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Theory Booklet

By GAURAV JAINN
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  - 68 Marks
  - (AIR/CA/CS 20th)

- **Shailee Chaudhary**
  - AIR 1
  - Roll No. 130814
  - 88 Marks

- **Payal Bansal**
  - AIR 27
  - Roll No. 137088
  - 70 Marks

- **Keshav Goel**
  - AIR 18
  - Roll No. 132485
  - 83 Marks

- **Naman Jain**
  - AIR 17
  - Roll No. 133759
  - 94 Marks

**Nov. 2014**

- **Anish Gupta**
  - AIR 22
  - Roll No. 188172
  - 68 Marks

- **Praveen Khandelwal**
  - AIR 2nd Highest
  - Roll No. 125761
  - 85 Marks

- **Nishant Gupta**
  - AIR 17
  - Roll No. 162871
  - 77 Marks

**May 2016**

- **Kunal Somani**
  - AIR 14
  - Roll No. 438272
  - 88 Marks

- **Prashu Goval**
  - AIR 36
  - Roll No. 480055
  - 81 Marks

**Nov. 2013**

- **Harsh Garg**
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FINANCIAL POLICY AND CORPORATE STRATEGY

Study Session 1

Q. No. 1 : Write a short note on "Functions of Strategic Financial Management" ?

❖ Strategic Financial Management is the portfolio constituent of the corporate strategic plan that embraces the optimum investment and financing decisions required to attain the overall specified objectives.

❖ In this connection, it is necessary to distinguish between strategic, tactical, and operational financial planning. While strategy is a long-term course of action, tactics are intermediate plans, while operational are short-term functions. Senior management decides strategy, middle levels decide tactics, and operational are dealt with by line management.

❖ Irrespective of the time horizon, the investment and financial decisions functions involve the following functions:
  ➢ Continual search for best investment opportunities
  ➢ Selection of the best profitable opportunities
  ➢ Determination of optimal mix of funds for the opportunities
  ➢ Establishment of systems for internal controls
  ➢ Analysis of results for future decision-making.

Q. No. 2 : Write a short note on 'Agency Theory' ?

According to this theory, strategic financial management is the function of our major components based on the mathematical concept of expected NPV (net present value) maximization, which are:

1. Investment decision
2. Dividend decision
3. Financing decision
4. Portfolio decision.

The key decisions falling within the scope of financial strategy include the following:

1. **Financial decisions**: This deals with the mode of financing or mix of equity capital and debt capital.
2. **Investment decision**: This involves the profitable utilization of firm's funds especially in long-term projects (capital projects). Since the future benefits associated with such projects are not known with certainty, investment decisions necessarily involve risk. The projects are therefore evaluated in relation to their expected return and risk.
3. **Dividend decision**: Dividend decision determines the division of earnings between payments to shareholders and reinvestment in the company.
4. **Portfolio decision**: Portfolio Analysis is a method of evaluating investments based on their contribution to the aggregate performance of the entire corporation rather than on the isolated characteristics of the investments themselves.

Q. No. 3 : Write a short note on "STRATEGY AT DIFFERENT HIERARCHY LEVELS" ?

Strategies at different levels are the outcomes of different planning needs. The three Levels of an enterprise strategy are

1. Corporate level
2. Business unit level
3. Functional or departmental level
1. **Corporate Level Strategy**: Corporate level strategy fundamentally is concerned with selection of businesses in which a company should compete and also with the development and coordination of that portfolio of businesses.

<table>
<thead>
<tr>
<th>Corporate level strategy should be able to answer three basic questions:</th>
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<tr>
<td><strong>Suitability</strong></td>
</tr>
<tr>
<td><strong>Feasibility</strong></td>
</tr>
<tr>
<td><strong>Acceptability</strong></td>
</tr>
</tbody>
</table>

2. **Business Unit Level Strategy**: Strategic business unit (SBO) may be any profit centre that can be planned independently from the other business units of a corporation. At the business unit level, the strategic issues are about practical coordination of operating units and developing and sustaining a competitive advantage for the products and services that are produced.

3. **Functional Level Strategy**: The functional level is the level of the operating divisions and departments. The strategic issues at this level are related to functional business processes and value chain. Functional level strategies in R&D, operations, manufacturing, marketing, finance, and human resources involve the development and coordination of resources through which business unit level strategies can be executed effectively and efficiently.

**Q. No. 4 : Write a short note on "FINANCIAL PLANNING" ?**

- Financial planning is the backbone of the business planning and corporate planning. It helps in defining the feasible area of operation for all types of activities and thereby defines the overall planning framework.
- Financial planning is a systematic approach whereby the financial planner helps the customer to maximize his existing financial resources by utilizing financial tools to achieve his financial goals.
- Financial planning is simple mathematics. There are 3 major components:
  - Financial Resources (FR)
  - Financial Tools (FT)
  - Financial Goals (FG)

**Financial Planning: FR + FT = FG**

- In other words, financial planning is the process of meeting your life goals through proper management of your finances.
- Life goals can include buying a home, saving for your children’s education or planning for retirement.
- It is a process that consists of specific steps that help you to take a big-picture look at where you are financially. Using these steps you can work out where you are now, what you may need in the future and what you must do to reach your goals.
- Outcomes of the financial planning are the financial objectives, financial decision-making and financial measures for the evaluation of the corporate performance.
- Financial objectives are to be decided at the very outset so that rest of the decisions can be taken accordingly. The objectives need to be consistent with the corporate mission and corporate objectives.

**Q. No. 5 : Explain the Interface of Strategic Management and Financial Policy ?**

- The interface of strategic management and financial policy will be clearly understood if we appreciate the fact that the starting point of an organization is money and the end point of that organization is also money again. Offer of the organization is only a vehicle that links up the starting point and the end point. No
organization can run the existing business and promote a new expansion project without a suitable internally mobilized financial base or both internally and externally mobilized financial base.

❖ Sources of finance and capital structure are the most important dimensions of a strategic plan. The generation of funds may arise out of ownership capital and or borrowed capital. A company may issue equity shares and / or preference shares for mobilizing ownership capital.

❖ Along with the mobilization of funds, policy makers should decide on the capital structure to indicate the desired mix of equity capital and debt capital. There are some norms for debt equity ratio. However this ratio in its ideal form varies from industry to industry. It also depends on the planning mode of the organization under study.

❖ Another important dimension of strategic management and financial policy interface is the investment and fund allocation decisions. A planner has to frame policies for regulating investments in fixed assets and for restraining of current assets. Investment proposals mooted by different business units may be addition of a new product, increasing the level of operation of an existing product and cost reduction and efficient utilization of resources through a new approach and or closer monitoring of the different critical activities.

❖ Now, given these three types of proposals a planner should evaluate each one of them by making within group comparison in the light of capital budgeting exercise.

❖ Dividend policy is yet another area for making financial policy decisions affecting the strategic performance of the company. A close interface is needed to frame the policy to be beneficial for all. Dividend policy decision deals with the extent of earnings to be distributed as dividend and the extent of earnings to be retained for future expansion scheme of the firm.

❖ It may be noted from the above discussions that financial policy of a company cannot be worked out in isolation of other functional policies. It has a wider appeal and closer link with the overall organizational performance and direction of growth. These policies being related to external awareness about the firm, specially the awareness of the investors about the firm, in respect of its internal performance. There is always a process of evaluation active in the minds of the current and future stakeholders of the company. As a result preference and patronage for the company depends significantly on the financial policy framework. And hence attention of the corporate planners must be drawn while framing the financial policies not at a later stage but during the stage of corporate planning itself.

Q. No. 6 : Explain briefly, how financial policy is linked to strategic Management.

❖ The success of any business is measured in financial terms. Maximising value to the shareholders is the ultimate objective. For this to happen, at every stage of its operations including policy-making, the firm should be taking strategic steps with value-maximization objective. This is the basis of financial policy being linked to strategic management.

❖ The linkage can be clearly seen in respect of many business decisions. For example :

(i) Manner of raising capital as source of finance and capital structure are the most important dimensions of strategic plan.
(ii) Cut-off rate (opportunity cost of capital) for acceptance of investment decisions.
(iii) Investment and fund allocation is another important dimension of interface of strategic management and financial policy.
(iv) Foreign Exchange exposure and risk management.
(v) Liquidity management
(vi) A dividend policy decision deals with the extent of earnings to be distributed and a close interface is needed to frame the policy so that the policy should be beneficial for all.
(vii) Issue of bonus share is another dimension involving the strategic decision.
Thus from above discussions it can be said that financial policy of a company cannot be worked out in isolation to other functional policies. It has a wider appeal and closer link with the overall organizational performance and direction of growth.

Q. No. 7: Discuss the importance of strategic management in today’s scenario?

**Importance of Strategic Management**

Strategic management intends to run an organization in a systematized fashion by developing a series of plans and policies known as strategic plans, functional policies, structural plans and operational plans. It is a systems approach, which is concerned with where the organization wants to reach and how the organization proposes to reach that position. Thus, strategic management is basically concerned with the futurity of the current decisions without ignoring the fact that uncertainty in the system is to be reduced, to the extent possible, through continuous review of the whole planning and implementation process. It is therefore necessary for an organization interested in long run survival and command over the market, to go for strategic planning and the planning process must be holistic, periodic, futuristic, intellectual and creative with emphasis given on critical resources of the firm otherwise, the organization will fall in the traps of tunneled and myopic vision.

Q. No. 8: Write a short note on Balancing Financial Goals vis-a-vis Sustainable Growth.

The concept of sustainable growth can be helpful for planning healthy corporate growth. This concept forces managers to consider the financial consequences of sales increases and to set sales growth goals that are consistent with the operating and financial policies of the firm. Often, a conflict can arise if growth objectives are not consistent with the value of the organization’s sustainable growth. Question concerning right distribution of resources may take a difficult shape if we take into consideration the rightness not for the current stakeholders but for the future stakeholders also. To take an illustration, let us refer to fuel industry where resources are limited in quantity and a judicial use of resources is needed to cater to the need of the future customers along with the need of the present customers. One may have noticed the save fuel campaign, a demarketing campaign that deviates from the usual approach of sales growth strategy and preaches for conservation of fuel for their use across generation. This is an example of stable growth strategy adopted by the oil industry as a whole under resource constraints and the long run objective of survival over years.

Incremental growth strategy, profit strategy and pause strategy are other variants of stable growth strategy.

Sustainable growth is important to enterprise long-term development. Too fast or too slow growth will go against enterprise growth and development, so financial should play important role in enterprise development, adopt suitable financial policy initiative to make sure enterprise growth speed close to sustainable growth ratio and have sustainable healthy development.

**What makes an organisation financially sustainable?**

To be financially sustainable, an organisation must:

- have more than one source of income;
- have more than one way of generating income;
- do strategic, action and financial planning regularly;
- have adequate financial systems;
- have a good public image;
- be clear about its values (value clarity); and
- have financial autonomy.

The sustainable growth rate (SGR), concept by Robert C. Higgins, of a firm is the maximum rate of growth in sales that can be achieved, given the firm’s profitability, asset utilization, and desired dividend payout and debt (financial leverage) ratios. The sustainable growth rate is a measure of how much a firm can grow without borrowing more money. After the firm has passed this rate, it must borrow funds from another source to facilitate
growth. Variables typically include the net profit margin on new and existing revenues; the asset turnover ratio, which is the ratio of sales revenues to total assets; the assets to beginning of period equity ratio; and the retention rate, which is defined as the fraction of earnings retained in the business.

**SGR = ROE x (1 - Dividend payment ratio)**

Sustainable growth models assume that the business wants to: 1) maintain a target capital structure without issuing new equity; 2) maintain a target dividend payment ratio; and 3) increase sales as rapidly as market conditions allow. Since the asset to beginning of period equity ratio is constant and the firm's only source of new equity is retained earnings, sales and assets cannot grow any faster than the retained earnings plus the additional debt that the retained earnings can support. The sustainable growth rate is consistent with the observed evidence that most corporations are reluctant to issue new equity. If, however, the firm is willing to issue additional equity, there is in principle no financial constraint on its growth rate.

**What makes an organisation sustainable?**

- In order to be sustainable, an organisation must:
- have a clear strategic direction;
- be able to scan its environment or context to identify opportunities for its work;
- be able to attract, manage and retain competent staff;
- have an adequate administrative and financial infrastructure;
- be able to demonstrate its effectiveness and impact in order to leverage further resources; and
- get community support for, and involvement in its work.

**Q. No. 9 : Discuss the methods of valuation in brief.**

The evaluation of sustainable growth strategy calls for interface of financial planning approach with strategic planning approach. Choice of the degree of sustainability approach for sustainability and modification in the sustainability principle must be based on financial evaluation of the alternative schemes in terms of financial and overall corporate objectives. There are two alternative methods for evaluation. They are:

a) **Valuation Method**: Valuation method depends on demand curve approach by either making use of expressed preferences or making use of revealed preferences.

b) **Pricing Method**: Pricing method is a non-demand curve approach that takes into consideration either opportunity costs or alternative costs or shadow projects or government payments or those response methods depending on the nature of the problem and environmental situation.

Valuation methods are in general more complex in implementation than pricing methods. But demand curve methods are more useful for cases where it seems likely that disparity between price and value is high.
Q. No. 1 : What is Financial System & its significance ?

- Financial system is a system of interrelated activities that work together to achieve a predetermined goal. It includes financial market, financial institutions, financial services and financial instrument which influence the generation of savings, investment, capital formation and growth.

- Van Horne defined the financial system as the purpose of financial markets to allocate savings efficiently in an economy to ultimate users either for investment in real assets or for consumption.

- Christy has opined that the objective of the financial system is to "supply funds to various sectors and activities of the economy in ways that promote the fullest possible utilization of resources without the destabilizing consequence of price level changes or unnecessary interference with individual desires."

- According to Robinson, the primary function of the system is "to provide a link between savings and investment for the creation of new wealth and to permit portfolio adjustment in the composition of the existing wealth."

- From the above definitions, it may be said that the primary function of the financial system is the mobilization of savings, their effective utilization for investment in various sectors of the economy and stimulating capital formation to accelerate the process of economic growth. The significance of financial system as explained above can be graphically depicted in the following diagram.

Q. No. 2 : What are the types of Financial system in India ?

- The Indian financial system consists of formal and informal financial system which is depicted in the following figure:

  (i) **Informal Financial System**

  From the above diagram, it can be easily understood that the Indian Financial System can be categorized into formal and informal financial system. The Informal financial system consists of moneylenders; Associations, funds, clubs, committees etc. These people have a system and they have their own rules on how they should function in their day to day activities.

  Moreover, informal financial system responds quickly to short term financing opportunities and allowed low income people access to service not available to them through the formal channel. Another advantage is that in informal financial system, loans were given quickly to the lenders. Also, informal financial markets are not subject to interest rate regulation. They do not incur legal expenses and their cost of lending and deposit taking tends to be lower than that of formal financial institutions. However, the formal financial system is always preferable because it is systematic and transparent and offers numerous benefits.
(ii) **Formal Financial System**

The formal financial system consists of financial institutions, financial markets, financial instrument, and financial services.

![Diagram of INDIAN FINANCIAL SYSTEM](image)

**Q. No. 3 : Write a note on Financial Institutions? What is the comparison between Banking & Non-Banking Financial Institutions?**

(i) **Financial Institutions**

First of all let us get some idea about the concept of financial institutions by going through following diagram:

![Diagram of Financial Intermediaries / Institutions](image)

Financial Institutions can be classified as banking and non-banking financial institutions. Banks are creators and providers of credit. While non-banking financial companies are only providers of credit. Financial institutions can be specialized financial institutions like Export Import Bank of India (EXIM), Tourism Finance Corporation of India (TFCI), the Infrastructure Development Finance Company (IDFC) etc. They can also be sector based such as National Bank for Agriculture and Rural Development (NABARD) and the National Housing Bank (NHB). Further, Unit Trust of India (UTI) which is in the business of mutual fund, Life Insurance Corporation (LIC) and General Insurance Corporation (GIC) and its subsidiaries are also classified as financial institutions. Therefore, the financial institutions can be categorized into banking institutions and non-banking institutions.

(a) **Banking Financial Institutions**

Banking institutions are those institutions, which participate in the country’s payment system, i.e. they provide transaction services. They play an important role in the mobilization of deposits and distribution of credit to various sectors of the economy. A sound banking system ensures that deposits accumulated from people are productively utilized. Banking sector is dominant in India as it accounts for nearly half of the total financial assets in the financial sector.

(b) **Non-Banking Financial Institutions**

Non-banking financial institutions are those institutions which act as mere providers of credit and they do not create credit, e.g., LIC, UTI, and IDBI.
### COMPARISON BETWEEN BANKING AND NON-BANKING INSTITUTIONS

<table>
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<tr>
<th>Basis for comparison</th>
<th>Banking Institutions</th>
<th>Non-Banking Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meaning</strong></td>
<td>Bank is a financial intermediary which provides banking services to general people. And it requires a bank license for that.</td>
<td>Non-banking institutions are basically company form of organization that provides banking services to people without holding a banking license.</td>
</tr>
<tr>
<td><strong>Transaction Services</strong></td>
<td>Banks provide transaction services like providing overdraft facility, issue of cheque books, travellers cheque, demand draft, transfer of funds, etc.</td>
<td>The non-banking institutions do not provide any transaction services.</td>
</tr>
<tr>
<td><strong>Money supply</strong></td>
<td>Bank deposits constitute a major part of the national money supply.</td>
<td>The money supply of the nonbanking institutions is small.</td>
</tr>
<tr>
<td><strong>Credit creation</strong></td>
<td>Banks create credit.</td>
<td>Non-banking institutions do not create credit.</td>
</tr>
<tr>
<td><strong>Compliance</strong></td>
<td>Banks are required to comply with some of the legal requirements like Cash Reserve Ratio (CRR), Statutory Liquidity Ratio and Capital Adequacy Ratio (CAR).</td>
<td>Non-banking institutions are not required to comply with these legal requirements.</td>
</tr>
<tr>
<td><strong>Demand Deposit</strong></td>
<td>They are not accepted.</td>
<td>They are accepted.</td>
</tr>
<tr>
<td><strong>Payment and settlement system</strong></td>
<td>Contains an integral part of the system.</td>
<td>Not a part of the system.</td>
</tr>
</tbody>
</table>

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**Q. No. 4 : What is the difference between Capital Market and Money Market?**

<table>
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<tr>
<th>Basics</th>
<th>Money Market</th>
<th>Capital Market</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tenure</strong></td>
<td>It is a market for lending and borrowing of short term funds, upto one year .</td>
<td>Capital markets deals in long term securities for a period beyond one year.</td>
</tr>
<tr>
<td><strong>Well defined place</strong></td>
<td>It is a not a well-defined market where business is done .</td>
<td>It is a well-defined market where business is done e.g. stock exchange.</td>
</tr>
</tbody>
</table>
### Basics

<table>
<thead>
<tr>
<th>Basics</th>
<th>Money Market</th>
<th>Capital Market</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short Term</strong></td>
<td>It deals in short term financial assets e.g. interbank call money, treasury</td>
<td>It deals in medium &amp; long term financial assets e.g. equity shares, debentures</td>
</tr>
<tr>
<td><strong>/Long Term</strong></td>
<td>bills, commercial paper, etc.</td>
<td>etc.</td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td>There is no sub-division in money market.</td>
<td>Capital Market is classified between Primary Market and Secondary Market</td>
</tr>
<tr>
<td><strong>Volume of</strong></td>
<td>The total value of transaction in money market far exceeds the capital</td>
<td>Capital market lag behind the total value of transaction done in money market.</td>
</tr>
<tr>
<td><strong>business</strong></td>
<td>market. According to DFHI only in call money market daily lending is ₹ 6000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>crores around</td>
<td></td>
</tr>
<tr>
<td><strong>No. of</strong></td>
<td>The number of instruments dealt in money market are various, e.g. (a)</td>
<td>The number of instruments in capital market are shares and debentures.</td>
</tr>
<tr>
<td><strong>instrument</strong></td>
<td>Interbank call money (b) Notice money up to 14 days (c) Short term deposits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>up to 3 months (d) 91 days treasury bill (e) 182 days treasury bill (f)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commercial paper etc.</td>
<td></td>
</tr>
<tr>
<td><strong>Participants</strong></td>
<td>The participants in money market are Bankers, RBI and Government.</td>
<td>The participants in capital market are general investors, brokers, merchant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>bankers, registrars to issue, underwriters, corporate investors, FI’s &amp;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bankers</td>
</tr>
<tr>
<td><strong>Liquidity</strong></td>
<td>The important features of money market instrument is that it is liquid.</td>
<td>Whereas Capital market are not as liquid as money market instrument.</td>
</tr>
<tr>
<td><strong>Regulator</strong></td>
<td>It is regulated by the guidelines of RBI</td>
<td>It is regulated by the guidelines of SEBI.</td>
</tr>
<tr>
<td><strong>End Use</strong></td>
<td>Capital raised are used for Working Capital needs only</td>
<td>Capital raised being long term, are used for fixed &amp; working capital</td>
</tr>
<tr>
<td><strong>Risk</strong></td>
<td>Low Credit &amp; Market Risk</td>
<td>High Credit &amp; Market Risk</td>
</tr>
</tbody>
</table>

### Q. No. 5: Write a short note on “Financial Markets & its functions”

The financial market is a market where trading of securities including equities, bonds, currencies and derivatives takes place. Financial market can be divided into money market and capital market. Money market is a market for short term securities having a maturity period of less than one year. Capital Market is a market for long term securities having a maturity period of more than one year. Further, capital market can be divided into primary market and secondary market. In primary market, securities (shares, bonds, debentures) are issued to the public for the first time. While in secondary market, trading (purchase and sale) takes place in those securities are already issued to the public.

