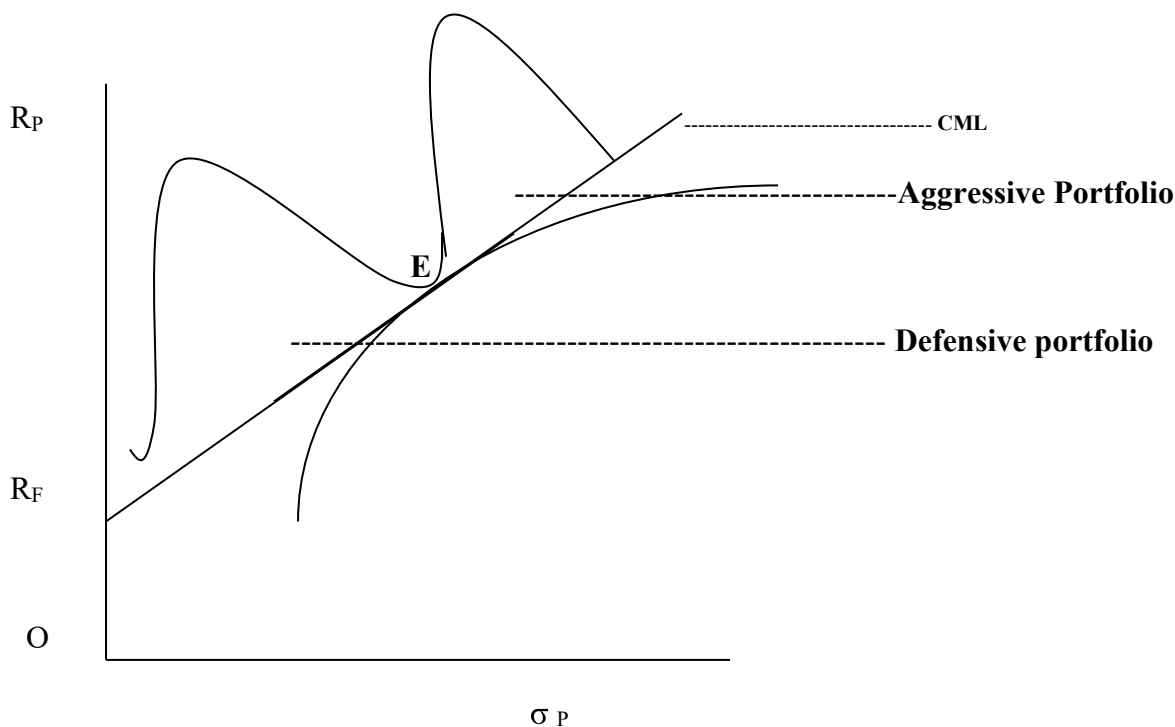
1. Individuals are risk averse.
2. Individual have homogenous expectations
3. Individual can borrow and lend freely at a riskless rate of interest.
4. The market is perfect; the market is competitive.
5. there are no transactions costs; securities are completely divisible;
6. The quantity of risky securities in the market is given.
7. Individual seek to maximize the expected utility of this portfolio over a single period planning horizon.

Capital Market Line (CML):

Example:

A to G \longrightarrow Own\ lending funds
 H to J \longrightarrow Borrowed funds

| Portfolio | % investment in Risk free securities (10%) | % in investment in Risky securities (20%) | Total money invested | Portfolio Return |
|-----------|--|---|----------------------|----------------------------------|
| A | 100 | - | 100 | $= 0.10 * 100 + 0.20 * 0 = 10\%$ |
| B | 90 | 10 | 100 | 11 % |
| C | 75 | 25 | 100 | 12.5 % |
| D | 60 | 40 | 100 | 14 % |
| E | 25 | 75 | 100 | 17.5 % |
| F | 10 | 90 | 100 | 19 % |
| G | 0 | 100 | 100 | 20 % |
| H | -10 | 110 | 100 | 21 % |
| I | -20 | 120 | 100 | 22 % |
| J | -50 | 150 | 100 | 25 % |



Capital Market Line

- The relationship between risk and expected return for efficient portfolio as given by the capital market line.
- The line $R_F E$ represents all possible combination of risk less and risky asset.
- The 'E' portfolio does not represent any risk less asset but the line $R_F E$ gives the combination of both.
- The portfolio along the path $R_F E$ is called lending portfolio.
- If it crosses the point E, it becomes borrowing portfolio.
- **The straight line is called Capital Market Line**
- **The capital market line is give by**

$$\begin{aligned} \text{CML} &= R_F + \lambda \\ &= R_F + (R_M - R_F) \sigma_m \end{aligned}$$

Where λ \longrightarrow Slope of CML

R_M \longrightarrow Market portfolio

R_F \longrightarrow Risk free rate of return



Security Market Line (SML):

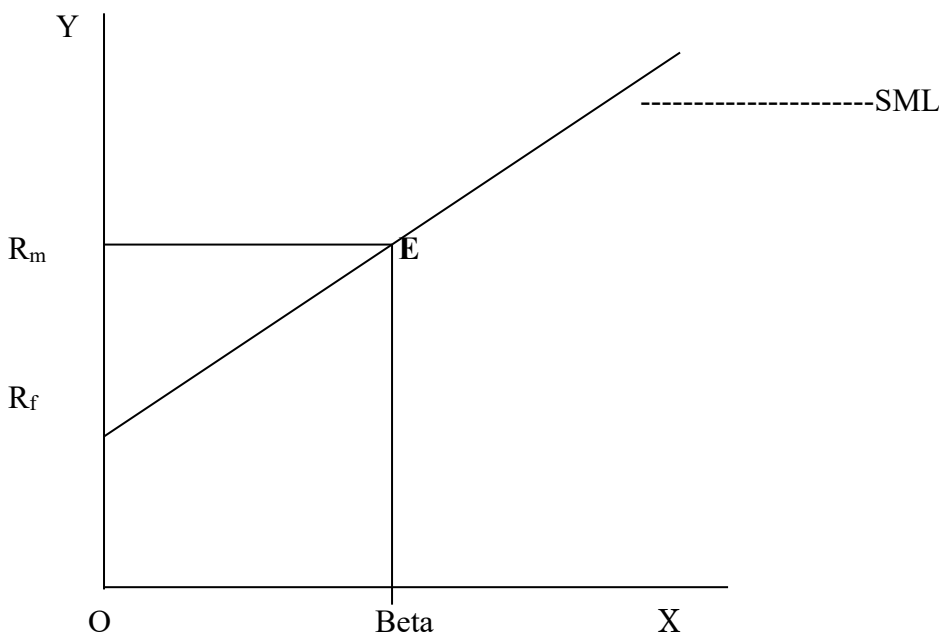
- The relationship between risk and expected return for an inefficient portfolio or a single security is expressed by the security market line.
- It is the extension of CML and the market risk is given by Beta value.
- Beta is a measure of the security sensitivity to changes in market return.
- Beta of market portfolio as represented by BSE \ NSE Index is always 1.
- The beta value will be 0, when total money is invested in risk free securities.
- The beta value will be 1, when total money is invested in risky securities.
- **The Security market line is give by**

$$SML = R_F + \beta (R_M - R_F)$$

Where β \longrightarrow Market risk

R_M \longrightarrow Market portfolio

R_F \longrightarrow Risk free rate of return



Limitation of CAPM:

1. Cumbersome calculation of Beta factor
2. Unrealistic assumptions
3. Approximation of the required rate of return

References Books:

1. Investment Analysis & portfolio Management, Prasanna Chandra.
2. Security analysis and portfolio management, Preeti Singh, Himalaya publications