**Functions of Financial Markets:**

The main functions of financial markets are enumerated as below:

1) To facilitate creation and allocation of credit and liquidity.
2) To serve as intermediaries for mobilization of savings.
3) To help in the process of balanced economic growth.
4) To provide financial convenience.
5) To provide information and facilitate transactions at low cost.
6) To cater to the various credits needs of the business organizations.
Q. No. 6: Write a short note on “Financial Instruments & its characteristics ?

Financial instruments are those instruments which have a monetary value. These instruments can be classified into debt based securities and equity based securities. Equity based securities consist of equity share capital which is ownership based securities and represents risk capital. Debt based securities consists of bonds and debentures. Debenture is an acknowledgement of debt which has to be repaid in full in certain number of years mentioned at the time of issue of debenture itself. On the other hand, bonds are financial instruments issued by companies which are basically a financial contract between a company (borrower) and investors (lenders). Bonds are generally used by companies, municipalities, states and sovereign governments to raise money and finance a variety of projects and activities. Owners of bonds are debt holders or creditors of the issue.

Short-term debt-based financial instruments are issued for one year or less. Securities of this kind come in the form of T-bills and commercial paper. Long-term debt-based financial instruments are issued for more than one year. These are bonds, debentures and loans.

Characteristics of Financial Instruments

The important characteristics of financial instruments are enumerated as below:

a) **Liquidity:** Financial instruments provide liquidity. These can be easily and quickly converted into cash.

b) **Marketing:** Financial instruments facilitate easy trading on the market. They have a ready market.

c) **Collateral value:** Financial instruments can be pledged for getting loans.

d) **Transferability:** Financial instruments can be transferred from one person to another.

e) **Maturity period:** The maturity period of financial instruments may be short term, medium term or long term.

f) **Transaction cost:** Financial instruments involve buying and selling cost. The buying and selling costs are called transaction costs.

g) **Risk:** Financial instruments carry risk. Equity based instruments are riskier in comparison to debt based instruments because the payment of dividend is uncertain. A company may not declare dividend in a
particular year. However, payment of principle or interest is more or less certain unless the company gets insolvent.

h) **Future trading:** Financial instruments facilitate future trading so as to cover risks arising out of price fluctuations, interest rate fluctuations etc.

**Q. No. 7 : Explain various types of financial services ?**

- Financial services are services which involves investment, lending, and management of money and assets. Financial services are needed for the following activities:
  1. Borrowing and lending
  2. Investing
  3. Buying and selling securities
  4. Making and enabling payments and settlements
  5. Managing risk

- Liquidity is required for the good functioning of the financial system. Financial liquidity is enhanced through trading in securities. Liquidity is provided by brokers who assist the buyers and sellers of securities in arriving at a trade agreement. Also, market makers help in increasing liquidity by providing buy and sell quotes.

- The producers of financial services are financial intermediaries or institutions such as banks, insurance companies, mutual funds and stock exchanges. These financial institutions provide financial services such as merchant banking, leasing, hire purchase, factoring and credit rating. Financial services rendered by financial institutions bridge the gap between lack of knowledge on the part of investors and latest trends in the financial instruments and markets. These financial services are essential for the creation of new business, expansion of existing industries and economic growth.

**The various types of financial services are briefly explained as below:**

(a) **Investment Banking**

Companies need cash in order to grow and expand their businesses; Investment banks sell securities to public investors in order to raise the cash. These securities come in the form of stocks or bonds. Thus, Investment banks are essentially financial intermediaries, who assist their clients in raising capital either by underwriting their shares or bonds or by acting as an agent (merchant banker) in the issuance of securities.

(b) **Credit Rating**

Credit Rating means an assessment made from credit-risk evaluation, translated into a current opinion as on a specific date on the quality of a specific debt security issued or on obligation undertaken by an enterprise in terms of the ability and willingness of the obligator to meet principal and interest payments on the rated debt instrument in a timely manner.

Thus, Credit Rating is:

1. An expression of opinion of a rating agency.
2. The opinion is in regard to a debt instrument.
3. The opinion is as on a specific date.
4. The opinion is dependent on risk evaluation.
5. The opinion depends on the probability of interest and principal obligations being met timely.

Such opinions are relevant to investors due to the increase in the number of issues and in the presence of newer financial products viz. asset backed securities and credit derivatives.
(c) **Consumer finance**

Consumer credit provides short term/medium term loans to finance purchase of goods or services for personal use. There are four important sources of consumer finance viz manufacturers / sellers / dealers, finance companies, banks and credit card companies. In the past, banks provided finance to manufacturing organizations. The consumers borrowed money from the sellers/dealers directly. Finance companies too entered this arena while credit card entitles with the support from banks started operating with substantial success. Both nationalized and private sector banks have started marketing aggressively for a large slice of the market share in this consumer finance segment. Employers also provide loan facilities to salary earners as a part of welfare scheme for their employees. In big concerns, employees organize themselves into co-operative credit societies and funds raised by its members through periodical contributions are used as loan assistance at low rate of interest.

(d) **Factoring**

This concept has not been fully developed in our country and most of their work is done by companies themselves. All units’ particularly small or medium size units have to make considerable efforts to realize the sale proceeds without much success creating functional difficulties for such units.

Many a units under small-scale sector have become sick only because of delay/non-realization of their dues from large units. Introduction of factoring services will, therefore, prove very beneficial for such units as it will free the units from hassles of collecting receivables to enable them to concentrate on product development and marketing.

(e) **Housing Finance**

The volume and growth rate across time periods are in housing loans are viewed as one of the important barometers of measuring growth in an economy. The demand for Housing Finance comes from:

1) Salary earners and self-employed professionals with their basic need of a roof over their head.
2) Non-residents having an eye on capital appreciation of the asset or with an eye to their possible resettlement in India for NRIs.

**The supply of loans comes from:**

(a) LIC, National Housing Bank in the government sector.
(b) Private Sector housing companies viz. HDFC, Commercial Banks etc.
(c) Non-Banking Finance Companies, Nidhis and Chit funds, Co-operative and Credit Societies, employers extending staff loans for housing, beside private money lenders.

(f) **Asset Restructuring/Management Company**

Asset reconstruction company’s (ARC) first task is to manage and convert the sick companies or those companies whose NPA’s rose to a significant level into profitable ones. But, the ARC’s face the risk of suffering loss if the company they are trying to manage may land itself into insololvency. However, if properly managed, the ARC’s may be able to recover them from financial distress, convert them into profitable ones and transfer them to worthy candidates. ARC’s charge a commission or fee from the distressed company for their services.

Asset Management Companies (AMC’s) pool large amount of funds from various source of investors and invest these pooled resources in diverse securities by paying out proportional returns to the investors. Simply put, they help their client to invest money and buy securities. They decide what to buy by relying on in-house research and data analytics. AMC’s charges a small fee for this sort of work.

(g) **Depository Services**

Depository system is concerned with conversion of securities from physical to electronic form, settlement of trades in electronic segment, electronic transfer of ownership of shares and electronic custody of
securities. All securities in the depositories are identical in all respects and are thus fungible. The ownership and transfer of securities take place by means of book entries, avoiding the risks associated with paper.

(h) Debit Cards
Debit cards are also known as cheque cards. A debit card is a plastic card that provides the cardholder electronic access to his or her bank account(s) at a financial institution. Debit cards look like credit cards or ATM (automated teller machine) cards, but operate like cash or a personal cheque. Debit cards are different from credit cards. While a credit card is to “pay later,” a debit card is to “pay now.” When one uses a debit card his money is immediately deducted from his cheque or savings account.

(i) Online Share Trading
Online stock trading is an internet based stock trading facility where investor can trade shares through a website without any manual intervention from the broker. It also provides investors with rich, interactive information in real time including market updates, investment research and robust analysis.

Q. No. 8 : What are the functions of Financial System?

(i) Mobilization of savings: Savings are done by millions of people. But amount saved are of no use unless they are mobilized into financial assets, whether currency, bank deposits, post office savings deposits, life insurance policies, mutual funds, bonds or equity shares.

(ii) Allocations of savings: Amount of savings mobilized through millions of people will then be allocated among the needy sectors. Direct lending by the general public has been made possible through corporate bonds and equities. Besides, there are banks, insurance companies, and other financial institutions. They serve as financial intermediaries between the ultimate lender and the ultimate borrower. They mobilize savings of the lender by selling their own liabilities which are deposits, insurance premium amount etc. and make these funds available to needy borrowers at their own risk. So, many savers find the secondary securities (indirect lending) of financial institutions much more acceptable than the primary securities (direct lending) of all sorts of borrowers.

(iii) A financial system provides a payment system for the exchange of goods and services: For exchange or sale of goods and services, payment in cash is the most preferred mode. However, large scale businesses deal mostly in credit transactions. After a certain date, payments are made either through cheque or online payment.

(iv) A financial system provides a mechanism for the pooling of funds to invest in large-scale enterprises: Large corporates raises funds through bonds, debentures and public deposits to invest in large scale business enterprises.

(v) Provide payment and settlement system: Banks provide this mechanism by means of a payment facility based upon cheques, promissory notes, credit and debit cards. The payment mechanism is now being increasingly made through electronic means. The clearing and settlement mechanism of the stock market is done through depositories and clearing corporations.

(vi) Monitor corporate performance: A financial system not only helps in selecting the projects to be funded but also motivates the various stakeholders of the financial system to monitor the performance of the investment. Financial markets and institutions help to monitor corporate performance and exert pressure on the corporates to continuously improve their performance.

(vii) Helps in risk reduction: The financial system helps in reduction of risk in the financial system by laying down rules for e.g. SEBI which lays down rules, regulations and guidelines from time to time for efficient and transparent conduct of operations in the capital market. Risk reduction is achieved by diversification of portfolios and screening of borrowers. Market participants also protect themselves from unexpected contingencies by buying insurance services. Risk is traded in the financial market through financial instruments such as derivatives. The derivatives shift risk from those who have it but don’t want it to those who are willing to take it.
(viii) **Provide price related information**: Financial markets provide information which enables the investors to make an informed decision about whether to buy, sell or hold a financial asset. This information dissemination facilitates valuation of financial assets. Further, this process of valuation influences the market price of equity and debt instruments and guides the management as to whether their actions are consistent with the objective of wealth maximization of shareholders.

**Q. No. 9 : Explain the Key elements of a well-functioning Financial System?**

**Key elements of a well-functioning financial system are explained as below:**

(i) **A strong legal and regulatory environment**: Capital market is regulated by SEBI which acts a watchdog of the securities market. This has been ensured through the passing of SEBI Act, Securities Contract Regulation Act and numerous SEBI rules, regulations and guidelines. Likewise money market and foreign exchange market is regulated by RBI and this has been ensured through various provisions of the RBI Act, Foreign Exchange Management Act etc. Thus, a strong legal system protects the rights and interests of investors and acts as a most important element of a sound financial system.

(ii) **Stable money**: Money is an important part of an economy. Frequent fluctuations and depreciations in the value of money lead to financial crises and restrict the economic growth.

(iii) **Sound public finances and public debt management**: Sound public finances means setting and controlling public expenditures and increase revenues to fund these expenditures efficiently. Public debt management is the process of establishing and executing a strategy for managing the government's debt in order to raise the required amount of funding. It also includes developing and maintaining an efficient market for government securities.

(iv) **A central bank**: A central bank supervises and regulates the operations of the banking system. It acts as a banker to the banks and government, manager of money market and foreign exchange market and also lender of the last resort. The monetary policy of the Central Bank is used to keep the pace of economic growth on a higher path.

(v) **Sound banking system**: A well-functioning financial system must have large variety of banks both in the private and public sector having both domestic and international operations with an ability to withstand adverse national and international events. They perform varied functions such as operating the payment and clearing system, and foreign exchange market. Banks also undertake credit risk analysis and assess the expected risk and return of a project before giving any loan for a proposed project.

(vi) **Information System**: All the participants in the financial system requires information at some stage or the other. Proper information disclosure practices form basis of a sound financial system for e.g. the corporates has to disclose their financial performance in the financial statements. Similarly, at the time of initial public offering, the companies have to disclose a host of information disclosing their financial health and efficiency.

(vii) **Well functioning securities market**: A securities market facilitates the issuance of both equity and debt. An efficient securities market helps in the deployment of funds raised through the capital market to the required sections of the economy, lowering the cost of capital for the firms, enhancing liquidity and attracting foreign investment.

**Q. No. 10 : What is Financial System Design---bank based & market based?**

❖ A financial integration is a well-integrated chain of financial markets and institutions that provide financial services. Different design of financial markets is found in different countries. Financial system design can be demarcated into bank based and market based.

❖ The bank dominated system which is prevalent in Germany is one extreme where banks play a dominant role and stock market is not that relevant. On the other hand, there is market based system, which is
prevailing in USA, where banks play a much lesser role and the economy is largely controlled by the financial markets.

- Demirguc Kunt and Levine (1999) have provided explanations of bank based and market based financial systems. In bank based financial systems, banks play a pivotal role in mobilizing savings, allocating capital, overseeing the investment decisions of corporate managers, and providing risk-management facilities. In market based financial systems, the securities markets share centre stage with banks in mobilizing the society’s savings for firms, exerting corporate control, and easing risk management.

**Advantages of market based system**

(i) Stock markets facilitate diversification of securities to enable the investors to reduce risks.

(ii) In furtherance of the above point, it can be reiterated that it helps the investors to reduce their risks.

(iii) Market based system provides an information system which enables investor to make an informed decision which is reflected in the stock prices, and in turn leads to efficient allocation of investment.

(iv) Another advantage of market based system is that they facilitate financing of new technologies.

Therefore, in case of emerging companies with significant financial and technological risks, a market based system is preferable.

**Disadvantages of market based system**

(i) Market based system is prone to instability as market may be fluctuating in turbulent times.

(ii) Consequently, investors are exposed to market risk.

(iii) There is a free rider problem.

**Advantages of bank-based financial system**

(i) Close relationship with parties.

(ii) Provide tailor made contracts.

(iii) Efficient risk sharing.

(iv) No free rider problem.

**Disadvantages of bank-based financial system**

(i) Retards innovation and growth as banks may have preference for low risk, low return projects.

(ii) Impedes competition and entry of new firms because banks may collude with business managers against investors.
**Difference between bank based financial system and market based financial system**

(a) In a market based financial system, the majority of the financial power is held by the stock market and the economy is dependent on how well or poorly the stock market is performing. On the other hand, in bank based financial system, the economy is dependent on how well or poorly the banking system is doing.

(b) In a market based system, banks are less dependent on interest from loans for their revenue enhancements and focuses on fee based services such as checking of accounts. However, in a bank based system, they focus their attention more on loans and are more dependent on interest from loans for their revenue increase.

(c) In a market-based financial economy, the wealth is spread more unevenly while in a bank-based financial system, the economy’s wealth is more evenly spread.

(d) Market based financial system constantly changes and each individual within the society has the opportunity to gain or lose on any given day. But, in bank based financial system only a few are given the opportunity to maximize their gain.

(e) In a market based financial system, laws are basically set forth and carried out by the government and are basically based on civil law rather than common law. Bank based financial system is prevalent where common law legal system is mostly there.

**Q. No. 11 : What is the key role of money markets in bank’s liquidity management & monetary policy of RBI?**

**Regulators in Financial Market**

![Regulatory Structure of Indian Financial System](image)

- Money markets play a key role in banks’ liquidity management and the monetary policy of RBI which are discussed as below:

  (a) **Banks’ liquidity management**

  Banks have to maintain Statutory Liquidity Ratio (SLR) and Cash Reserve Ratio (CRR). CRR is the reserve which the Banks have to keep with Reserve Bank of India (RBI). On the other hand, SLR is the amount which the banks have to keep with themselves. Banks are often evaluated on the basis of their liquidity.

  SLR requirements help banks to do that. Whenever the RBI issues treasury bills on behalf of the Government, CRR and SLR requirements of banks are automatically met.
(b) Monetary policy

Monetary policy affects rates of interest, inflation and business cycle. Through the introduction of repos and reverse repos, the government adjusts the rate of interest, thus, reducing or increasing money supply by impacting inflation, thereby effecting changes in business cycles. Also, by introducing treasury bills and other money market instruments, it affects money supply and consequently inflation and business cycles.

In normal times, money markets are among the most liquid in the financial sector. By providing the appropriate instruments for liquidity trading, the money market allows the refinancing of short and medium-term positions and facilitates the mitigation of one’s business liquidity risk with the help of commercial papers, commercial bills and certificate of deposits.

Q. No. 12 : What are the objectives & functions of SEBI?

The important objectives of SEBI are:

i) Protect the interest of investors in securities.

ii) Promotes the development of securities market.

iii) Regulating the securities market.

Functions of SEBI as per SEBI Act, 1992

(a) regulating the business in stock exchanges and any other securities markets;

(b) registering and regulating the working of stock brokers, sub-brokers, share transfer agents, bankers to an issue, trustees of trust deeds, registrars to an issue, merchant bankers, underwriters, portfolio managers, investment advisers and such other intermediaries who may be associated with securities markets in any manner; ([b] registering and regulating the working of the depositaries, [participants,] custodians of securities, foreign institutional investors, credit rating agencies and such other intermediaries as the Board may, by notification, specify in this behalf;)

(c) registering and regulating the working of [venture capital funds and collective investment schemes], including mutual funds;

(d) promoting and regulating self-regulatory organisations;

(e) prohibiting fraudulent and unfair trade practices relating to securities markets;

(f) promoting investors' education and training of intermediaries of securities markets;

(g) prohibiting insider trading in securities;

(h) regulating substantial acquisition of shares and take-over of companies;

(i) calling for information from, undertaking inspection, conducting inquiries and audits of the stock exchanges, mutual funds, other persons associated with the securities market intermediaries and self-regulatory organizations in the securities market;

(ia) calling for information and record from any bank or any other authority or board or corporation established or constituted by or under any Central, State or Provincial Act in respect of any transaction in securities which is under investigation or inquiry by the Board;

(i) performing such functions and exercising such powers under the provisions of the Securities Contracts (Regulation) Act, 1956(42 of 1956), as may be delegated to it by the Central Government;

(k) levying fees or other charges for carrying out the purposes of this section;

(l) conducting research for the above purposes;

(m) calling from or furnishing to any such agencies, as may be specified by the Board, such information as may be considered necessary by it for the efficient discharge of its functions;

(n) performing such other functions as may be prescribed.
Q. No. 13 : What are the functions of RBI?

As per the RBI Act, 1934, RBI performs three types of functions:

(i) Banking Functions -

(a) **Issuer of Bank Notes** - Under section 22 of the Reserve Bank of India Act, the bank has the sole right to issue bank notes of all denominations. The distribution of one rupee notes and coins and small coins all over the country is undertaken by the Reserve Bank as agent of the Government.

(b) **To act as government banker, agent and adviser** - The second important function of the Reserve Bank of India is to act as Government banker, agent and adviser. The Reserve Bank is agent of Central Government and of all State Governments in India except the State of Jammu and Kashmir.

(c) **Bankers’ Bank and Lender of the Last Resort** – The commercial banks always look up to RBI in case of any need for funds. Therefore, they are called bankers’ bank and lender of the last resort.

(d) **Controller of Credit** - The Reserve Bank of India is the controller of credit i.e. it has the power to influence the volume of credit created by banks in India. It can do so through changing the Bank rate or through open market operations. RBI is also the selective controller of credit. It can direct the banks not to lend to certain people or group of people on the basis of certain types of securities. RBI also has the power to control the money market in India. Further, on every weekly Friday which is called the reporting Friday, the commercial banks have to report to the RBI that they are complying with CRR (presently 4%) and SLR (presently 20.5%) requirements.

(e) **Custodian of Foreign Reserve** - The foreign exchange regulations under the law required that all foreign exchange receipts whether on account of export earnings, investment earnings, or capital receipts, whether on private account or on government account, must be sold to the RBI either directly or through authorized dealers (mostly commercial banks). This resulted in centralization of country’s foreign exchange reserves with the RBI and facilitated planned utilization of these reserves, because all payments in foreign exchange were also controlled by the authorities.

(ii) Supervisory Functions –

The Reserve Bank Act, 1934, and the Banking Regulation Act, 1949 have given the RBI wide powers of supervision and control over commercial and co-operative banks, relating to licensing and establishments, branch expansion, liquidity of their assets, management and methods of working, amalgamation, reconstruction and liquidation. Further, the RBI is authorized to carry out periodical inspection of the banks and to call for returns and necessary information from them. Therefore, the supervisory functions of RBI have forced the banks to do their job on sound lines and to improve the methods of their operation.

(iii) Promotional Functions –

The Central Bank (RBI) now performs a variety of developmental and promotional functions, which, at one time, were regarded as outside the normal scope of central banking. So, the Reserve Bank was asked to promote banking habit amongst the people. People are encouraged to open Jan Dhan Account in urban and rural areas on the basis of their Aadhar Card. Now, people are asked to resort to online banking as the Government is promoting cashless economy. Banks are also gearing up to this challenge as they will need the required infrastructure to enable the customers to transact through online banking only. The reason is that recent trends indicate that transactions through ATM will reduce in the future.

Earlier, the Reserve Bank has helped in the setting up of the Industrial Finance Corporation of India and the State Financial Corporations; it set up the Deposit Insurance Corporation in 1962, the Unit Trust of India in 1964, the Industrial Development Bank of India also in 1964, the Agricultural Refinance Corporation of India in 1963 and the Industrial Reconstruction Corporation of India in 1972.

It also helps in the setting up of various sector specific development financial institutions, for instance, NABARD which provides agricultural credit and also supervises Regional Rural Banks (RRB’s). Further, EXIM Bank was created which provides necessary credit to exporters and importers.
Q. No. 14 : Write a note on IRDA?

IRDA Act was passed in 1999. The main aim of the Insurance Regulatory and Development Authority of India is to protect the interest of holders of Insurance policies to regulate, promote and ensure orderly growth of Insurance industry & for matters connected therewith or incidental thereto. Under this Act, Controller of Insurance under Insurance Act 1938 was replaced by newly established authority called Insurance Regulatory and Development Authority (IRDA).

Features of Authority:

(i) The authority consists of chairman, whole time members & part time members and they act as a group of members and work jointly.

(ii) The authority has a perpetual succession. In case, if any member resigns or die, the authority still continues to work.

(iii) The authority has a common seal with power to enter into a contract by affixing stamp on the documents.

(iv) The authority can sue or be sued means the authority can file a case against any person or organization and vice versa.

Duties, Powers & Functions of Authority:

(i) Subject to the provisions of this Act and any other law for the time being in force, the Authority shall have the duty to regulate, promote and ensure orderly growth of the insurance business and re-insurance business.

(ii) Without prejudice to the generality of the provisions contained in sub-section (1), the powers and functions of the Authority shall include,

(a) issue to the applicant a certificate of registration, renew, modify, withdraw, suspend or cancel such registration;

(b) protection of the interests of the policy holders in matters concerning assigning of policy, nomination by policy holders, insurable interest, settlement of insurance claim, surrender value of policy and other terms and conditions of contracts of insurance;

(c) specifying requisite qualifications, code of conduct and practical training for intermediary or insurance intermediaries and agents;

(d) specifying the code of conduct for surveyors and loss assessors;

(e) promoting efficiency in the conduct of insurance business;

(f) promoting and regulating professional organisations connected with the insurance and re-insurance business;

(g) levying fees and other charges for carrying out the purposes of this Act;

(h) calling for information from, undertaking inspection of, conducting enquiries and investigations including audit of the insurers, intermediaries, insurance intermediaries and other organizations connected with the insurance business;

(i) control and regulation of the rates, advantages, terms and conditions that may be offered by insurers in respect of general insurance business not so controlled and regulated by the Tariff Advisory Committee under section 64U of the Insurance Act, 1938 (4 of 1938);

(j) specifying the form and manner in which books of account shall be maintained and statement of accounts shall be rendered by insurers and other insurance intermediaries;

(k) regulating investment of funds by insurance companies;

(l) regulating maintenance of margin of solvency;

(m) adjudication of disputes between insurers and intermediaries or insurance intermediaries;
(n) supervising the functioning of the Tariff Advisory Committee;
(o) specifying the percentage of premium income of the insurer to finance schemes for promoting and regulating professional organisations referred to in clause (f);
(p) specifying the percentage of life insurance business and general insurance business to be undertaken by the insurer in the rural or social sector; and [Source: www.irdai.gov.in]

**Importance of Insurance Regulatory and Development Authority (IRDA)**

(i) **Regulation of Insurance Sector**
   IRDA has a significant effect on the overall regulation of Indian Insurance Sector. In order to keep the proper protection of the policy holder’s interests, Insurance Regulatory and Development Authority (IRDA) closely observe the different activities of insurance sector in India.

(ii) **Protection of Policyholders Interests**
   The core objective or purpose of the Insurance Regulatory and Development Authority is to protect the interests of policyholders and IRDA is doing that with aplomb.

(iii) **Awareness to Insurance**
   In order to increase the awareness of insurance in the society, IRDA is trying to convince the prospective investors about the transparency of the system and the effort being put by the regulator to put this into practice.

(iv) **Insurance Market**
   Insurance sector has grown leap and bounds due to the concerted efforts of Insurance Regulatory and Development Authority with respect to marketing of insurance products, competition & customer awareness.

(v) **Development of Insurance Product**
   Insurance Regulatory and Development Authority (IRDA) has brought a revolution in the development of insurance products. The development of ULIPs (Unit-Linked Insurance Plans) is the result of privatization of the insurance sector.

(vi) **Competition in the Insurance Sector**
   After the advent of privatization in the insurance sector by inviting private players, competition in the insurance sector has increased significantly leading to comparatively cheaper services and greater customer satisfaction.

(vii) **Saving and Investment of Individual**
   Insurance Regulatory and Development Authority has made insurance a popular & profitable mode of investment and inculcate saving habits among various sections of the society.

(viii) **Government Responsibility**
   Insurance Regulatory and Development Authority (IRDA) has make it sure that uniformity in the insurance sector is being ensured by helping in constant increase in the number of insurers, increasing competition, number of diversified products and diversification in the activities of the insurers.

(ix) **Banks and Post Offices**
   Insurance sector is now giving security against any kind of uncertainty or risk, so the insurance sector has now become a popular medium for savings & investments and is gradually diverting the flow of funds from banks & post offices to insurance industry.

(x) **Individual Life’s**
   Insurance Regulatory and Development Authority has helped in developing an understanding of insurance by putting across a great impression over the life of a common man of the society.
(xi) **Stock Market**

Private players in the insurance have developed ULIPs (Unit-Linked Insurance plans) in order to attract more customers. ULIP is a byproduct of modern insurance market. Therefore, insurance products have made it simple for the companies to raise funds and have also attracted various sections of the society to invest in the stock market indirectly.

(xii) **Indian Economy**

Insurance Regulatory and Development Authority has an impact over the economic development of the country because money invested by investors or individuals in various types of insurance products has channelized the funds of a country for a non-economic activity to economic activity & has made available to the governments of a country in order to implement the various developmental activities in the country.

**Q. No. 15 : Write a note on Pension Fund Regulatory & Development Authority (PFRDA)?**

- The aim of PFRDA is to be a model Regulator for promotion and development of an organized pension system to serve the old age income needs of people on a sustainable basis. Pension systems throughout the world have been under close scrutiny over the last couple of decades. Numerous reforms have been carried out to tackle the sustainability and adequacy of pension arrangements in the face of the rising global demographic challenge.

- For the next two decades, India has the potential to reap demographic benefits. The country’s population pyramid is expected to “bulge” across the 15–64 age brackets over the next decade. Around 64% of India’s population is expected to be in the age bracket of 15–59 years by 2026, with 13% of the total aged above 60 years. However, India’s demographic dividend is expected to level off around 2040. In 2050, the old age dependency ratio is likely to increase to 18.7% of the total population from 8.6% in 2011. With the shift to nuclear families, intergenerational support cannot be the sole source of old age security. So, it is necessary to be prepared for the future challenge of old age income security of our people in their old age.

- The pension landscape in India can be broadly categorized under four pillars. Pillar 0 constitutes tested pension schemes like IGNOAPS, Annapurna etc. Pillar - 1 constitutes tax financed, defined benefit pension system under which the employees of central and state governments and their autonomous bodies, joined prior to January 1, 2004 or the date of adoption of the respective state governments, respectively are covered. While Pillar 2 covers mandatory defined contribution retirement schemes like NPS (for government subscribers), EPF etc., Pillar 3 covers voluntary subscribers of NPS like corporate subscribers and subscribers from unorganised sector.

- During FY 2014-15, the coverage under mandatory NPS, comprising central and state government employees has witnessed a decent growth of 23.65% with total number of government subscribers at around 41.42 lakh at end of March 2015. 488 Central Autonomus bodies and 438 State Autonomous Bodies have joined NPS. The coverage under voluntary NPS has witnessed an impressive growth of 45.93 % taking count of private and unorganised sector subscribers to around 46 lakh at the end of March 2015.

- The major challenge faced by PFRDA is to extend pension coverage to the people from informal sector characterized by low financial literacy, financial affordability, and financial savings.

- Normally, saving for retirement requires regular disciplined contributions, preserved until retirement.

- The incomes of workers in the informal sector are frequently seasonal and volatile which prevents regular periodic contributions. Also, households living at or below subsistence are unlikely to be able to afford to pay for pension for long term.
To address this, it is important to build trust and confidence of people in the institutional framework in which the retirement savings are made, especially, in cases where informal sector workers are dealing with them for the first time and do not have an employer to negotiate arrangements on their behalf. Also some form of incentive needs to be given to the prospective subscribers to part with their money for a long time.

Towards this end a new scheme, Atal Pension Yojana (APY) has been launched by the government with effect from June 1, 2015 which provides the strategic direction for shaping the pension landscape in the country to convert the society from “pension less” to “pensioned” one in the largely uncovered informal sector. As pension involves a long term commitment, there is a need to create awareness and financial literacy to encourage informal sector worker to save for their retirement.

Under APY, the Central Government co-contributes 50% of the subscriber’s contribution or Rs. 1000 per annum, whichever is lower, to each eligible subscriber account, for a period of 5 years, i.e., from 2015-16 to 2019-20, who join the NPS before December 31, 2015 and who are not income tax payers. State Governments can also co-contribute under APY to their underlying workers like Anganwadi, ASHA, and Construction Labour etc. to encourage the subscribers to join the scheme and secure their old age. The subscribers of APY would receive minimum pension of Rs. 1000 to Rs. 5000 per month, at the age of 60 years, depending on their contributions, which itself would vary depending on the age of joining the APY. APY has low costs and has access in rural areas via existing networks of post offices and banks.

Additionally, there is flexibility to contribute on monthly, quarterly and half yearly basis. Subscriber of APY are updated periodically with the information regarding activation of PRAN, balance in the account, contribution credits etc. by way of SMS alerts. The subscribers have the option to change the non-financial details like nominee’s name, address, phone number etc. whenever required.

Q. No.16 : What is National Pension Scheme (NPS)?

NPS is an easily accessible, low cost, tax-efficient, flexible and portable retirement savings account. Under the NPS, the individual contributes to his retirement account and also his employer can also co-contribute for the social security/welfare of the individual. NPS is designed on Defined contribution basis wherein the subscriber contributes to his account, there is no defined benefit that would be available at the time of exit from the system and the accumulated wealth depends on the contributions made and the income generated from investment of such wealth. The greater the value of the contributions made, the greater the investments achieved, the longer the term over which the fund accumulates and the lower the charges deducted, the larger would be the eventual benefit of the accumulated pension wealth likely to be.

This can be explained with the help of the following equation:

Contributions + Investment Growth – Charges = Accumulated Pension Wealth (Individual contribution as well as co-contribution from Employers)

Who can Join NPS?

Any citizen of India, whether resident or non-resident, subject to the following conditions: Individuals who are aged between 18 – 60 years as on the date of submission of his/her application to the POP/POP-SP. The citizens can join NPS either as individuals or as an employee-employer group(s) (corporates) subject to submission of all required information and Know your customer (KYC) documentation. After attaining 60 years of age, you will not be permitted to make further contributions to the NPS accounts.

How are the funds contributed by the subscribers managed under NPS?

The funds contributed by the Subscribers are invested by the PFRDA registered Pension Fund Managers (PFM’s) as per the investment guidelines provided by PFRDA. The investment guidelines are framed in such a manner that there is minimal impact on the subscribers contributions even if there is a market downturn by a judicious mix of investment instruments like Government securities, corporate bonds and equities. At present there are 8 Pension Fund Managers (PFM’s) who manage the subscriber funds at the option of the subscriber. At present, Subscriber has option to select any one of the following 8 pension funds:
ICICI Prudential Pension Fund
• LIC Pension Fund
• Kotak Mahindra Pension Fund
• Reliance Capital Pension Fund
• SBI Pension Fund
• UTI Retirement Solutions Pension Fund
• LIC Pension Fund
• HDFC Pension Management Company
• DSP Blackrock Pension Fund.

Since registration of PFMs is an ongoing process, this list will be updated from time to time.

What are the features of the retirement account provided under NPS?

The following are the most prominent features of the retirement account under NPS:

• Every individual subscriber is issued a Permanent Retirement Account Number (PRAN) card and has a 12 digit unique number. In case of the card being lost or stolen, the same can be reprinted with additional charges.

• Under NPS account, two sub-accounts – Tier I & II are provided. Tier I account is mandatory and the subscriber has the option to opt for Tier II account opening and operation. The following are the salient features of these sub-accounts:

  (i) Tier-I account: This is a non-withdrawable retirement account which can be withdrawn only upon meeting the exit conditions prescribed under NPS.

  (ii) Tier-II account: This is a voluntary savings facility available as an add-on to any Tier-I account holder. Subscribers will be free to withdraw their savings from this account whenever they wish.

Q. No. 17: Write a note on Real Estate Regulatory Authority (RERA)?

❖ India has a vast population with needs regarding food, house and jobs on an ever-increase mode. The housing among these fields is one of the major ones. Thousands of people have grown to be rich and as many of them have made loss in real estate business. It is the one of the leading revenue generators for the government. Even though it has such strong presence in the country, it never had a regulating body. Due to the failure of the government to observe this, many people have become the victims of some scheming people doing the real estate business. The buyers who come from a middle-class background have time and again fallen prey to such petty real estate developers. There was a growing need to bring a transparent government body which can check the developers.

❖ Finally, the government delivered by making an authority known as RERA which stands for Real Estate Regulatory Authority. It was passed in March 2016 by the parliament. This promises to bring a justice to the buyer through making strict policies that have to be fulfilled by the developers to sell their projects. The major problem that real estate in India is facing is that of the delayed possession given to the home seeker by the rich and the cunning builders. Thus, RERA will help people by bringing in a high level of transparency and discipline that these builders must have to follow.

Following are some of the risks that people face through developers:

• Selling of flats multiple times to different parties.

• Delay in giving possession to the buyer which happens due to various reasons and malpractices such as funding crisis, demanding additional charges in the name of facilities, reducing carpet area, changing the plans of the societies etc.

• The contracts made are one-sided in the favour of the developer, for example, a penalty of a massive 21% if one delay’s the payment even by a day.
Apart from these risks, the buyer has to unwillingly become a part of a major tussle between the developers and the government relating to the approval of the projects. Many a time, the builder takes the money from a buyer and then his project ceases at half completion due to not completing some paperwork or not getting prior approvals with the government. Thus, in some way or the other, the government also becomes a part of this deceiving process as they start the approval process after the builder markets his project leading to many problems.

The laws under RERA are still in the early days of development but one thing is for sure that there will be a huge relief for the buyers regarding developer-specific risk. The mechanism of RERA will be made such that it provides a common ground for both the buyers as well as the developers. Transparency is the key point regarding the rules under RERA as the government wants that every aspect of information that the general public should know should be made available on an informational portal.

The regulatory risk will also be laid upon the developer as he will have to pay compensation if any mishap happen while giving the possession of a unit. All the builders will have to register themselves under RERA which will see a low risk in the property business.

However, even though RERA will bring a new light for the people affected due to the immoral practices of builders, it is still not certain whether the price will go up in the coming years.

Q. No. 18: Which are the Administrative authorities to facilitate the Financial Markets

<table>
<thead>
<tr>
<th>Administrative Authorities to Facilitate the Financial Market</th>
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<td>AMFI</td>
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<td>To develop the Indian Mutual Fund Industry</td>
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**Association of Mutual funds of India (AMFI)**

The Association of Mutual Funds in India (AMFI) is dedicated to developing the Indian Mutual Fund Industry on professional, healthy and ethical lines and to enhance and maintain standards in all areas with a view to protecting and promoting the interests of mutual funds and their unit holders.

AMFI, the association of SEBI registered mutual funds in India of all the registered Asset Management Companies, was incorporated on August 22, 1995, as a non-profit organization. As of now, all the 42 Asset Management Companies that are registered with SEBI are its members.

**Objectives of AMFI**

(i) To define and maintain high professional and ethical standards in all areas of operation of mutual fund industry.

(ii) To recommend and promote best business practices and code of conduct to be followed by members and others engaged in the activities of mutual fund and asset management including agencies connected or involved in the field of capital markets and financial services.
(iii) To interact with the Securities and Exchange Board of India (SEBI) and to represent to SEBI on all matters concerning the mutual fund industry.

(iv) To represent to the Government, Reserve Bank of India and other bodies on all matters relating to the Mutual Fund Industry.

(v) To undertake nationwide investor awareness programme so as to promote proper understanding of the concept and working of mutual funds.

(vi) To disseminate information on Mutual Fund Industry and to undertake studies and research directly and/or in association with other bodies.

(vii) To regulate conduct of distributors including disciplinary actions (cancellation of ARN) for violations of Code of Conduct.

(viii) To protect the interest of investors/unit holders.

**The AMFI Code of Ethics**

One of the objects of the Association of Mutual Funds in India (AMFI) is to promote the investors’ interest by defining and maintaining high ethical and professional standards in the mutual fund industry. In pursuance of this objective, AMFI had constituted a Committee under the Chairmanship of Shri A. P. Pradhan with Shri S. V. Joshi, Shri C. G. Parekh and Shri M. Laxman Kumar as members. This Committee, working in close co-operation with Price Waterhouse–LLP under the FIRE Project of USAID, has drafted the Code, which has been approved and recommended by the Board of AMFI for implementation by its members.

The AMFI Code of Ethics, “The ACE” for short, sets out the standards of good practices to be followed by the Asset Management Companies in their operations and in their dealings with investors, intermediaries and the public. SEBI (Mutual Funds) Regulation 1996 requires all Asset Management Companies and Trustees to abide by the Code of conduct as specified in the Fifth Schedule to the Regulation. The AMFI Code has been drawn up to supplement that schedule, to encourage standards higher than those prescribed by the Regulations for the benefit of investors in the mutual fund industry.

**Foreign Exchange Dealers Association of India (FEDAI)**

Foreign Exchange Dealers Association of India (FEDAI) was set up in 1958 as an Association of banks dealing in foreign exchange (forex) in India (typically called Authorised Dealers - ADs) as a self-regulatory body and is incorporated under Section 25 of The Companies Act, 1956. It's major activities include framing of rules governing the conduct of inter-bank foreign exchange business among banks vis-à-vis public and liaison with RBI for reforms and development of forex market.

Functions:

Presently, some of the functions of FEDAI are as follows:

(i) Guidelines and Rules for Forex Business.

(ii) Training of Bank Personnel in the areas of Foreign Exchange Business.

(iii) Accreditation of Forex Brokers.

(iv) Advising/Assisting member banks in settling issues/matters in their dealings.

(v) Represent member banks on Government/Reserve Bank of India/Other Bodies.

(vi) Announcement of daily and periodical rates to member banks.

Due to continuing integration of the global financial markets and increased pace of de-regulation, the role of self-regulatory organizations like FEDAI has also transformed. In such an environment, FEDAI plays a catalytic role for smooth functioning of the markets through closer co-ordination with the RBI, other organizations like FIMMDA, the Forex Association of India and various market participants. FEDAI also maximizes the benefits derived from synergies of member banks through innovation in areas like new customized products, benchmarking against international standards on accounting, market practices, risk management systems, etc.
Fixed Income Money Market and Derivative Association of India (FIMMDA)

The Fixed Income Money Market and Derivatives Association of India (FIMMDA), an association of Scheduled Commercial Banks, Public Financial Institutions, Primary Dealers and Insurance Companies was incorporated as a Company under section 25 of the Companies Act, 1956 on June 3rd, 1998. FIMMDA is a voluntary market body for the bond, money and derivatives markets.

FIMMDA has members representing all major institutional segments of the market. The membership includes Nationalized Banks such as State Bank of India, its associate banks and other nationalized banks; Private sector banks such as ICICI Bank, HDFC Bank, IDBI Bank; Foreign Banks such as Bank of America, ABN Amro, Citibank, Financial institutions such as IDFC, EXIM Bank, NABARD, Insurance Companies like Life Insurance Corporation of India (LIC), ICICI Prudential Life Insurance Company, Birla Sun Life Insurance Company and all Primary Dealers.

Role of FIMMDA

1) Functions as the principal interface with Regulators (like Reserve Bank of India, Securities Exchange Board of India, Ministry of Finance - Government of India, International Monetary Fund, World Bank)

2) Mandated by the Reserve Bank of India for valuation of Government Bonds, Corporate Bonds and Securitized Papers for valuation of investment portfolios of Banks and Primary Dealers.

3) Undertakes developmental activities such as introduction of benchmarks and new products (e.g. Mumbai Inter-bank Offered Rate, Commercial Papers, Securitized Asset, and Overnight Indexed Swaps).

4) Suggests Legal and Regulatory framework for the development of new products.


6) Standardisation of market practices.
Q. No. 1 : What are the types of risk faced by an organization?

A business organization faces many types of risks. Important among them are discussed as below:

1) **Strategic Risk**

A successful business always needs a comprehensive and detailed business plan. Everyone knows that a successful business needs a comprehensive, well-thought-out business plan. But it’s also a fact of life that, if things changes, even the best-laid plans can become outdated if it cannot keep pace with the latest trends. This is what is called as strategic risk. So, strategic risk is a risk in which a company’s strategy becomes less effective and it struggles to achieve its goal. It could be due to technological changes, a new competitor entering the market, shifts in customer demand, increase in the costs of raw materials, or any number of other large-scale changes.

We can take the example of Kodak which was able to develop a digital camera by 1975. But, it considers this innovation as a threat to its core business model, and failed to develop it. However, it paid the price because when digital camera was ultimately discovered by other companies, it failed to develop it and left behind. Similar example can be given in case of Nokia when it failed to upgrade its technology to develop touch screen mobile phones. That delay enables Samsung to become a market leader in touch screen mobile phones.

However, a positive example can be given in the case of Xerox which invented photocopy machine. When laser printing was developed, Xerox was quick to lap up this opportunity and changes its business model to develop laser printing. So, it survived the strategic risk and escalated its profits further.

2) **Compliance Risk**

Every business needs to comply with rules and regulations. For example with the advent of Companies Act, 2013, and continuous updating of SEBI guidelines, each business organization has to comply with plethora of rules, regulations and guidelines. Non-compliance leads to penalties in the form of fine and imprisonment.

However, when a company ventures into a new business line or a new geographical area, the real problem then occur For example, a company pursuing cement business likely to venture into sugar business in a different state. But laws applicable to the sugar mills in that state are different.

So, that poses a compliance risk. If the company fails to comply with laws related to a new area or industry or sector, it will pose a serious threat to its survival.

3) **Operational Risk**

This type of risk relates to internal risk. It also relates to failure on the part of the company to cope with day to day operational problems. Operational risk relates to ‘people’ as well as ‘process’. We will take an example to illustrate this. For example, an employee paying out ₹ 1,00,000 from the account of the company instead of ₹ 10,000.

This is a people as well as a process risk. An organization can employ another person to check the work of that person who has mistakenly paid ₹ 1,00,000 or it can install an electronic system that can flag off an unusual amount.
4) **Financial Risk**

Financial Risk is referred as the unexpected changes in financial conditions such as prices, exchange rate, Credit rating, and interest rate etc. Though political risk is not a financial risk in direct sense but same can be included as any unexpected political change in any foreign country may lead to country risk which may ultimately may result in financial loss.

Accordingly, the broadly Financial Risk can be divided into following categories.

a) **Counter Party Risk**

This risk occurs due to non-honouring of obligations by the counter party which can be failure to deliver the goods for the payment already made or vice-versa or repayment of borrowings and interest etc. Thus, this risk also covers the credit risk i.e. default by the counter party.

b) **Political Risk**

Generally this type of risk is faced by and overseas investors, as the adverse action by the government of host country may lead to huge loses. This can be on any of the following form.

- Confiscation or destruction of overseas properties.
- Rationing of remittance to home country.
- Restriction on conversion of local currency of host country into foreign currency.
- Restriction as borrowings.
- Invalidation of Patents
- Price control of products

c) **Interest Rate Risk**

This risk occurs due to change in interest rate resulting in change in asset and liabilities. This risk is more important for banking companies as their balance sheet’s items are more interest sensitive and their base of earning is spread between borrowing and lending rates.

As we know that the interest rates are two types i.e. fixed and floating. The risk in both of these types is inherent. If any company has borrowed money at floating rate then with increase in floating the liability under fixed rate shall remain the same. This fixed rate, with falling floating rate the liability of company to pay interest under fixed rate shall comparatively be higher.

d) **Currency Risk**

This risk mainly affects the organization dealing with foreign exchange as their cash flows changes with the movement in the currency exchange rates. This risk can be affected by cash flow adversely or favourably. For example, if rupee depreciates vis-à-vis US$ receivables will stand to gain vis-à-vis to the importer who has the liability to pay bill in US$. The best case we can quote Infosys (Exporter) and Indian Oil Corporation Ltd. (Importer).

**Q. NO. 2 : The Financial Risk can be viewed from different perspective. Explain.**

The financial risk can be evaluated from different point of views as follows:

(a) **From stakeholder’s point of view:** Major stakeholders of a business are equity shareholders and they view financial gearing i.e. ratio of debt in capital structure of company as risk since in event of winding up of a company they will be least prioritized.

Even for a lender, existing gearing is also a risk since company having high gearing faces more risk in default of payment of interest and principal repayment.

(b) **From Company’s point of view:** From company’s point of view if a company borrows excessively or lend to someone who defaults, then it can be forced to go into liquidation.
From Government’s point of view: From Government’s point of view, the financial risk can be viewed as failure of any bank or (like Lehman Brothers) down grading of any financial institution leading to spread of distrust among society at large. Even this risk also includes willful defaulter. This can also be extended to sovereign debt crisis.

Q. NO. 3: What is VAR & its features? Explain the significance of VAR?

VAR is a measure of risk of investment. Given the normal market condition in a set of period, say, one day it estimates how much an investment might lose. This investment can be a portfolio, capital investment or foreign exchange etc., VAR answers two basic questions -

(i) What is worst case scenario?
(ii) What will be loss?

It was first applied in 1922 in New York Stock Exchange, entered the financial world in 1990s and become world’s most widely used measure of financial risk.

Features of VAR
Following are main features of VAR

(i) Components of Calculations: VAR calculation is based on following three components:
   (a) Time Period
   (b) Confidence Level – Generally 95% and 99%
   (c) Loss in percentage or in amount

(ii) Statistical Method: It is a type of statistical tool based on Standard Deviation.

(iii) Time Horizon: VAR can be applied for different time horizons say one day, one week, one month and so on.

(iv) Probability: Assuming the values are normally attributed, probability of maximum loss can be predicted.

(v) Control Risk: Risk can be controlled by selling limits for maximum loss.

(vi) Z Score: Z Score indicates how many standard Deviations is away from Mean value of a population. When it is multiplied with Standard Deviation it provides VAR.

Application of VAR
VAR can be applied

(a) to measure the maximum possible loss on any portfolio or a trading position.
(b) as a benchmark for performance measurement of any operation or trading.
(c) to fix limits for individuals dealing in front office of a treasury department.
(d) to enable the management to decide the trading strategies.
(e) as a tool for Asset and Liability Management especially in banks.

Example:
The concept of VAR can be understood in a better manner with help of following example:

Suppose you hold ₹2 crore shares of X Ltd. whose market price standard deviation is 2% per day. Assuming 252 trading days a year, determine maximum loss level over the period of 1 trading day and 10 trading days with 99% confidence level.
RISK MANAGEMENT

Answer:

Assuming share prices are normally for level of 99%, the equivalent Z score from Normal table of Cumulative Area shall be 2.33.

Volatility in terms of rupees shall be: 2% of ₹ 2 Crore = ₹ 4 lakh

The maximum loss for 1 day at 99% Confidence Level shall be: ₹ 4 lakh x 2.33 = ₹ 9.32 lakh, and expected maximum loss for 10 trading days shall be: √10 x ₹ 9.32 lakh = 29.47 lakhs

Q. No. 4: What are the appropriate methods for identification and management of Financial Risk?

1) Counter Party risk:

The various hints that may provide counter party risk are as follows:
(a) Failure to obtain necessary resources to complete the project or transaction undertaken.
(b) Any regulatory restrictions from the Government.
(c) Hostile action of foreign government.
(d) Let down by third party.
(e) Have become insolvent.

The various techniques to manage this type of risk are as follows:
(1) Carrying out Due Diligence before dealing with any third party.
(2) Do not over commit to a single entity or group or connected entities.
(3) Know your exposure limits.
(4) Review the limits and procedure for credit approval regularly.
(5) Rapid action in the event of any likelihood of defaults.
(6) Use of performance guarantee, insurance or other instruments.

2) Political risk:

Since this risk mainly relates to investments in foreign country, company should assess country
(1) By referring political ranking published by different business magazines.
(2) By evaluating country’s macro-economic conditions.
(3) By analyzing the popularity of current government and assess their stability.
(4) By taking advises from the embassies of the home country in the host countries.
(5) Further, following techniques can be used to mitigate this risk.
   (i) Local sourcing of raw materials and labour.
   (ii) Entering into joint ventures
   (iii) Local financing
   (iv) Prior negotiations

From the following actions by the Governments of the host country this risk can be identified:
1. Insistence on resident investors or labour.
2. Restriction on conversion of currency.
3. Repatriation of foreign assets of the local govt.
3) Interest Rate Risk:

Generally, interest rate Risk is mainly identified from the following:

2. Any action by Government such as demonetization etc.
3. Economic Growth
4. Release of Industrial Data
5. Investment by foreign investors
6. Stock market changes

4) Currency Risk:

Just like interest rate risk the currency risk is dependent on the Government action and economic development. Some of the parameters to identify the currency risk are as follows:

(1) Government Action: The Government action of any country has visual impact in its currency. For example, the UK Govt. decision to divorce from European Union i.e. Brexit brought the pound to its lowest since 1980’s.

(2) Nominal Interest Rate: As per interest rate parity (IRP) the currency exchange rate depends on the nominal interest of that country.

(3) Inflation Rate: Purchasing power parity theory discussed in later chapters impact the value of currency.

(4) Natural Calamities: Any natural calamity can have negative impact.

(5) War, Coup, Rebellion etc.: All these actions can have far reaching impact on currency’s exchange rates.

(6) Change of Government: The change of government and its attitude towards foreign investment also helps to identify the currency risk.

Practical Questions

Consider a portfolio consisting of a ₹ 200,00,000 investment in share XYZ and a ₹ 200,00,000 investment in share ABC. The daily standard deviation of both shares is 1% and that the coefficient of correlation between them is 0.3. You are required to determine the 10-day 99% value at risk for the portfolio?

Answer

The standard deviation of the daily change in the investment in each asset is ₹ 2,00,000 i.e. 2 lakhs. The variance of the portfolio’s daily change is 

\[
V = 22 + 22 + 2 \times 0.3 \times 2 \times 2 = 10.4
\]

\[\sigma \text{ (Standard Deviation)} = \sqrt{10.4} = ₹ 3.22 \text{lakhs}\]

Accordingly, the standard deviation of the 10-day change is ₹ 3.22 lakhs x 10 = ₹ 10.18 lakh

From the Normal Table we see that z score for 1% is 2.33. This means that 1% of a normal distribution lies more than 2.33 standard deviations below the mean.

The 10-day 99 percent value at risk is therefore 

\[2.33 \times ₹ 10.18 \text{lakh} = ₹ 23.72 \text{lakh}\]
Q. No 1: What is Fundamental Analysis? What are the key variables that an investor must monitor in order to carry out his fundamental analysis?

‘OR’ Write a short note on Economic Analysis, Industry Analysis, Company Analysis? What are the various techniques are used in Economic Analysis?

❖ Fundamental Analysis: Fundamental analysis is based on the assumption that the share prices depend upon the future dividends expected by the shareholders. The present value of the future dividends can be calculated by discounting the cash flows at an appropriate discount rate and is known as the ‘intrinsic value of the share’. The intrinsic value of a share, according to a fundamental analyst, depicts the true value of a share.

❖ Decision To Be Taken By Fundamental Analysts:

❖ If the prevailing price or the P/E multiple of a security is higher than the estimated fundamental value, the security is overpriced, the decision in such case will be to sell such security.

❖ If the prevailing price or the P/E multiple of a security is lesser than the estimated fundamental value, the security is underpriced, the decision in such case will be to buy such security.

❖ Key Variables Of Fundamental Analysis: The key variables that an investor must monitor in order to carrying out his fundamental analysis are:

1. Economy Analysis
2. Industry Analysis
3. Firm/Company Analysis

1) Economic Analysis

Macro-economic factors e. g. historical performance of the economy in the past/present and expectations in future, growth of different sectors of the economy in future with signs of stagnation/degradation at present to be assessed while analyzing the overall economy. Trends in peoples’ income and expenditure reflect the growth of a particular industry/company in future. Consumption affects corporate profits, dividends and share prices in the market.
Factors Affecting Economic Analysis:

a) **Growth Rates of National Income and Related Measures:** For most purposes, what is important is the difference between the nominal growth rate quoted by GDP and the 'real' growth after taking inflation into account. The estimated growth rate of the economy would be a pointer to the prospects for the industrial sector, and therefore to the returns investors can expect from investment in shares.

b) **Growth Rates of Industrial Sector:** This can be further broken down into growth-rates of various industries or groups of industries if required. The growth rates in various industries are estimated based on the estimated demand for its products.

c) **Inflation:** Inflation is measured in terms of either wholesale prices (the Wholesale Price Index or WPI) or retail prices (Consumer Price Index or CPI). The demand in some industries, particularly the consumer products industries, is significantly influenced by the inflation rate. Therefore, firms in these industries make continuous assessment about inflation rates likely to prevail in the near future so as to fine-tune their pricing, distribution and promotion policies to the anticipated impact of inflation on demand for their products.

d) **Monsoon:** Because of the strong forward and backward linkages, monsoon is of great concern to investors in the stock market too.

Techniques Used in Economic Analysis: Some of the techniques used for economic analysis are:

a) Anticipatory Surveys: They help investors to form an opinion about the future state of the economy. It incorporates expert opinion on construction activities, expenditure on plant and machinery, levels of inventory - all having a definite bearing on economic activities. Also future spending habits of consumers are taken into account.

   In spite of valuable inputs available through this method, it has certain drawbacks:

   1) Survey results do not guarantee that intentions surveyed would materialize.
   2) They are not regarded as forecasts per se, as there can be a consensus approach by the investor for exercising his opinion.

   Continuous monitoring of this practice is called for to make this technique popular.

b) Barometer/Indicator Approach: Various indicators are used to find out how the economy shall perform in the future. The indicators have been classified as under:

   1) **Leading Indicators:** They lead the economic activity in terms of their outcome. They relate to the time series data of the variables that reach high/low points in advance of economic activity.
   2) **Roughly Coincidental Indicators:** They reach their peaks and troughs at approximately the same time in the economy.
   3) **Lagging Indicators:** They are time series data of variables that lag behind in their consequences vis-a-vis the economy. They reach their turning points after the economy has reached its own already.

c) Economic Model Building Approach: In this approach, a precise and clear relationship between dependent and independent variables is determined. GNP model building or sectorial analysis is used in practice through the use of national accounting framework. The steps used are as follows:

   1) Hypothesize total economic demand by measuring total income (GNP) based on political stability, rate of inflation, changes in economic levels.
2) Forecasting the GNP by estimating levels of various components viz. consumption expenditure, gross private domestic investment, government purchases of goods/services, net exports.

3) After forecasting individual components of GNP, add them up to obtain the forecasted GNP.

4) Comparison is made of total GNP thus arrived with that from an independent agency for the forecast of GNP and then the overall forecast is tested for consistency. This is carried out for ensuring that both the total forecast and the component wise forecast fit together in a reasonable manner.

2) **INDUSTRY ANALYSIS**

When an economy grows, it is very unlikely that all industries in the economy would grow at the same rate. So it is necessary to examine industry specific factors, in addition to economy wide factors.

**Factors Affecting Industry Analysis:** The following factors may particularly be kept in mind while assessing the factors relating to an industry.

- **Product Life-Cycle:** An industry usually exhibits high profitability in the initial and growth stages, medium but steady profitability in the maturity stage and a sharp decline in profitability in the last stage of growth.

- **Demand Supply Gap:** Excess supply reduces the profitability of the industry because of the decline in the unit price realization, while insufficient supply tends to improve the profitability because of higher unit price realization.

- **Barriers to Entry:** Any industry with high profitability would attract fresh investments. The potential entrants to the industry, however, face different types of barriers to entry. Some of these barriers are innate to the product and the technology of production, while other barriers are created by existing firms in the industry.

- **Government Attitude:** The attitude of the government towards an industry is a crucial determinant of its prospects.

- **State of Competition in the Industry:** Factors to be noted are- firms with leadership capability and the nature of competition amongst them in foreign and domestic market, type of products manufactured viz. homogeneous or highly differentiated, demand prospects through classification viz customer-wise/area-wise, changes in demand patterns in the long/immediate/short run, type of industry the firm is placed viz. growth, cyclical, defensive or decline.

- **Cost Conditions and Profitability:** The price of a share depends on its return, which in turn depends on profitability of the firm. Profitability depends on the state of competition in the industry, cost control measures adopted by its units and growth in demand for its products. Factors to be considered are:
  1) Cost allocation among various heads e.g. raw material, labors and overheads and their controllability. Overhead cost for some may be higher while for others labour may be so. Labour cost which depends on wage level and productivity needs close scrutiny.
  2) Product price.
  3) Production capacity in terms of installation, idle and operating.
  4) Level of capital expenditure required for maintenance/increase in productive efficiency. Investors are required to make a through analysis of profitability. This is carried out by the study of certain ratios such as G.P. Ratio, Operating Profit margin Ratio, R.O.E., Return on Total Capital etc.

- **Technology and Research:** They play a vital role in the growth and survival of a particular industry. Technology is subject to change very fast leading to obsolescence. Industries which update
themselves have a competitive advantage over others in terms of quality, price etc. Things to be probed in this regard are:

1) Nature and type of technology used.
2) Expected changes in technology for new products leading to increase in sales.
3) Relationship of capital expenditure and sales over time. More capital expenditure means increase in sales.
4) Money spent in research and development. Whether this amount relates to redundancy or not?
5) Assessment of industry in terms of sales and profitability in short, immediate and long run.

Techniques Used in Industry Analysis: The techniques used for analyzing the industry wide factors are:

a) **Regression Analysis:** Investor diagnoses the factors determining the demand for output of the industry through product demand analysis. Factors to be considered are GNP, disposable income, per capita consumption income, price elasticity of demand. For identifying factors affecting demand, statistical techniques like regression analysis and correlation are used.

b) **Input - Output Analysis:** It reflects the flow of goods and services through the economy intermediate steps in production process as goods proceed from raw material stage through final consumption. This is carried out to detect changing patterns/trends indicating growth/decline of industries.

3) **COMPANY ANALYSIS**

Economic and industry framework provides the investor with proper background against which shares of a particular company are purchased. This requires careful examination of the company’s quantitative and qualitative fundamentals.

a) **Net Worth and Book Value:** Net Worth is sum of equity share capital, preference share capital and free reserves less intangible assets and any carry forward of losses. The total net worth divided by the number of shares is the much talked about book value of a share. Though the book value is often seen as an indication of the intrinsic worth of the share, this may not be so for two major reasons. First, the market price of the share reflects the future earnings potential of the firm which may have no relationship with the value of its assets. Second, the book value is based upon the historical costs of the assets of the firm and these may be gross underestimates of the cost of the replacement or resale values of these assets.

b) **Sources and Uses of Funds:** The identification of sources and uses of funds is known as Funds Flow Analysis. One of the major uses of funds flow analysis is to find out whether the firm has used short term sources of funds to finance long-term investments. Such methods of financing increases the risk of liquidity crunch for the firm, as long-term investments, because of the gestation period involved may not generate enough surplus in time to meet the short-term liabilities incurred by the firm. Many firm has come to grief because of this mismatch between the maturity periods of sources and uses of funds.

c) **Cross-Sectional and Time Series Analysis:** One of the main purposes of examining financial statements is to compare two firms, compare a firm against some benchmark figures for its industry and to analyze the performance of a firm over time. The techniques that are used to do such proper comparative analysis are: common-sized statement, and financial ratio analysis.

d) **Size and Ranking:** A rough idea regarding the size and ranking of the company within the economy, in general, and the industry, in particular, would help the investment manager in assessing the risk associated with the company. In this regard the net capital employed, the net profits, the return on investment and the sales figures of the company under consideration may
be compared with similar data of other companies in the same industry group. It may also be useful to assess the position of the company in firms of technical know-how, research and development activity and price leadership.

e) **Growth Record**: The growth in sales, net income, net capital employed and earning per share of the company in the past few years should be examined. The following three growth indicators may be particularly looked into: (a) Price earnings ratio, (b) Percentage growth rate of earnings per annum, and (c) Percentage growth rate of net block.

f) **Financial Analysis**:

- An analysis of its financial statements for the past few years would help the investment manager in understanding the financial solvency and liquidity, the efficiency with which the funds are used, the profitability, the operating efficiency and the financial and operating leverages of the company. For this purpose, certain fundamental ratios have to be calculated.
- From the investment point of view, the most important figures are earnings per share, price earning ratios, yield, book value and the intrinsic value of the share. These five elements may be calculated for the past 10 years or so and compared with similar ratios computed from the financial accounts of other companies in the industry and with the average ratios for the industry as a whole.
- Various other ratios to measure profitability, operating efficiency and turnover efficiency of the company may also be calculated. The return on owners' investment, capital turnover ratio and the cost structure ratios may also be worked out.
- To examine the financial solvency or liquidity of the company, the investment manager may work out current ratio, liquidity ratio, debt-equity ratio, etc. These ratios will provide an overall view of the company to the investment analyst. He can analyze its strengths and weaknesses and see whether it is worth the risk or not.

g) **Quality of Management**: This is an intangible factor. Yet it has a very important bearing on the value of the shares. Every investment manager knows that the shares of certain business houses command a higher premium than those of similar companies managed by other business houses. This is because of the quality of management, the confidence that investors have in a particular business house, its policy vis-a-vis its relationship with the investors, dividend and financial performance record of other companies in the same group, etc. Quality of management has to be seen with reference to the experience, skills and integrity of the persons at the helm of affairs of the company.

h) **Location and Labour-Management Relations**: The locations of the company's manufacturing facilities determines its economic viability which depends on the availability of crucial inputs like power, skilled labour and raw-materials, etc. Nearness to markets is also a factor to be considered. In the past few years, the investment manager has begun looking into the state of labour management relations in the company under consideration and the area where it is located.

i) **Pattern of Existing Stock Holding**: An analysis of the pattern of existing stock holdings of the company would also be relevant. This would show the stake of various parties in the company.

j) **Marketability of the Shares**: Another important consideration for an investment manager is the marketability of the shares of the company. Mere listing of a share on the stock exchange does not automatically mean that the share can be sold or purchased at will. There are many shares which remain inactive for long periods with no transactions being effected.

**Techniques Used in Company Analysis**: Through the use of statistical techniques the company wide factors can be analyzed. Some of the techniques are discussed as under:
1) **Correlation & Regression Analysis:** Simple regression is used when inter relationship covers two variables. For more than two variables, multiple regression analysis is followed. Here the inter relationship between variables belonging to economy, industry and company are found out. The main advantage in such analysis is the determination of the forecasted values along with testing the reliability, of the estimates.

2) **Trend Analysis:** The relationship of one variable is tested over time using regression analysis. It gives an insight to the historical behavior of the variable.

3) **Decision Tree Analysis:** In decision tree analysis, the decision is taken sequentially with probabilities attached to each sequence. To obtain the probability of final outcome, various sequential decisions given along with probabilities, is to be multiplied and then summed up.

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**Q. No. 2 : Write a short note on Evaluation of Technical Analysis ?**

- **Meaning:** Technical Analysis is a method of share price movements based on a study of price graphs or charts on the assumption that share price trends are repetitive, that what is seen to have happened before is likely to be repeated. In other words Technical analysis is based on the proposition that the securities prices and volume in past suggest their future price behavior.

- **Two Basic Question:** The two basic Question that it seeks to answer are:
  1) is there a discernible trend in the prices?
  2) if there is, then are there indications that the trend would reverse?

- **Methods Used:** The methods used to answer these Questions are visual and statistical. The visual methods are based on examination of a variety of charts to make out patterns, while the statistical procedures analyze price and return data to make trading decisions

- **Assumptions :** Technical Analysis is based on the following assumptions:
  1. The market value of stock is actually depending on the supply and demand for a stock.
  2. The supply and demand is actually governed by several factors. For instance, recent initiatives taken by the Government to reduce the Non-Performing Assets (NPA) burden of banks may actually increase the demand for banking stocks.
  3. Stock prices generally move in trends which continue for a substantial period of time. Therefore, if there is a bull market going on, there is every possibility that there will soon be a substantial correction which will provide an opportunity to the investors to buy shares at that time.
  4. Technical analysis relies upon chart analysis which shows the past trends in stock prices rather than the information in the financial statements like balance sheet or profit and loss account.

- **Principles of Technical Analysis**
  Technical analysis is based on the following three principals:
  a. The market discounts everything.
  b. Price moves in trends.
  c. History tends to repeat itself.

**a. The Market Discounts Everything**

Many experts criticize technical analysis because it only considers price movements and ignores fundamental factors. The argument against such criticism is based on the Efficient Market Hypothesis, which states that a company’s share price already reflects everything that has or could affect a company. And it includes fundamental factors. So, technical analysts generally have the view that a company’s share price includes everything including the fundamentals of a company.
b. **Price Moves in Trends**

Technical analysts believe that prices move in trends. In other words, a stock price is more likely to continue a past trend than move in a different direction.

c. **History Tends to Repeat Itself**

Technical analysts believe that history tends to repeat itself. Technical analysis uses chart patterns to analyze subsequent market movements to understand trends. While many forms of technical analysis have been used for many years, they are still considered to be significant because they illustrate patterns in price movements that often repeat themselves.

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**Q. No. 3 : Explain Dow Jones Theory.**

- The Dow Theory is one of the oldest and most famous technical theories. It was originated by Charles Dow, the founder of Dow Jones Company in late nineteenth century. It is a helpful tool for determining the relative strength of the stock market. It can also be used as a barometer of business.
- The Dow Theory is based upon the movements of two indices, constructed by Charles Dow, Dow Jones Industrial Average (DJIA) and Dow Jones Transportation Average (DJTA). These averages reflect the aggregate impact of all kinds of information on the market. The movements of the market are divided into three classifications, all going at the same time; the primary movement, the secondary movement, and the daily fluctuations. The primary movement is the main trend of the market, which lasts from one year to 36 months or longer. This trend is commonly called bear or bull market. The secondary movement of the market is shorter in duration than the primary movement, and is opposite in direction. It lasts from two weeks to a month or more. The daily fluctuations are the narrow movements from day-to-day. These fluctuations are not part of the Dow Theory interpretation of the stock market. However, daily movements must be carefully studied, along with primary and secondary movements, as they go to make up the longer movement in the market.
- Thus, the Dow Theory’s purpose is to determine where the market is and where is it going, although not how far or high. The theory, in practice, states that if the cyclical swings of the stock market averages are successively higher and the successive lows are higher, then the market trend is up and a bullish market exists. Contrarily, if the successive highs and successive lows are lower, then the direction of the market is down and a bearish market exists.
- Charles Dow proposed that the primary uptrend would have three moves up, the first one being caused by accumulation of shares by the far-sighted, knowledgeable investors, the second move would be caused by the arrival of the first reports of good earnings by corporations, and the last move up would be caused by widespread report of financial well-being of corporations. The third stage would also see rampant speculation in the market. Towards the end of the third stage, the far-sighted investors, realizing that the high earnings levels may not be sustained, would start selling, starting the first move down of a downtrend, and as the non-sustainability of high earnings is confirmed, the second move down would be initiated and then the third move down would result from distress selling in the market.

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**Q. No. 4 : Explain Elloit Wave Theory of technical Analysis.**

Inspired by the Dow Theory and by observations found throughout nature, Ralph Elliot formulated Elliot Wave Theory in 1934. This theory was based on analysis of 75 years stock price movements and charts. From his studies, he defined price movements in terms of waves. Accordingly, this theory was named Elliot Wave Theory. Elliot found that the markets exhibited certain repeated patterns or waves. As per this theory wave is a movement of the market price from one change in the direction to the next change in the same direction. These waves are resulted from buying and selling impulses emerging from the demand and supply pressures on the market. Depending on the demand and supply pressures, waves are generated in the prices.
As per this theory, waves can be classified into two parts:

- Impulsive patterns
- Corrective patterns

Let us discuss each of these patterns.

(a) Impulsive Patterns-(Basic Waves) - In this pattern there will be 3 or 5 waves in a given direction (going upward or downward). These waves shall move in the direction of the basic movement. This movement can indicate bull phase or bear phase.

(b) Corrective Patterns- (Reaction Waves) - These 3 waves are against the basic direction of the basic movement. Correction involves correcting the earlier rise in case of bull market and fall in case of bear market.

❖ As shown in the following diagram waves 1, 3 and 5 are directional movements, which are separated or corrected by wave 2 & 4, termed as corrective movements.

❖ Complete Cycle - As shown in following figure five-wave impulses is following by a three-wave correction (a,b & c) to form a complete cycle of eight waves

❖ One complete cycle consists of waves made up of two distinct phases, bullish and bearish. On completion of full one cycle i.e. termination of 8 waves movement, the fresh cycle starts with similar impulses arising out of market trading.

Q. No. 5 : Write a short note on Randon Walk Theory?

❖ While discussing the Dow Jones theory, we have seen that the theory is based on the assumption that the behaviour of stock market itself contains trends which give clues to the future behaviour of stock market prices. Thus supporters of the theory argue that market prices can be predicted if their patterns can be properly understood. Such analysis of stock market patterns is called technical analysis. Apart
from this theory there are many approaches to technical analysis. Most of them, however, involve a good deal of subjective judgment.

❑ Many investment managers and stock market analysts believe that stock market prices can never be predicted because they are not a result of any underlying factors but are mere statistical ups and downs. This hypothesis is known as Random Walk hypothesis which states that the behaviour of stock market prices is unpredictable and that there is no relationship between the present prices of the shares and their future prices. Proponents of this hypothesis argue that stock market prices are independent. A British statistician, M. G. Kendell, found that changes in security prices behave nearly as if they are generated by a suitably designed roulette wheel for which each outcome is statistically independent of the past history. In other words, the fact that there are peaks and troughs in stock exchange prices is a mere statistical happening – successive peaks and troughs are unconnected. In the layman’s language it may be said that prices on the stock exchange behave exactly the way a drunk would behave while walking in a blind lane, i.e., up and down, with an unsteady way going in any direction he likes, bending on the side once and on the other side the second time.

The supporters of this theory put out a simple argument. It follows that:

(a) Prices of shares in stock market can never be predicted.

(b) The reason is that the price trends are not the result of any underlying factors, but that they represent a statistical expression of past data.

(c) There may be periodical ups or downs in share prices, but no connection can be established between two successive peaks (high price of stocks) and troughs (low price of stocks).

Q. No. 6 : What are the charts used by technical analysts ?

❑ Technical analysts use three types of charts for analyzing data. They are:

1) Bar Chart: In a bar chart, a vertical line (bar) represents the lowest to the highest price, with a short horizontal line protruding from the bar representing the closing price for the period. Since volume and price data are often interpreted together, it is a common practice to plot the volume traded, immediately below the line and the bar charts.

![Bar Chart Diagram]

2) Line Chart: In a line chart, lines are used to connect successive day’s prices. The closing price for each period is plotted as a point. These points are joined by a line to form the chart. The period may be a day, a week or a month.

![Line Chart Diagram]
3) **Point and Figure Chart:**

- Point and Figure charts are more complex than line or bar charts.
- They are used to detect reversals in a trend.

For plotting a point and figure chart, we have to first decide the box size and the reversal criterion. The box size is the value of each box on the chart, for example each box could be ₹ 1, ₹ 2 or ₹ 0.50. The smaller the box size, the more sensitive would the chart be to price change. The reversal criterion is the number of boxes required to be retraced to record prices in the next column in the opposite direction.

![Point and Figure Chart](image)

**Q. No. 7 : What are the various forms of Market indicators?**

1) **Breadth Index:** It is an index that covers all securities traded. It is computed by dividing the net advances or declines in the market by the number of issues traded. The breadth index either supports or contradicts the movement of the Dow Jones Averages. If it supports the movement of the Dow Jones Averages, this is considered sign of technical strength and if it does not support the averages, it is a sign of technical weakness i.e. a sign that the market will move in a direction opposite to the Dow Jones Averages. The breadth index is an audition to the Dow Theory and the movement of the Dow Jones Averages.

2) **Volume of Transactions:** The volume of shares traded in the market provides useful clues on how the market would behave in the near future. A rising index/price with increasing volume would signal buy behavior because the situation reflects an unsatisfied demand in the market. Similarly, a falling market with increasing volume signals a bear market and the prices would be expected to fall further. Arising market with decreasing volume indicates a bull market while a falling market with dwindling volume indicates a bear market. Thus, the volume concept is best used with another market indicator, such as the Dow Theory.

3) **Confidence Index:** It is supposed to reveal how willing the investors are to take a chance in the market. It is the ratio of high-grade bond yields to low-grade bond yields. It is used by market analysts as a method of trading or timing the purchase and sale of stock, and also, as a forecasting device to determine the turning points of the market. A rising confidence index is expected to precede a rising stock market, and a fall in the index is expected to precede a drop in stock prices. A fall in the confidence index represents the fact that low-grade bond yields are rising faster or falling more slowly than high grade yields. The confidence index is usually, but not always a leading indicator of the market. Therefore, it should be used in conjunction with other market indicators.

4) **Relative Strength Analysis:** The relative strength concept suggests that the prices of some securities rise relatively faster in a bull market or decline more slowly in a bear market than Other securities i.e. some securities exhibit relative strength. Investors will earn higher returns by investing in securities which have demonstrated relative strength in the past because the relative strength of a security tends to remain undiminished over time. Relative strength can be measured in several ways. Calculating rates of return and classifying those securities with historically high average returns as securities with
high relative strength is one of them. Even ratios like security relative to its industry and security relative to the entire market can also be used to detect relative strength in a security or an industry.

5) **Odd - Lot Theory:** This theory is a contrary-opinion theory. It assumes that the average person is usually wrong and that a wise course of action is to pursue strategies contrary to popular opinion. The odd-lot theory is used primarily to predict tops in bull markets, but also to predict reversals in individual securities.

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**Q. No. 8 : Write a short note on SUPPORT AND RESISTANCE?**

- Support and resistance is one of the most widely used concepts in trading.
- When the index/price goes down from a peak, the peak becomes the resistance level. Resistance levels act like a ceiling for the price of a stock. As the price rises up to a resistance level, it tends to stop, turn around and move lower.
- When the index/price starts falling, the lowest value reached becomes the support level. Support levels act like a floor for the price of stock. As the price of a stock drops down to a support level it tends to stop at that point, turn around and move higher.
- The price is then expected to move between these two levels.
- Whenever the price approaches the resistance level, there is a selling pressure because all investors who failed to sell at the high would be keen to liquidate, while whenever the price approaches the support level, there is a buying pressure as all those investors who failed to buy at the lowest price would like to purchase the share.
- Support levels indicate the price where the most of investors believe that prices will move higher. Resistance levels indicate the price at which the most of investors feel prices will move lower.
- A breach of these levels indicates a distinct departure from status quo, and an attempt to set newer levels. When a resistance level is successfully broken through, that level becomes a support level. Similarly, when a support level is successfully broken through, that level becomes a resistance level.
- Support and resistance levels can be identified by trend lines.
Q. No. 9: What are the numerous price patterns documented by technical analysts?

Interpreting Price Patterns: There are numerous price patterns documented by technical analysts but only a few and important of them have been discussed here:

1) **Channel**: A series of uniformly changing tops and bottoms gives rise to a channel formation. A downward sloping channel would indicate declining prices and an upward sloping channel would imply rising prices.

2) **Wedge**: A wedge is formed when the tops (resistance levels) and bottoms (support levels) change in opposite direction (that is, if the tops, are decreasing then the bottoms are increasing and vice versa), or when they are changing in the same direction at different rates over time.

3) **Head and Shoulders**: It is a distorted drawing of a human form, with a large lump (for head) in the middle of two smaller humps (for shoulders). This is perhaps the single most important pattern to indicate a reversal of price trend. The neckline of the pattern is formed by joining points where the head and the shoulders meet. The price movement after the formation of the second shoulder is crucial. If the price goes below the neckline, then a drop in price is indicated, with the drop expected to be equal to the distance between the top of the head and the neckline.

   a) **Head and Shoulder Top Pattern**: This has a left shoulder, a head and a right shoulder. Such formation represents bearish development. If the price falls below the neck line (line drawn tangentially to the left and right shoulders) a price decline is expected. Hence it's a signal to sell.

   b) **Inverse Head and Shoulder Pattern**: As the name indicates this formation, it is an inverse of head and shoulder top formation. Hence it reflects a bullish development. The price rise to above the neck line suggests price rise is imminent and a signal to purchase.
4) **Triangle or Coil Formation**: This formation represents a pattern of uncertainty and is difficult to predict which way the price will break out.

5) **Flags and Pennants Form**: This form signifies a phase after which the previous price trend is likely to continue.

![Triangle or Coil Formation](image1)

![Flag & Pennant Formation](image2)

6) **Double Top Form**: This form represents a bearish development, signals that price is expected to fall.

7) **Double Bottom Form**: This form represents bullish development signalling price is expected to rise.

![Double Top Formation](image3)

![Double Bottom Formation](image4)

8) **GAP**:

- A Gap is the difference between the opening price on a trading day and the closing price of the previous trading day.
- The wider the gap the stronger the signal for a continuation of the observed trend.
- On a rising market, if the opening price is considerably higher than the previous closing price, it indicates that investors are willing to pay a much higher price to acquire the scrip.
- Similarly, a gap in a falling market is an indicator of extreme selling pressure.
- Gap Down / Down Gap: An opening price that is below the prior day closing price.
- Gap Up / Up Gap: An opening price that is above the prior day closing price.

**Q. No. 10: Write a note on Moving Averages.**

Technical analysts have developed rules based on simple statistical analysis of price data. Moving Averages is one of the more popular methods of data analysis for decision making.

**Moving Averages**: Moving averages are frequently plotted with prices to make buy and sell decisions. The two types of moving averages used by chartists are the Arithmetic Moving Average (AMA) and the Exponential Moving Average (EMA). An n-period AMA, at period t, is nothing but the simple average of the last n period prices.

\[ \text{AMAn,}t = \frac{1}{n}[Pt + Pt-1 + \ldots + Pt-(n-1)] \]
To identify trend, technical analysts use moving average analysis:

(i) A 200 day’s moving average of daily prices or a 30 week moving of weekly price for identifying a long term trend.

(ii) A 60 day’s moving average of daily price to discern an intermediate term trend.

(iii) A 10 day’s moving average of daily price to detect a short term trend.

### Buy and Sell Signals Provided by Moving Average Analysis

<table>
<thead>
<tr>
<th>Buy Signal</th>
<th>Sell Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Stock price line rise through the moving average line when graph of the moving average line is flattening out.</td>
<td>(a) Stock price line falls through moving average line when graph of the moving average line is flattening out.</td>
</tr>
<tr>
<td>(b) Stock price line falls below moving average line which is rising.</td>
<td>(b) Stock price line rises above moving average line which is falling.</td>
</tr>
<tr>
<td>(c) Stock price line which is above moving average line falls but begins to rise again before reaching the moving average line.</td>
<td>(c) Stock price line which is slow moving average line rises but begins to fall again before reaching the moving average line.</td>
</tr>
</tbody>
</table>

### Exponential Moving Average

Unlike the AMA, which assigns equal weight of \(1/n\) to each of the \(n\) prices used for computing the average, the Exponential Moving Average (EMA) assigns decreasing weights, with the highest weight being assigned to the latest price. The weights decrease exponentially, according to a scheme specified by the exponential smoothing constant, also known as the exponent, \(a\).

\[
EMA_t = aP_t + (1-a)(EMA_{t-1})
\]

### Q. No. 11: Write a note on Evaluation of Technical Analysis.

Technical Analysis has several supporters as well as several critics. The advocates of technical analysis offer the following interrelated argument in their favour:

(a) Under influence of crowd psychology trend persist for some time. Tools of technical analysis help in identifying these trends early and help in investment decision making.

(b) Shift in demand and supply are gradual rather than instantaneous. Technical analysis helps in detecting this shift rather early and hence provides clues to future price movements.

(c) Fundamental information about a company is observed and assimilated by the market over a period of time. Hence price movement tends to continue more or less in same direction till the information is fully assimilated in the stock price.

Detractors of technical analysis believe that it is an useless exercise; their arguments are as follows:

(a) Most technical analysts are not able to offer a convincing explanation for the tools employed by them.

(b) Empirical evidence in support of random walk hypothesis cast its shadow over the usefulness of technical analysis.

(c) By the time an up trend and down trend may have been signalled by technical analysis it may already have taken place.

(d) Ultimately technical analysis must be self defeating proposition. With more and more people employing it, the value of such analysis tends to decline.

In a nutshell, it may be concluded that in a rational, well ordered and efficient market, technical analysis may not work very well. However with imperfection, inefficiency and irrationalities that characterizes the real world market, technical analysis may be helpful. If technical analysis is used in conjunction with fundamental analysis, it might be useful in providing proper guidance to investment decision makers.
Q. No. 12 : Explain the Efficient Market Theory (EFFICIENT MARKET HYPOTHESIS)?

- Efficient Market Theory was developed by University of Chicago professor Eugen Fama in the 1960s. As per this theory, at any given time, all available price sensitive information is fully reflected in securities' prices. Thus this theory implies that no investor can consistently outperform the market as every stock is appropriately priced based on available information.

- Stating otherwise theory states that no one can "beat the market" hence making it impossible for investors to either purchase undervalued stocks or sell stocks for inflated prices as stocks are always traded at their fair value on stock exchanges. Hence it is impossible to outperform the overall market through expert stock selection or market timing and that the only way an investor can possibly obtain higher returns is by purchasing riskier investments.

Search for Theory

When empirical evidence in favour of Random walk hypothesis seemed overwhelming, researchers wanted to know about the Economic processes that produced a Random walk. They concluded that randomness of stock price was a result of efficient market that led to the following viewpoints:

- Information is freely and instantaneously available to all market participants.
- Keen competition among the market participants more or less ensures that market will reflect intrinsic values. This means that they will fully impound all available information.
- Price change only response to new information that is unrelated to previous information and therefore unpredictable.

Misconception about Efficient Market Theory

- Efficient Market Theory implies that market prices factor in all available information and as such it is not possible for any investor to earn consistent long term returns from market operations.
- Although price tends to fluctuate they cannot reflect fair value. This is because the future is uncertain. The market springs surprises continually and as prices reflect the surprises they fluctuate.
- Inability of institutional portfolio managers to achieve superior investment performance implies that they lack competence in an efficient market. It is not possible to achieve superior investment performance since market efficiency exists due to portfolio managers doing this job well in a competitive setting.
- The random movement of stock prices suggests that stock market is irrational. Randomness and irrationality are two different things, if investors are rational and competitive, price changes are bound to be random.

Q. No. 13 : Explain the different levels or forms of Efficient Market Theory and what are the various empirical evidence for these forms?

That price reflects all available information, the highest order of market efficiency. According to FAMA, there exist three levels of market efficiency:

(i) **Weak form efficiency**: Price reflect all information found in the record of past prices and volumes.

(ii) **Semi – Strong efficiency**: Price reflect not only all information found in the record of past prices and volumes but also all other publicly available information.

(iii) **Strong form efficiency**: Price reflect all available information public as well as private.

**Empirical Evidence on Weak form of Efficient Market Theory**

According to the Weak form Efficient Market Theory current price of a stock reflect all information found in the record of past prices and volumes. This means that there is no relationship between the past and future price movements.
Three types of tests have been employed to empirically verify the weak form of Efficient Market Theory-
Serial Correlation Test, Run Test and Filter Rule Test.

(a) **Serial Correlation Test:** To test for randomness in stock price changes, one has to look at serial
correlation. For this purpose, price change in one period has to be correlated with price change in
some other period. Price changes are considered to be serially independent. Serial correlation studies
employing different stocks, different time lags and different time period have been conducted to
detect serial correlation but no significant serial correlation could be discovered. These studies were
carried on short term trends viz. daily, weekly, fortnightly and monthly and not in long term trends
in stock prices as in such cases. Stock prices tend to move upwards.

(b) **Run Test:** Given a series of stock price changes each price change is designated + if it represents an
increase and – if it represents a decrease. The resulting series may be -,+, -, -, - ,+ , + .

A run occurs when there is no difference between the sign of two changes. When the sign of change
differs, the run ends and new run begins.

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To test a series of price change for independence, the number of runs in that series is compared
with a number of runs in a purely random series of the same length and in the process determines whether
it is statistically different. By and large, the result of these studies strongly supports the Random Walk
Model.

(c) **Filter Rules Test:** If the price of stock increases by at least N% buy and hold it until its price decreases
by at least N% from a subsequent high. When the price decreases at least N% or more, sell it. If the
behaviour of stock price changes is random, filter rules should not apply in such a buy and hold
strategy. By and large, studies suggest that filter rules do not out perform a single buy and hold
strategy particular after considering commission on transaction.

**Empirical Evidence on Semi-strong Efficient Market Theory :**

❖ Semi-strong form efficient market theory holds that stock prices adjust rapidly to all publicly available
information. By using publicly available information, investors will not be able to earn above normal
rates of return after considering the risk factor. To test semi-strong form efficient market theory, a
number of studies was conducted which lead to the following queries: Whether it was possible to earn
on the above normal rate of return after adjustment for risk, using only publicly available information
and how rapidly prices adjust to public announcement with regard to earnings, dividends, mergers,
acquisitions, stock-splits?

❖ Several studies support the Semi-strong form Efficient Market Theory. Fama, Fisher, Jensen and Roll
in their adjustment of stock prices to new information examined the effect of stock split on return of
940 stock splits in New York Stock Exchange during the period 1957-1959 They found that prior to
the split, stock earns higher returns than predicted by any market model.

❖ Boll and Brown in an empirical evaluation of accounting income numbers studied the effect of annual
earnings announcements. They divided the firms into two groups. First group consisted of firms whose
earnings increased in relation to the average corporate earnings while second group consists of firms
whose earnings decreased in relation to the average corporate earnings. They found that before the
announcement of earnings, stock in the first group earned positive abnormal returns while stock in
the second group earned negative abnormal returns after the announcement of earnings. Stock in
both the groups earned normal returns.

There have been studies which have been empirically documented showing the following inefficiencies and
anomalies:

➢ Stock price adjust gradually not rapidly to announcements of unanticipated changes in quarterly
earnings.

➢ Small firms’ portfolio seemed to outperform large firms’ portfolio.
➢ Low price earnings multiple stock tend to outperform large price earnings multiple stock.
➢ Monday’s return is lower than return for the other days of the week.

Empirical Evidence on Strong form of Efficient Market Theory

❖ According to the Efficient Market Theory, all available information, public or private, is reflected in the stock prices. This represents an extreme hypothesis.
❖ To test this theory, the researcher analysed returns earned by certain groups viz. corporate insiders, specialists on stock exchanges, mutual fund managers who have access to internal information (not publicly available), or posses greater resource or ability to intensively analyse information in the public domain. They suggested that corporate insiders (having access to internal information) and stock exchange specialists (having monopolistic exposure) earn superior rate of return after adjustment of risk.
❖ Mutual Fund managers do not on average earn a superior rate of return. No scientific evidence has been formulated to indicate that investment performance of professionally managed portfolios as a group has been any better than that of randomly selected portfolios. This was the finding of Burton Malkiel in his Random Walk Down Wall Street, New York.

Q. No. 14: Explain the different challenges to Efficient Market Theory?

Information inadequacy – Information is neither freely available nor rapidly transmitted to all participants in the stock market. There is a calculated attempt by many companies to circulate misinformation.

(a) Limited information processing capabilities: Human information processing capabilities are sharply limited. According to Herbert Simon every human organism lives in an environment which generates millions of new bits of information every second but the bottle necks of the perceptual apparatus does not admit more than thousand bits per seconds and possibly much less. David Dreman maintained that under conditions of anxiety and uncertainty, with a vast interacting information grid, the market can become a giant.

(b) Irrational Behaviour: It is generally believed that investors' rationality will ensure a close correspondence between market prices and intrinsic values. But in practice this is not true. J. M. Keynes argued that all sorts of consideration enter into the market valuation which is in no way relevant to the prospective yield. This was confirmed by L. C. Gupta who found that the market evaluation processes work haphazardly almost like a blind man firing a gun. The market seems to function largely on hit or miss tactics rather than on the basis of informed beliefs about the long term prospects of individual enterprises.

(c) Monopolistic Influence: A market is regarded as highly competitive. No single buyer or seller is supposed to have undue influence over prices. In practice, powerful institutions and big operators wield great influence over the market. The monopolistic power enjoyed by them diminishes the competitiveness of the market.
Q. No. 1 : Explain term structure theories?

The term structure theories explains the relationship between interest rates or bond yields and different terms or maturities. The different term structures theories are as follows:

(a) **Unbiased Expectation Theory** : As per this theory the long-term interest rates can be used to forecast short-term interest rates in the future on the basis of rolling the sum invested for more than one period.

(b) **Liquidity Preference Theory** : As per this theory forward rates reflect investors’ expectations of future spot rates plus a liquidity premium to compensate them for exposure to interest rate risk. Positive slope may be a result of liquidity premium.

(c) **Preferred Habitat Theory** : Premiums are related to supply and demand for funds at various maturities – not the term to maturity and hence this theory can be used to explain almost any yield curve shape.

Q. No. 2 : Write short note on Zero Coupon Bonds?

As name indicates these bonds do not pay interest during the life of the bonds. Instead, zero coupon bonds are issued at discounted price to their face value, which is the amount a bond will be worth when it matures or comes due. When a zero coupon bond matures, the investor will receive one lump sum (face value) equal to the initial investment plus interest that has been accrued on the investment made. The maturity dates on zero coupon bonds are usually long term. These maturity dates allow an investor for a long range planning. Zero coupon bonds issued by banks, government and private sector companies. However, bonds issued by corporate sector carry a potentially higher degree of risk, depending on the financial strength of the issuer and longer maturity period, but they also provide an opportunity to achieve a higher return.

Q. No. 3 : Why should the duration of a coupon carrying bond always be less than the time to its maturity?

The concept of duration is straightforward. Duration is nothing but the average time taken by an investor to collect his/her investment. If an investor receives a part of his/her investment over the time on specific intervals before maturity, the investment will offer him the duration which would be lesser than the maturity of the instrument. Higher the coupon rate, lesser would be the duration.

It measures how quickly a bond will repay its true cost. The longer the time it takes the greater exposure the bond has to changes in the interest rate environment. Following are some of factors that affect bond's duration:

(i) **Time to maturity** : The shorter-maturity bond would have a lower duration and less price risk and vice versa.

(ii) **Coupon rate** : Coupon payment is a key factor in calculation of duration of bonds. The higher the coupon, the lower is the duration and vice versa.

Q. No. 4 : Write short note on Bond Immunization?

We know that when interest rate goes up although return on investment improves but value of bond falls and vice versa. Thus, the price of Bond is subject to following two risk:

(a) **Price Risk**, (b) **Reinvestment Rate Risk**

Further, with change in interest rates these two risks move in opposite direction. Through the process of immunization selection of bonds shall be in such manner that the effect of above two risks shall offset each other.
PORTFOLIO MANAGEMENT

Study Session 6

Q. No. 1: Briefly explain the Objectives of Portfolio Management?

Some of the important objectives of portfolio management are:

(i) **Security/Safety of Principal**: Security not only involves keeping the principal sum intact but also its purchasing power.

(ii) **Stability of Income**: To facilitate planning more accurately and systematically the reinvestment or consumption of income.

(iii) **Capital Growth**: It can be attained by reinvesting in growth securities or through purchase of growth securities.

(iv) **Marketability i.e. the case with which a security can be bought or sold**: This is essential for providing flexibility to investment portfolio.

(v) **Liquidity i.e. nearness to money**: It is desirable for the investor so as to take advantage of attractive opportunities upcoming in the market.

(vi) **Diversification**: The basic objective of building a portfolio is to reduce the risk of loss of capital and/or income by investing in various types of securities and over a wide range of industries.

(vii) **Favourable Tax Status**: The effective yield an investor gets from his investment depends on tax to which it is subjected to. By minimising the tax burden, yield can be effectively improved.

Q. No. 2: Discuss the various kinds of Systematic and Unsystematic risk?

There are two types of Risk - Systematic (or non-diversifiable) and unsystematic (or diversifiable) relevant for investment - also, called as general and specific risk.

**Types of Systematic Risk**

(i) **Market risk**: Even if the earning power of the corporate sector and the interest rate structure remain more or less unchanged prices of securities, equity shares in particular, tend to fluctuate. Major cause appears to be the changing psychology of the investors. The irrationality in the security markets may cause losses unrelated to the basic risks. These losses are the result of changes in the general tenor of the market and are called market risks.

(ii) **Interest Rate Risk**: The change in the interest rate has a bearing on the welfare of the investors. As the interest rate goes up, the market price of existing fixed income securities falls and vice versa. This happens because the buyer of a fixed income security would not buy it at its par value or face value if its fixed interest rate is lower than the prevailing interest rate on a similar security.
(iii) **Social or Regulatory Risk**: The social or regulatory risk arises, where an otherwise profitable investment is impaired as a result of adverse legislation, harsh regulatory climate, or in extreme instance nationalization by a socialistic government.

(iv) **Purchasing Power Risk**: Inflation or rise in prices lead to rise in costs of production, lower margins, wage rises and profit squeezing etc. The return expected by investors will change due to change in real value of returns.

**Classification of Unsystematic Risk**

(i) **Business Risk**: As a holder of corporate securities (equity shares or debentures) one is exposed to the risk of poor business performance. This may be caused by a variety of factors like heightened competition, emergence of new technologies, development of substitute products, shifts in consumer preferences, inadequate supply of essential inputs, changes in governmental policies and so on. Often of course the principal factor may be inept and incompetent management.

(ii) **Financial Risk**: This relates to the method of financing, adopted by the company, high leverage leading to larger debt servicing problem or short term liquidity problems due to bad debts, delayed receivables and fall in current assets or rise in current liabilities.

(iii) **Default Risk**: Default risk refers to the risk accruing from the fact that a borrower may not pay interest and/or principal on time. Except in the case of highly risky debt instrument, investors seem to be more concerned with the perceived risk of default rather than the actual occurrence of default. Even though the actual default may be highly unlikely, they believe that a change in the perceived default risk of a bond would have an immediate impact on its market price.

**Q. No. 3**: Distinguish between ‘Systematic risk’ and ‘Unsystematic risk’.

Systematic risk refers to the variability of return on stocks or portfolio associated with changes in return on the market as a whole. It arises due to risk factors that affect the overall market such as changes in the nations’ economy, tax reform by the Government or a change in the world energy situation. These are risks that affect securities overall and, consequently, cannot be diversified away. This is the risk which is common to an entire class of assets or liabilities. The value of investments may decline over a given time period simply because of economic changes or other events that impact large portions of the market. Asset allocation and diversification can protect against systematic risk because different portions of the market tend to underperform at different times. This is also called market risk.

Unsystematic risk however, refers to risk unique to a particular company or industry. It is avoidable through diversification. This is the risk of price change due to the unique circumstances of a specific security as opposed to the overall market. This risk can be virtually eliminated from a portfolio through diversification.
Q. No. 4 : Write short note on Factors affecting investment decisions in portfolio management.

Factors affecting Investment Decisions in Portfolio Management

(i) **Objectives of investment portfolio** : There can be many objectives of making an investment. The manager of a provident fund portfolio has to look for security (low risk) and may be satisfied with none too higher return. An aggressive investment company may, however, be willing to take a high risk in order to have high capital appreciation.

(ii) **Selection of investment**

(a) What types of securities to buy or invest in? There is a wide variety of investments opportunities available i.e. debentures, convertible bonds, preference shares, equity shares, government securities and bonds, income units, capital units etc.

(b) What should be the proportion of investment in fixed interest/dividend securities and variable interest/dividend bearing securities?

(c) In case investments are to be made in the shares or debentures of companies, which particular industries show potential of growth?

(d) Once industries with high growth potential have been identified, the next step is to select the particular companies, in whose shares or securities investments are to be made.

(iii) **Timing of purchase** : At what price the share is acquired for the portfolio depends entirely on the timing decision. It is obvious if a person wishes to make any gains, he should “buy cheap and sell dear” i.e. buy when the shares are selling at a low price and sell when they are at a high price.

Q. No. 5 : Discuss the Capital Asset Pricing Model (CAPM) and its relevant assumptions.

**Capital Asset Pricing Model** : The mechanical complexity of the Markowitz’s portfolio model kept both practitioners and academics away from adopting the concept for practical use. Its intuitive logic, however, spurred the creativity of a number of researchers who began examining the stock market implications that would arise if all investors used this model As a result what is referred to as the Capital Asset Pricing Model (CAPM), was developed.

The Capital Asset Pricing Model was developed by Sharpe, Mossin and Linter in 1960. The model explains the relationship between the expected return, non-diversifiable risk and the valuation of securities. It considers the required rate of return of a security on the basis of its contribution to the total risk. It is based on the premises that the diversifiable risk of a security is eliminated when more and more securities are added to the portfolio. However, the systematic risk cannot be diversified and is or related with that of the market portfolio. All securities do not have same level of systematic risk. The systematic risk can be measured by beta, ß under CAPM, the expected return from a security can be expressed as:

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\text{Expected return on security} = R_f + \beta (R_m - R_f)
\]

The model shows that the expected return of a security consists of the risk-free rate of interest and the risk premium. The CAPM, when plotted on the graph paper is known as the Security Market Line (SML). A major implication of CAPM is that not only every security but all portfolios too must plot on SML. This implies that in an efficient market, all securities are expected returns commensurate with their riskiness, measured by ß.

**Relevant Assumptions of CAPM**

(i) The investor’s objective is to maximize the utility of terminal wealth;

(ii) Investors make choices on the basis of risk and return;

(iii) Investors have identical time horizon;

(iv) Investors have homogeneous expectations of risk and return;
(v) Information is freely and simultaneously available to investors;
(vi) There is risk-free asset, and investor can borrow and lend unlimited amounts at the risk-free rate;
(vii) There are no taxes, transaction costs, restrictions on short rates or other market imperfections;
(viii) Total asset quantity is fixed, and all assets are marketable and divisible.

Thus, CAPM provides a conceptual framework for evaluating any investment decision where capital is committed with a goal of producing future returns. However, there are certain limitations of the theory. Some of these limitations are as follows:

(i) **Reliability of Beta**: Statistically reliable Beta might not exist for shares of many firms. It may not be possible to determine the cost of equity of all firms using CAPM. All shortcomings that apply to Beta value apply to CAPM too.

(ii) **Other Risks**: It emphasis only on systematic risk while unsystematic risks are also important to shareholders who do not possess a diversified portfolio.

(iii) **Information Available**: It is extremely difficult to obtain important information on risk-free interest rate and expected return on market portfolio as there are multiple risk-free rates for one while for another, markets being volatile it varies over time period.

Q. No. 6: Write short note on factors affecting decision of investment in fixed income securities and Equity Shares.

1) **Selection of Bonds**
   Bonds are fixed income avenues. The following factors have to be evaluated in selecting fixed income avenues:
   
   (a) **Yield to Maturity**: The yield to maturity for a fixed income avenues represent the rate of return earned by the investor, if he invests in the fixed income avenues and holds it till its maturity.
   
   (b) **Risk of Default**: To assess such risk on a bond, one has to look at the credit rating of the bond. If no credit rating is available relevant financial ratios of the firm have to be examined such as debt equity, interest coverage, earning power etc and the general prospect of the industry to which the firm belongs have to be assessed.

   (c) **Tax Shield**: In the past, several fixed income avenues offers tax shields but at present only a few of them do so.

   (d) **Liquidity**: If the fixed income avenues can be converted wholly or substantially into cash at a fairly short notice it possesses a liquidity of a high order.

2) **Selection of Stock (Equity Share)**
   Three approaches are applied for selection of equity shares - Technical analysis, Fundamental analysis and Random selection analysis.

   (a) Technical analysis looks at price behaviours and volume data to determine whether the share will move up or down or remain trend less.

   (b) Fundamental analysis focuses on fundamental factors like earning level, growth prospects and risk exposure to establish intrinsic value of a share. The recommendation to buy hold or sell is based on comparison of intrinsic value and prevailing market price.

   (c) Random selection analysis is based on the premise that the market is efficient and security is properly priced.
Q. No. 7 : Describe four asset allocation strategies.

There are four asset allocation strategies:

(a) **Integrated Asset Allocation**: Under this strategy, capital market conditions and investor objectives and constraints are examined and the allocation that best serves the investor’s needs while incorporating the capital market forecast is determined.

(b) **Strategic Asset Allocation**: Under this strategy, optimal portfolio mixes based on returns, risk, and co-variances is generated using historical information and adjusted periodically to restore target allocation within the context of the investor’s objectives and constraints.

(c) **Tactical Asset Allocation**: Under this strategy, investor’s risk tolerance is assumed constant and the asset allocation is changed based on expectations about capital market conditions.

(d) **Insured Asset Allocation**: Under this strategy, risk exposure for changing portfolio values (wealth) is adjusted; more value means more ability to take risk.

Q. No. 8 : Write a note on Fixed income Portfolio.

Fixed Income Portfolio is same as equity portfolio with difference that it consists of fixed income securities such as bonds, debentures, money market instruments etc. Since, it mainly consists of bonds, it is also called Bond Portfolio.

1) **Fixed Income Portfolio Process**

   Just like other portfolios, following five steps are involved in fixed income portfolio.

   1. Setting up objective
   2. Drafting guideline for investment policy
   3. Selection of Portfolio Strategy - Active and Passive
   4. Selection of securities and other assets
   5. Evaluation of performance with benchmark

2) **Calculation of Return on Fixed Income Portfolio**

   First and foremost step in evaluation of performance of a portfolio is calculation of return. Although there can be many types of measuring returns there can be many types of measuring returns as per requirements but some of are commonly used measures are:

   (i) Arithmetic Average Rate of Return
   (ii) Time Weighted Rate of Return
   (iii) Rupee Weighted Rate of Return
   (iv) Annualized Return

3) **Fixed Income Portfolio Management Strategies**

   There are two strategies

   (i) Passive Strategy
   (ii) Active Strategy

   (i) **Passive Strategy**

   As mentioned earlier Passive Strategy is based on the premise that securities are fairly priced commensurate with the level of risk. Though investor does not try to outperform the market but it does not imply they remain totally inactive. Two common strategies applied by passive investors of fixed income portfolios are as follows:
6.6 PORTFOLIO MANAGEMENT

(a) **Buy and Hold Strategy**: This technique is do nothing technique and investor continues with initial selection and do not attempt to churn bond portfolio to increase return or reduce the level of risk.

However, sometime to control the interest rate risk, the investor may set the duration of fixed income portfolio equal to benchmarked index.

(b) **Indexation Strategy**: This strategy involves replication of a predetermined benchmark well known bond index as closely as possible.

(c) **Immunization**: This strategy cannot exactly be termed as purely passive strategy but a hybrid strategy. This strategy is more popular among pension funds. Since pension funds promised to pay fixed amount to retirees people in the form of annuities any inverse movement in interest may threaten fund’s ability to meet their liability timely. By building an immunized portfolio the interest rate risk can be avoided.

(d) **Matching Cash Flows**: Another stable approach to immunize the portfolio is Cash Flow Matching. This approach involves buying of Zero Coupon Bonds to meet the promised payment out of the proceeds realized.

(ii) **Active Strategy**

As mentioned earlier active strategy is usually adopted to outperform the market. Following are some of active strategies:

(1) **Forecasting Returns and Interest Rates**: This strategy invokes the estimation of return on basis of change in interest rates. Since interest rate and bond values are inversely related if portfolio manager is expecting a fall in interest rate of bonds he/she should buy with longer maturity period. On the contrary, if he/she expected a fall in interest then he/she should sell bonds with longer period.

Based on short term yield movement following three strategies can be adopted:

(a) Bullet Strategies

(b) Barbell Strategies

(c) Ladder Strategies

Further estimation of interest ratio is a daunting task, and quite difficult to ascertain. There are several models available to forecast the expected interest rates which are based on:

(i) Inflation

(ii) Past Trends

(iii) Multi Factor Analysis

It should be noted that these models can be used as estimates only, as it is difficult to calculate the accurate changes.

There is one another techniques of estimating expected change in interest rate called ‘Horizon Analysis’. This technique requires that analyst should select a particular holding period and then predict yield curve at the end of that period as with a given period of maturity, a bond yield curve of a selected period can be estimated and its end price can also be calculated.

(2) **Bond Swaps**: This strategy involves regularly monitoring bond process to identify mispricing and try to exploit this situation. Some of the popular swap techniques are as follows:

(a) **Pure Yield Pickup Swap**: This strategy involves switch from a lower yield bond to a higher yield bonds of almost identical quantity and maturity. This strategy is suitable for portfolio manager who is willing to assume interest rate risk as in
switching from short term bond to long term bonds to earn higher rate of interest, he may suffer a capital loss.

(b) **Substitution Swap**: This swapping involves swapping with similar type of bonds in terms of coupon rate, maturity period, credit rating, liquidity and call provision but with different prices. This type of differences exits due to temporary imbalance in the market. The risk a portfolio manager carries if some features of swapped bonds may not be truly identical to the swapped one.

(c) **International Spread Swap**: In this swap portfolio manager is of the belief that yield spreads between two sectors is temporarily out of line and he tries to take benefit of this mismatch. Since the spread depends on many factor and a portfolio manager can anticipate appropriate strategy and can profit from these expected differentials.

(d) **Tax Swap**: This is based on taking tax advantage by selling existing bond whose price decreased at capital loss and set it off against capital gain in other securities and buying another security which has features like that of disposed one.

(3) **Interest Rate Swap**: Interest Rate Swap is another technique that is used by Portfolio Manager. This technique has been discussed in greater details in the chapter on Derivative.

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**Q. No. 9: Write a note on Alternative Investments Strategies in context of portfolio management.**

**Features of Alternative Investments**

Though here may be many features of Alternative Investment but following are some common features.

(i) **High Fees**: Being a specific nature product the transaction fees are quite on higher side.

(ii) **Limited Historical Rate**: The data for historic return and risk is verity limited where data for equity market for more than 100 years in available.

(iii) **Illiquidity**: The liquidity of Alternative Investment is not good as next buyer not be easily available due to limited market.

(iv) **Less Transparency**: The level of transparency is not adequate due to limited public information available.

(v) **Extensive Research Required**: Due to limited availability of market information the extensive analysis is required by the Portfolio Managers.

(vi) **Leveraged Buying**: Generally investment in alternative investments is highly leveraged.

Over the time various types of AIs have been evolved but some of the important AIs are as follows:

1. Mutual Funds
2. Real Estates
3. Exchange Traded Funds
4. Private Equity
5. Hedge Funds
6. Closely Held Companies
7. Distressed Securities
8. Commodities
9. Managed Futures
10. Mezzanine Finance
Q. No. 10 : Write a note on Investment in Real Estates.

Since, some of the above terms have been covered under the respective chapter in this study, we shall cover other terms hereunder.

1) Real Estates

As opposed to financial claims in the form of paper or a dematerialized mode, real estate is a tangible form of assets which can be seen or touched. Real Assets consists of land, buildings, offices, warehouses, shops etc.

Although real investment is like any other investment but it has some special features as every country has their own laws and paper works which makes investment in foreign properties less attractive. However, in recent time due to globalization investment in foreign real estate has been increased.

2) Valuation Approaches

Comparing to financial instrument the valuation of Real Estate is quite complex as number of transactions or dealings comparing to financial instruments are very small.

Following are some characteristics that make valuation of Real Estate quite complex:

(i) Inefficient market : Information as may not be freely available as in case of financial securities.

(ii) Illiquidity : Real Estates are not as liquid as that of financial instruments.

(iii) Comparison : Real estates are only approximately comparable to other properties.

(iv) High Transaction cost : In comparison to financial instruments, the transaction and management cost of Real Estate is quite high.

(v) No Organized market : There is no such organized exchange or market as for equity shares and bonds.

3) Valuation of Real Estates

Generally, following four approaches are used in valuation of Real estates:

(1) Sales Comparison Approach : It is like Price Earning Multiplier as in case of equity shares. Benchmark value of similar type of property can be used to value Real Estate.

(2) Income Approach : This approach like value of Perpetual Debenture or unredeemable Preference Shares. In this approach the perpetual cash flow of potential net income (after deducting expense) is discounted at market required rate of return.

(3) Cost Approach : In this approach, the cost is estimated to replace the building in its present form plus estimated value of land. However, adjustment of other factors such as good location, neighbourhood is also made in it.

(4) Discounted After Tax Cash Flow Approach : In comparison to NPV technique, PV of expected inflows at required rate of return is reduced by amount of investment.

Q. No. 11 : Write a note on Distressed securities.

It is a kind of purchasing the securities of companies that are in or near bankruptcy. Since these securities are available at very low price, the main purpose of buying such securities is to make efforts to revive the sick company. Further, these securities are suitable for those investors who cannot participate in the market and those who wants avoid due diligence.

Now, question arises how profit can be earned from distressed securities. We can see by taking long position in debt and short position in equity, how investor can earn arbitrage profit.
(i) In case company's condition improves because of priority, the investor will get his interest payment which shall be more than the dividend on his short position in equity shares.

(ii) If company is condition further deteriorates the value of both share ad debenture goes down. He will make good profit from his short position.

Risks Analysis of Investment in Distressed Securities: On the face, investment in distressed securities appears to be a good proposition but following types of risks are need to be analyzed.

(i) Liquidity Risk: These securities may be saleable in the market.

(ii) Event Risk: Any event that particularly effect the company not economy as a whole

(iii) Market Risk: This is another type of risk though it is not important.

(iv) Human Risk: The judge's decision on the company in distress also play a big role.
SECURITIZATION

Q. No. 1 : Write a short note on Securitization and what are its features?

The process of securitization typically involves the creation of pool of assets from the illiquid financial assets, such as receivables or loans which are marketable. In other words, it is the process of repackaging or rebundling of illiquid assets into marketable securities. These assets can be automobile loans, credit card receivables, residential mortgages or any other form of future receivables.

Features of Securitization

The securitization has the following features:

(i) **Creation of Financial Instruments**: The process of securities can be viewed as process of creation of additional financial product of securities in market backed by collaterals.

(ii) **Bundling and Unbundling**: When all the assets are combined in one pool it is bundling and when these are broken into instruments of fixed denomination it is unbundling.

(iii) **Tool of Risk Management**: In case of assets are securitized on non-recourse basis, then securitization process acts as risk management as the risk of default is shifted.

(iv) **Structured Finance**: In the process of securitization, financial instruments are tailor structured to meet the risk return trade of profile of investor, and hence, these securitized instruments are considered as best examples of structured finance.

(v) **Trenching**: Portfolio of different receivable or loan or asset are split into several parts based on risk and return they carry called ‘Trenche’. Each Trench carries a different level of risk and return.

(vi) **Homogeneity**: Under each Trench the securities are issued of homogenous nature and even meant for small investors the who can afford to invest in small amounts.

Q. No. 2 : What are the benefits of Securitization?

The benefits of securitization can be viewed from the angle of various parties involved as follows:

**From the angle of originator**

Originator (entity which sells assets collectively to Special Purpose Vehicle) achieves the following benefits from securitization.

(i) **Off – Balance Sheet Financing**: When loan/receivables are securitized it release a portion of capital tied up in these assets resulting in off Balance Sheet financing leading to improved liquidity position which helps expanding the business of the company.

(ii) **More specialization in main business**: By transferring the assets the entity could concentrate more on core business as servicing of loan is transferred to SPV. Further, in case of non-recourse arrangement even the burden of default is shifted.

(iii) **Helps to improve financial ratios**: Especially in case of Financial Institutions and Banks, it helps to manage Capital –To-Weighted Asset Ratio effectively.

(iv) **Reduced borrowing Cost**: Since securitized papers are rated due to credit enhancement even they can also be issued at reduced rate as of debts and hence the originator earns a spread, resulting in reduced cost of borrowings.
From the angle of investor
Following benefits accrues to the investors of securitized securities.

1. **Diversification of Risk**: Purchase of securities backed by different types of assets provides the diversification of portfolio resulting in reduction of risk.

2. **Regulatory requirement**: Acquisition of asset backed belonging to a particular industry say micro industry helps banks to meet regulatory requirement of investment of fund in industry specific.

3. **Protection against default**: In case of recourse arrangement if there is any default by any third party then originator shall make good the least amount. Moreover, there can be insurance arrangement for compensation for any such default.

Q. No. 3 : What are the Participants in Securitization?

Broadly, the participants in the process of securitization can be divided into two categories; one is Primary Participant and the other is Secondary Participant.

**Primary Participants**
Primary Participants are main parties to this process. The primary participants in the process of securitization are as follows:

(a) **Originator**: It is the initiator of deal or can be termed as securitizer. It is an entity which sells the assets lying in its books and receives the funds generated through the sale of such assets. The originator transfers both legal as well as beneficial interest to the Special Purpose Vehicle (discussed later).

(b) **Special Purpose Vehicle**: Also, called SPV is created for the purpose of executing the deal. Since issuer originator transfers all rights in assets to SPV, it holds the legal title of these assets. It is created especially for the purpose of securitization only and normally could be in form of a company, a firm, a society or a trust.

The main objective of creating SPV to remove the asset from the Balance Sheet of Originator. Since, SPV makes an upfront payment to the originator, it holds the key position in the overall process of securitization. Further, it also issues the securities (called Asset Based Securities or Mortgage Based Securities) to the investors.

(c) **The Investors**: Investors are the buyers of securitized papers which may be an individual, an institutional investor such as mutual funds, provident funds, insurance companies, mutual funds, Financial Institutions etc.

Since, they acquire a participating in the total pool of assets/receivable, they receive their money back in the form of interest and principal as per the terms agree.

**Secondary Participants**
Besides the primary participants other parties involved into the securitization process are as follows:

(a) **Obligors**: Actually they are the main source of the whole securitization process. They are the parties who owe money to the firm and are assets in the Balance Sheet of Originator. The amount due from the obligor is transferred to SPV and hence they form the basis of securitization process and their credit standing is of paramount importance in the whole process.

(b) **Rating Agency**: Since the securitization is based on the pools of assets rather than the originators, the assets have to be assessed in terms of its credit quality and credit support available. Rating agency assesses the following:

- Strength of the Cash Flow.
- Mechanism to ensure timely payment of interest and principle repayment.
- Credit quality of securities.
Liquidity support.
Strength of legal framework.

Although rating agency is secondary to the process of securitization but it plays a vital role.

(c) Receiving and Paying agent (RPA) : Also, called Servicer or Administrator, it collects the payment due from obligor(s) and passes it to SPV. It also follow up with defaulting borrower and if required initiate appropriate legal action against them. Generally, an originator or its affiliates acts as servicer.

(d) Agent or Trustee : Trustees are appointed to oversee that all parties to the deal perform in the true spirit of terms of agreement. Normally, it takes care of interest of investors who acquires the securities.

(e) Credit Enhancer : Since investors in securitized instruments are directly exposed to performance of the underlying and sometime may have limited or no recourse to the originator, they seek additional comfort in the form of credit enhancement. In other words, they require credit rating of issued securities which also empowers marketability of the securities.

Originator itself or a third party say a bank may provide this additional context called Credit Enhancer. While originator provides his comfort in the form of over collateralization or cash collateral, the third party provides it in form of letter of credit or surety bonds.

(f) Structurer : It brings together the originator, investors, credit enhancers and other parties to the deal of securitization. Normally, these are investment bankers also called arranger of the deal. It ensures that deal meets all legal, regulatory, accounting and tax laws requirements.

Q. No. 4 : What are the steps in Securitization Mechanism ?

Let us discuss briefly the steps in securitization mechanism :

1. **Creation of Pool of Assets**

   The process of securitization begins with creation of pool of assets by segregation of assets backed by similar type of mortgages in terms of interest rate, risk, maturity and concentration units.

2. **Transfer to SPV**

   One assets have been pooled, they are transferred to Special Purpose Vehicle (SPV) especially created for this purpose.

3. **Sale of Securitized Papers**

   SPV designs the instruments based on nature of interest, risk, tenure etc. based on pool of assets. These instruments can be Pass Through Security or Pay Through Certificates, (discussed later).

4. **Administration of assets**

   The administration of assets in subcontracted back to originator which collects principal and interest from underlying assets and transfer it to SPV, which works as a conduct.

5. **Recourse to Originator**

   Performance of securitized papers depends on the performance of underlying assets and unless specified in case of default they go back to originator from SPV.

6. **Repayment of funds**

   SPV will repay the funds in form of interest and principal that arises from the assets pooled.

7. **Credit Rating to Instruments**

   Sometime before the sale of securitized instruments credit rating can be done to assess the risk of the issuer.

   The mechanism of Securities is shown below in diagrammatic form.
Q. No. 5 : What are the main problems faced in growth of Securitization of instruments especially in Indian context?

Following are main problems faced in growth of Securitization of instruments especially in Indian context:

1. **Stamp Duty**
   - Stamp Duty is one of the obstacle in India. Under Transfer of Property Act, 1882, a mortgage debt stamp duty which even goes upto 12% in some states of India and this impeded the growth of securitization in India. It should be noted that since pass through certificate does not evidence any debt only able to receivable, they are exempted from stamp duty.
   
   Moreover, in India, recognizing the special nature of securitized instruments in some states has reduced the stamp duty on them.

2. **Taxation**
   - Taxation is another area of concern in India. In the absence of any specific provision relating to securitized instruments in Income Tax Act experts’ opinion differ a lot. Some are of opinion that in SPV as a trustee is liable to be taxed in a representative capacity then other are of view that instead of SPV, investors will be taxed on their share of income. Clarity is also required on the issues of capital gain implications on passing payments to the investors.

3. **Accounting**
   - Accounting and reporting of securitized assets in the books of originator is another area of concern. Although securitization is slated to an off-balance sheet instrument but in true sense receivables are removed from originator’s balance sheet. Problem arises especially when assets are transferred without recourse.

4. **Lack of standardization**
   - Every originator follows own format for documentation and administration have lack of standardization is another obstacle in growth of securitization.

5. **Inadequate Debt Market**
   - Lack of existence of a well-developed debt market in India is another obstacle that hinders the growth of secondary market of securitized or asset backed securities.

6. **Ineffective Foreclosure laws**
   - For last many years there are efforts are going on for effective foreclosure but still foreclosure laws are not supportive to lending institutions and this makes securitized instruments especially mortgaged
backed securities less attractive as lenders face difficulty in transfer of property in event of default by the borrower.

Q. No. 6: What are the instruments of securitization? OR

**Differentiate between PTS and PTC.**

On the basis of different maturity characteristics, the securitized instruments can be divided into following three categories:

1. **Pass Through Certificates (PTCs)**
   - As the title suggests originator (seller of the assets) transfers the entire receipt of cash in form of interest or principal repayment from the assets sold. Thus, these securities represent direct claim of the investors on all the assets that has been securitized through SPV.
   - Since all cash flows are transferred the investors carry proportional beneficial interest in the asset held in the trust by SPV.
   - It should be noted that since it is a direct route any prepayment of principal is also proportionately distributed among the securities holders. Further, due to these characteristics on completion of securitization by the final payment of assets, all the securities are terminated simultaneously.
   - Skewness of cash flows occurs in early stage if principals are repaid before the scheduled time.

2. **Pay Through Security (PTS)**
   - As mentioned earlier, since in PTCs all cash flows are passed to the performance of the securitized assets. To overcome this limitation and limitation to single mature there is another structure i.e. PTS.
   - In contrast to PTC in PTS, SPV debt securities backed by the assets and hence it can restructure different tranches from varying maturities of receivables.
   - In other words, this structure permits desynchronization of servicing of securities issued from cash flow generating from the asset. Further, this structure also permits the SPV to reinvest surplus funds for short term as per their requirement.
   - Since, in Pass Through, all cash flow immediately in PTS in case of early retirement of receivables plus cash can be used for short term yield. This structure also provides the freedom to issue several debt trances with varying maturities.

3. **Stripped Securities**
   - Stripped Securities are created by dividing the cash flows associated with underlying securities into two or more new securities. Those two securities are as follows:
     (i) Interest Only (IO) Securities
     (ii) Principle Only (PO) Securities
   - As each investor receives a combination of principal and interest, it can be stripped into two portion of Interest and Principle.
   - Accordingly, the holder of IO securities receives only interest while PO security holder receives only principal. Being highly volatile in nature these securities are less preferred by investors.
   - In case yield to maturity in market rises, PO price tends to fall as borrower prefers to postpone the payment on cheaper loans. Whereas if interest rate in market falls, the borrower tends to repay the loans as they prefer to borrow fresh at lower rate of interest.
   - In contrast, value of IO’s securities increases when interest rate goes up in the market as more interest is calculated on borrowings.
   - However, when interest rate due to prepayments of principals, IO’s tends to fall.
Thus, from the above, it is clear that it is mainly perception of investors that determines the prices of IOs and POs

**Q. No. 7 : How the Pricing of the Securitized instruments are done?**

Pricing of securitized instruments in an important aspect of securitization. While pricing the instruments, it is important that it should be acceptable to both originators as well as to the investors. On the same basis pricing of securities can be divided into following two categories:

1. **From Originator’s Angle**
   From originator’s point of view, the instruments can be priced at a rate at which originator has to incur an outflow and if that outflow can be amortized over a period of time by investing the amount raised through securitization.

2. **From Investor’s Angle**
   From an investor’s angle security price can be determined by discounting best estimate of expected future cash flows using rate of yield to maturity of a security of comparable security with respect to credit quality and average life of the securities. This yield can also be estimated by referring the yield curve available for marketable securities, though some adjustments is needed on account of spread points, because of credit quality of the securitized instruments.

**Q. No. 8 : Write a note on Securitization in India?**

- It is the Citi Bank who pioneered the concept of securitization in India by bundling of auto loans in securitized instruments.
- Thereafter many organizations securitized their receivables. Although started with securitization of auto loans it moved to other types of receivables such as sales tax deferrals, aircraft receivable etc.
- In order to encourage securitization, the Government has come out with Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002, to tackle menace of Non-performing Assets (NPAs) without approaching to Court.
- With growing sophistication of financial products in Indian Capital Market, securitization has occupied an important place.
- As mentioned above, though, initially started with auto loan receivables, it has become an important source of funding for micro finance companies and NBFCs and even now a days commercial mortgage backed securities are also emerging.
- The important highlight of the scenario of securitization in Indian Market is that it is dominated by a few players e.g. ICICI Bank, HDFC Bank, NHB etc.
- As per a report of CRISIL, securitization transactions in India scored to the highest level of approximately ₹ 70000 crores, in Financial Year 2016. (Business Line, 15th June, 2016)
- In order to further enhance the investor base in securitized debts, SEBI allowed FPIs to invest in securitized debt of unlisted companies upto a certain limit.
Establishment of a Mutual Fund: A mutual fund is required to be registered with the Securities and Exchange Board of India (SEBI) before it can collect funds from the public. All mutual funds are governed by the same set of regulations and are subject to monitoring and inspections by the SEBI. The Mutual Fund has to be established through the medium of a sponsor. A sponsor means any body corporate who, acting alone or in combination with another body corporate, establishes a mutual fund after completing the formalities prescribed in the SEBI’s Mutual Fund Regulations.

The role of sponsor is akin to that of a promoter of a company, who provides the initial capital and appoints the trustees. The sponsor should be a body corporate in the business of financial services for a period not less than 5 years, be financially sound and be a fit party to act as sponsor in the eyes of SEBI.

The Mutual Fund has to be established as either a trustee company or a Trust, under the Indian Trust Act and the instrument of trust shall be in the form of a deed. The deed shall be executed by the sponsor in favour of the trustees named in the instrument of trust. The trust deed shall be duly registered under the provisions of the Indian Registration Act, 1908. The trust deed shall contain clauses specified in the Third Schedule of the Regulations.

An Asset Management Company, who holds an approval from SEBI, is to be appointed to manage the affairs of the Mutual Fund and it should operate the schemes of such fund. The Asset Management Company is set up as a limited liability company, with a minimum net worth of ₹ 10 crores.

The sponsor should contribute at least 40% to the net worth of the Asset Management Company. The Trustee should hold the property of the Mutual Fund in trust for the benefit of the unit holders.

SEBI regulations require that at least two-thirds of the directors of the Trustee Company or board of trustees must be independent, that is, they should not be associated with the sponsors. Also, 50 per cent of the directors of AMC must be independent. The appointment of the AMC can be terminated by majority of the trustees or by 75% of the unit holders of the concerned scheme.

The AMC may charge the mutual fund with Investment Management and Advisory fees subject to prescribed ceiling. Additionally, the AMC may get the expenses on operation of the mutual fund reimbursed from the concerned scheme.

The Mutual fund also appoints a custodian, holding valid certificate of registration issued by SEBI, to have custody of securities held by the mutual fund under different schemes. In case of dematerialized securities, this is done by Depository Participant. The custodian must be independent of the sponsor and the AMC.
Q. No. 2 : Write a Short note on Classification of Mutual Funds.

There are three different types of classification of mutual funds. (1) Functional (2) Portfolio and (3) Ownership. Each classification is mutually exclusive.

1. **Functional Classification**: Funds are divided into: Open Ended and Close Ended.
   - **Open-end Vs. Closed-end Funds**
     - **Number Of Units**: The number of units outstanding under the schemes of Open Ended Funds keeps on changing. A closed-end mutual fund is a publicly traded investment company with a limited number of units i.e. number of units under Close Ended Funds is fixed.
     - **Maturity Period**: Open Ended schemes usually don't have a fixed maturity period whereas Close Ended Schemes have fixed maturity period.
     - **NAV / Market Price**: The price at which an investor buys or sell shares of a Close Ended Fund after the NFO (New Fund Offer) is the market price, as determined by the demand and supply market principles. In contrast, the price at which an investor buys or sells shares of a mutual fund is the NAV of the Mutual Fund at the close of a given business day.
     - **Sale and Purchase**: The Units of Open Ended Funds are available for subscription and redemption on an ongoing basis. An investor is allowed to join or withdraw from the fund at any time by the mutual fund companies at NAV related prices. The Units of Close Ended Funds can be purchased or sold by the investor only from the secondary market i.e. stock market after the initial public offerings or there may be periodic repurchase at NAV related price by Mutual Fund itself.
     - **Listing**: Open Ended Funds are not listed on any stock exchange. While listing of close ended funds are compulsory on any Stock Exchange.

   **Example**: The Unit Scheme -1964 (US- 64) was an open ended mutual fund scheme. Recently introduced Reliance Natural Resources Fund was also an Open Ended Mutual Fund. UTI has recently come up with new fund offer (NFO) with name "India Lifestyle Fund". This will be the three year close ended scheme.

2. **Portfolio Classification**: Funds are classified into Equity Funds, Debt Funds and Special Funds.
   - **Equity Funds**: Funds that invest in equity stocks. They are of the following types viz.
     - **Growth Funds**: They seek to provide long term capital appreciation to the investor and are best to long term investors
     - **Aggressive Funds**: They look for super normal returns for which investment is made in start-ups, IPOs and speculative shares. They are best to investors willing to take risks.
     - **Income Funds**: They seek to maximize present income of investors by investing in safe stocks paying high cash dividends and in high yield money market instruments. They are best to investors seeking current income
     - **Balanced Funds**: They are a mix of growth and income funds. They buy shares for growth and bonds for income and best for investors seeking to strike golden mean.
   - **Debt Funds**: Funds that invest in fixed income securities e.g. government bonds, corporate debentures, convertible debentures, money market. Investors seeking tax free income go in for government bonds while those looking for safe, steady income buy government bonds or high grade corporate bonds
     - **Bond Funds**: They are mainly invested in Government securities.
Special Funds are of four types viz.

(i) **Index Funds**: Every stock market has a stock index which measures the upward and downward sentiment of the stock market. Index Funds are low cost funds and influence the stock market. The investor will receive whatever the market delivers.

(ii) **International Funds**: A mutual fund located in India to raise money in India for investing globally.

(iii) **Offshore Funds**: A mutual fund located in India to raise money globally for investing in India.

(iv) **Sector Funds**: They invest their entire fund in a particular industry e.g. utility fund for utility industry like power, gas, public works.

3. **Ownership Classification**: Funds are classified into Public Sector Mutual Funds, Private Sector Mutual Funds, Foreign Mutual Funds,

- Public Sector Mutual Funds are sponsored by a company of the public sector.
- Private Sector Mutual Funds are sponsored by a company of the private sector.
- Foreign Mutual Funds are sponsored by companies for raising funds in India, operate from India and invest in India.

**Q. No. 3 : What are the various schemes under mutual fund?**

1. **Balanced Funds**
   Balanced funds make strategic allocation to both debt as well as equities. It mainly works on the premise that while the debt portfolio of the scheme provides stability, the equity one provides growth. It can be an ideal option for those who do not like total exposure to equity, but only substantial exposure. Such funds provide moderate returns to the investors as the investors are neither taking too high risk nor too low a risk.

2. **Equity Diversified Funds**
   A Diversified funds is a fund that contains a wide array of stocks. The fund manager of a diversified fund ensures a high level of diversification in its holdings, thereby reducing the amount of risk in the fund.
   - **Flexicap/Multicap Fund**: These are by definition, diversified funds. The only difference is that unlike a normal diversified fund, the offer document of a multi-cap/flexi-cap fund generally spells out the limits for minimum and maximum exposure to each of the market caps.
   - **Contra fund**: A contra fund invests in those out-of-favour companies that have unrecognised value. It is ideally suited for investors who want to invest in a fund that has the potential to perform in all types of market environments as it blends together both growth and value opportunities. Investors who invest in contra funds have an aggressive risk appetite.
   - **Index fund**: An index fund seeks to track the performance of a benchmark market index like the BSE Sensex or S&P CNX Nifty. Simply put, the fund maintains the portfolio of all the securities in the same proportion as stated in the benchmark index and earns the same return as earned by the market.
   - **Dividend Yield fund**: A dividend yield fund invests in shares of companies having high dividend yields. Dividend yield is defined as dividend per share dividend by the share’s market price. Most of these funds invest in stocks of companies having a dividend yield higher than the dividend yield of a particular index, i.e., Sensex or Nifty. The prices of dividend yielding stocks are generally less volatile than growth stocks. Besides, they also offer the potential to appreciate.
among diversified equity funds, dividend yield funds are considered to be a medium-risk proposition. However, it is important to note that dividend yield funds have not always proved resilient in short-term corrective phases. Dividend yield schemes are of two types:

- **Dividend Payout Option**: Dividends are paid out to the unit holders under this option. However, the NAV of the units falls to the extent of the dividend paid out and applicable statutory levies.

- **Dividend Re-investment Option**: The dividend that accrues on units under option is re-invested back into the scheme at ex-dividend NAV. Hence investors receive additional units on their investments in lieu of dividends.

3. **Equity Linked Tax Savings Scheme**

ELSS is one of the options for investors to save taxes under Section 80 C of the Income Tax Act. They also offer the perfect way to participate in the growth of the capital market, having a lock-in-period of three years. Besides, ELSS has the potential to give better returns than any traditional tax savings instrument.

Moreover, by investing in an ELSS through a Systematic Investment Plan (SIP), one can not only avoid the problem of investing a lump sum towards the end of the year but also take advantage of “averaging”.

4. **Sector Funds**

These funds are highly focused on a particular industry. The basic objective is to enable investors to take advantage of industry cycles. Since sector funds ride on market cycles, they have the potential to offer good returns if the timing is perfect. However, they are bereft of downside risk protection as available in diversified funds.

Sector funds should constitute only a limited portion of one’s portfolio, as they are much riskier than a diversified fund. Besides, only those who have an existing portfolio should consider investing in these funds.

For example, Real Estate Mutual Funds invest in real estate properties and earn income in the form of rentals, capital appreciation from developed properties. Also some part of the fund corpus is invested in equity shares or debentures of companies engaged in real estate assets or developing real estate development projects. REMFs are required to be close-ended in nature and listed on a stock exchange.

5. **Thematic Funds**

A Thematic fund focuses on trends that are likely to result in the ‘out-performance’ by certain sectors or companies. The theme could vary from multi-sector, international exposure, commodity exposure etc. Unlike a sector fund, theme funds have a broader outlook.

However, the downside is that the market may take a longer time to recognize views of the fund house with regards to a particular theme, which forms the basis of launching a fund.

6. **Arbitrage Funds**

Typically these funds promise safety of deposits, but better returns, tax benefits and greater liquidity. Pru-ICICI is the latest to join the list with its equities and derivatives funds.

The open ended equity scheme aims to generate low volatility returns by inverting in a mix of cash equities, equity derivatives and debt markets. The fund seeks to provide better returns than typical debt instruments and lower volatility in comparison to equity.

This fund is aimed at an investor who seeks the return of small savings instruments, safety of bank deposits, tax benefits of RBI relief bonds and liquidity of a mutual fund.

Arbitrage fund finally seeks to capitalize on the price differentials between the spot and the futures market.
The other schemes in the arbitrage universe are Benchmark Derivative, JM Equity and Derivatives, Prudential ICICI Balanced, UTI Spread and Prudential ICICI Equity and Derivatives.

7. Hedge Fund

A hedge fund (there are no hedge funds in India) is a lightly regulated investment fund that escapes most regulations by being a sort of a private investment vehicle being offered to selected clients.

The big difference between a hedge fund and a mutual fund is that the former does not reveal anything about its operations publicly and charges a performance fee. Typically, if it outperforms a benchmark, it take a cut off the profits. Of course, this is a one way street, any losses are borne by the investors themselves. Hedge funds are aggressively managed portfolio of investments which use advanced investment strategies such as leveraged, long, short and derivative positions in both domestic and international markets with the goal of generating high returns (either in an absolute sense or over a specified market benchmark). It is important to note that hedging is actually the practice of attempting to reduce risk, but the goal of most hedge funds is to maximize return on investment.

8. Cash Fund

Cash Fund is an open ended liquid scheme that aims to generate returns with lower volatility and higher liquidity through a portfolio of debt and money market instrument.

The fund will have retail institutional and super institutional plans. Each plan will offer growth and dividend options. The minimum initial investment for the institutional plan is ₹ 1 crore and the super institutional is ₹ 25 crore. For the retail plan, the minimum initial investment is ₹ 5,000/-. The fund has no entry or exit loads. Investors can invest even through the Systematic Investment Planning (SIP) route with a minimum amount of ₹ 500 per instalment with the total of all instalments not being less than ₹ 5,000/-.

Q. No. 4 : What is exchange traded fund ? What are its advantages ?

❖ An Exchange Traded Fund (ETF) is a hybrid product that combines the features of an index fund. These funds are listed on the stock exchanges and their prices are linked to the underlying index. The authorized participants act as market makers for ETFs.

❖ ETFs can be bought and sold like any other stock on an exchange. In other words, ETFs can be bought or sold any time during the market hours at prices that are expected to be closer to the NAV at the end of the day. Therefore, one can invest at real time prices as against the end of the day prices as is the case with open-ended schemes.

❖ There is no paper work involved for investing in an ETF. These can be bought like any other stock by just placing an order with a broker. ETFs may be attractive as investments because of their low costs, tax efficiency, and stock-like features. An ETF combines the valuation feature of a mutual fund or unit investment trust, which can be bought or sold at the end of each trading day for its net asset value, with the tradability feature of a closed-end fund, which trades throughout the trading day at prices that may be more or less than its net asset value. Following types of ETF products are available in the market:

➢ **Index ETFs** : Most ETFs are index funds that hold securities and attempt to replicate the performance of a stock market index.

➢ **Commodity ETFs** : Commodity ETFs invest in commodities, such as precious metals and futures.

➢ **Bond ETFs** : Exchange-traded funds that invest in bonds are known as bond ETFs. They thrive during economic recessions because investors pull their money out of the stock market and into bonds (for example, government treasury bonds or those issues by companies regarded as financially stable). Because of this cause and effect relationship, the performance of bond ETFs may be indicative of broader economic conditions.
➢ Currency ETFs: The funds are total return products where the investor gets access to the FX spot change, local institutional interest rates and a collateral yield.

Some other important advantages of ETF are as follows:

1. It gives an investor the benefit of investing in a commodity without physically purchasing the commodity like gold, silver, sugar etc.
2. It is launched by an asset management company or other entity.
3. The investor does not need to physically store the commodity or bear the costs of upkeep which is part of the administrative costs of the fund.
4. An ETF combines the valuation feature of a mutual fund or unit investment trust, which can be bought or sold at the end of each trading day for its net asset value, with the tradability feature of a closed ended fund, which trades throughout the trading day at prices that may be more or less than its net asset value.

Q. No. 5: What are the advantages of Mutual Fund?

(a) Professional Management: The funds are managed by skilled and professionally experienced managers with a back up of a Research team.

(b) Diversification: Mutual Funds offer diversification in portfolio which reduces the risk.

(c) Convenient Administration: There are no administrative risks of share transfer, as many of the Mutual Funds offer services in a demat form which save investor’s time and delay.

(d) Higher Returns: Over a medium to long-term investment, investors always get higher returns in Mutual Funds as compared to other avenues of investment. This is already seen from excellent returns, Mutual Funds have provided in the last few years. However, investors are cautioned that such high returns riding on the IT boom should not be taken as regular returns and therefore one should look at the average returns provided by the Mutual Funds particularly in the equity schemes during the last couple of years.

(e) Low Cost of Management: No Mutual Fund can increase the cost beyond prescribed limits of 2.5% maximum and any extra cost of management is to be borne by the AMC.

(f) Liquidity: In all the open ended funds, liquidity is provided by direct sales / repurchase by the Mutual Fund and in case of close ended funds, the liquidity is provided by listing the units on the Stock Exchange.

(g) Transparency: The SEBI Regulations now compel all the Mutual Funds to disclose their portfolios on a half-yearly basis. However, many Mutual Funds disclose this on a quarterly or monthly basis to their investors. The NAVs are calculated on a daily basis in case of open ended funds and are now published through AMFI in the newspapers.

(h) Other Benefits: Mutual Funds provide regular withdrawal and systematic investment plans according to the need of the investors. The investors can also switch from one scheme to another without any load.

(i) Highly Regulated: Mutual Funds all over the world are highly regulated and in India all Mutual Funds are registered with SEBI and are strictly regulated as per the Mutual Fund Regulations which provide excellent investor protection.

(j) Economies of scale: The way mutual funds are structured gives it a natural advantage. The “pooled” money from a number of investors ensures that mutual funds enjoy economies of scale; it is cheaper compared to investing directly in the capital markets which involves higher charges. This also allows retail investors access to high entry level markets like real estate, and also there is a greater control over costs.
(k) Flexibility: There are a lot of features in a regular mutual fund scheme, which imparts flexibility to the scheme. An investor can opt for Systematic Investment Plan (SIP), Systematic Withdrawal Plan etc. to plan his cash flow requirements as per his convenience. The wide range of schemes being launched in India by different mutual funds also provides an added flexibility to the investor to plan his portfolio accordingly.

Q. No. 6: What are the drawbacks of Mutual Fund?

(a) No guarantee of Return: There are three issues involved:

(i) All Mutual Funds cannot be winners. There may be some who may underperform the benchmark index i.e. it may not even perform well as a novice who invests in the stocks constituting the index.

(ii) A mutual fund may perform better than the stock market but this does not necessarily lead to a gain for the investor. The market may have risen and the mutual fund scheme increased in value but the investor would have got the same increase had he invested in risk free investments than in mutual fund.

(iii) Investors may forgive if the return is not adequate. But they will not do so if the principal is eroded. Mutual Fund investment may depreciate in value.

(b) Diversification: A mutual fund helps to create a diversified portfolio. Though diversification minimizes risk, it does not ensure maximizing returns. The returns that mutual funds offer are less than what an investor can achieve. For example, if a single security held by a mutual fund doubles in value, the mutual fund itself would not double in value because that security is only one small part of the fund's holdings. By holding a large number of different investments, mutual funds tend to do neither exceptionally well nor exceptionally poor.

(c) Selection of Proper Fund: It may be easier to select the right share rather than the right fund. For stocks, one can base his selection on the parameters of economic, industry and company analysis. In case of mutual funds, past performance is the only criteria to fall back upon. But past cannot predict the future.

(d) Cost Factor: Mutual Funds carry a price tag. Fund Managers are the highest paid executives. While investing, one has to pay for entry load and when leaving he has to pay for exit load. Such costs reduce the return from mutual fund. The fees paid to the Asset Management Company is in no way related to performance.

(e) Unethical Practices: Mutual Funds may not play a fair game. Each scheme may sell some of the holdings to its sister concerns for substantive notional gains and posting NAVs in a formalized manner.

(f) Taxes: When making decisions about your money, fund managers do not consider your personal tax situations. For example when a fund manager sells a security, a capital gain tax is triggered, which affects how profitable the individual is from sale. It might have been more profitable for the individual to defer the capital gain liability.

(g) Transfer Difficulties: Complications arise with mutual funds when a managed portfolio is switched to a different financial firm. Sometimes the mutual fund positions have to be closed out before a transfer can happen. This can be a major problem for investors. Liquidating a mutual fund portfolio may increase risk, increase fees and commissions, and create capital gains taxes.
Q. No. 1 : What is Derivatives, its uses & Difference between Cash & Derivative Market?

Derivative is a product whose value is to be derived from the value of one or more basic variables called bases (underlying assets, index or reference rate). The underlying assets can be Equity, Forex, and Commodity. The underlying has a marketable value which is subject to market risks. The importance of underlying in derivative instruments is as follows:

➢ All derivative instruments are dependent on an underlying to have value.
➢ The change in value in a forward contract is broadly equal to the change in value in the underlying.
➢ In the absence of a valuable underlying asset the derivative instrument will have no value.
➢ On maturity, the position of profit/loss is determined by the price of underlying instruments. If the price of the underlying is higher than the contract price the buyer makes a profit. If the price is lower, the buyer suffers a loss.

Main users of Derivatives are as follows:

<table>
<thead>
<tr>
<th>Users</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Corporation</td>
<td>To hedge currency risk and inventory risk</td>
</tr>
<tr>
<td>(b) Individual Investors</td>
<td>For speculation, hedging and yield enhancement.</td>
</tr>
<tr>
<td>(c) Institutional Investor</td>
<td>For hedging asset allocation, yield enhancement and to avail arbitrage opportunities.</td>
</tr>
<tr>
<td>(d) Dealers</td>
<td>For hedging position taking, exploiting inefficiencies and earning dealer spreads.</td>
</tr>
</tbody>
</table>

The basic differences between Cash and the Derivative market are enumerated below:

(a) In cash market tangible assets are traded whereas in derivative market contracts based on tangible or intangibles assets like index or rates are traded.
(b) In cash market, we can purchase even one share whereas in Futures and Options minimum lots are fixed.
(c) Cash market is more risky than Futures and Options segment because in “Futures and Options” risk is limited upto 20%.
(d) Cash assets may be meant for consumption or investment. Derivate contracts are for hedging, arbitrage or speculation.
(e) The value of derivative contract is always based on and linked to the underlying security. However, this linkage may not be on point-to-point basis.
(f) In the cash market, a customer must open securities trading account with a securities depository whereas to trade futures a customer must open a future trading account with a derivative broker.
(g) Buying securities in cash market involves putting up all the money upfront whereas buying futures simply involves putting up the margin money.
(h) With the purchase of shares of the company in cash market, the holder becomes part owner of the company. While in future it does not happen.
### Q. No. 2 : Difference between Forward & Future Contracts.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Features</th>
<th>Forward</th>
<th>Futures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Trading</td>
<td>Forward contracts are traded on personal basis or on telephone or otherwise.</td>
<td>Futures Contracts are traded in a competitive arena.</td>
</tr>
<tr>
<td>2.</td>
<td>Size of Contract</td>
<td>Forward contracts are individually tailored and have no standardized size</td>
<td>Futures contracts are standardized in terms of quantity or amount as the case may be</td>
</tr>
<tr>
<td>3.</td>
<td>Organized exchanges</td>
<td>Forward contracts are traded in an over the counter market.</td>
<td>Futures contracts are traded on organized exchanges with a designated physical location.</td>
</tr>
<tr>
<td>4.</td>
<td>Settlement</td>
<td>Forward contracts settlement takes place on the date agreed upon between the parties.</td>
<td>Futures contracts settlements are made daily via. Exchange’s clearing house.</td>
</tr>
<tr>
<td>5.</td>
<td>Delivery date</td>
<td>Forward contracts may be delivered on the dates agreed upon and in terms of actual delivery.</td>
<td>Futures contracts delivery dates are fixed on cyclical basis and hardly takes place. However, it does not mean that there is no actual delivery.</td>
</tr>
<tr>
<td>6.</td>
<td>Transaction costs</td>
<td>Cost of forward contracts is based on bid – ask spread.</td>
<td>Futures contracts entail brokerage fees for buy and sell order</td>
</tr>
<tr>
<td>7.</td>
<td>Marking to market</td>
<td>Forward contracts are not subject to marking to market</td>
<td>Futures contracts are subject to marking to market in which the loss on profit is debited or credited in the margin account on daily basis due to change in price.</td>
</tr>
<tr>
<td>8.</td>
<td>Margins</td>
<td>Margins are not required in forward contract.</td>
<td>In futures contracts every participants is subject to maintain margin as decided by the exchange authorities</td>
</tr>
<tr>
<td>9.</td>
<td>Credit risk</td>
<td>In forward contract, credit risk is born by each party and, therefore, every party has to bother for the creditworthiness.</td>
<td>In futures contracts the transaction is a two way transaction, hence the parties need not to bother for the risk.</td>
</tr>
</tbody>
</table>

### Q. No. 3 : Write a short note on Marking to Market?

**Marking to Market:**

It implies the process of recording the investments in traded securities (shares, debt-instruments, etc.) at a value, which reflects the market value of securities on the reporting date. In the context of derivatives trading, the futures contracts are marked to market on periodic (or daily) basis. Marking to market essentially means that at the end of a trading session, all outstanding contracts are repriced at the settlement price of that session. Unlike the forward contracts, the future contracts are repriced every day. Any loss or profit resulting from repricing would be debited or credited to the margin account of the broker. It, therefore, provides an opportunity to calculate the extent of liability on the basis of repricing. Thus, the futures contracts provide better risk management measure as compared to forward contracts.

### Q. No. 4 : Stock index futures is most popular financial derivatives over stock futures

Stock index futures is most popular financial derivatives over stock futures due to following reasons:
1. It adds flexibility to one’s investment portfolio. Institutional investors and other large equity holders prefer the most this instrument in terms of portfolio hedging purpose. The stock systems do not provide this flexibility and hedging.

2. It creates the possibility of speculative gains using leverage. Because a relatively small amount of margin money controls a large amount of capital represented in a stock index contract, a small change in the index level might produce a profitable return on one’s investment if one is right about the direction of the market. Speculative gains in stock futures are limited but liabilities are greater.

3. Stock index futures are the most cost efficient hedging device whereas hedging through individual stock futures is costlier.

4. Stock index futures cannot be easily manipulated whereas individual stock price can be exploited more easily.

5. Since, stock index futures consists of many securities, so being an average stock, is much less volatile than individual stock price. Further, it implies much lower capital adequacy and margin requirements in comparison of individual stock futures. Risk diversification is possible under stock index future than in stock futures.

6. One can sell contracts as readily as one buys them and the amount of margin required is the same.

7. In case of individual stocks the outstanding positions are settled normally against physical delivery of shares. In case of stock index futures they are settled in cash all over the world on the premise that index value is safely accepted as the settlement price.

8. It is also seen that regulatory complexity is much less in the case of stock index futures in comparison to stock futures.

9. It provides hedging or insurance protection for a stock portfolio in a falling market.

Q. No. 5 : What are the assumptions of Black-Scholes Model?

The following assumptions accompany the model:

1. European Options are considered,
2. No transaction costs,
3. Short term interest rates are known and are constant,
4. Stocks do not pay dividend,
5. Stock price movement is similar to a random walk,
6. Stock returns are normally distributed over a period of time, and
7. The variance of the return is constant over the life of an Option.

Q. No. 6 : What are the Factors affecting the value of an Option?

There are a number of different mathematical formulae, or models, that are designed to compute the fair value of an option. You simply input all the variables (stock price, time, interest rates, dividends and future volatility), and you get an answer that tells you what an option should be worth. Here are the general effects the variables have on an option's price:

(a) **Price of the Underlying**: The value of calls and puts are affected by changes in the underlying stock price in a relatively straightforward manner. When the stock price goes up, calls should gain in value and puts should decrease. Put options should increase in value and calls should drop as the stock price falls.

(b) **Time**: The option's future expiry, at which time it may become worthless, is an important and key factor of every option strategy. Ultimately, time can determine whether your option trading decisions are profitable.
To make money in options over the long term, you need to understand the impact of time on stock and option positions.

With stocks, time is a trader's ally as the stocks of quality companies tend to rise over long periods of time. But time is the enemy of the options buyer. If days pass without any significant change in the stock price, there is a decline in the value of the option. Also, the value of an option declines more rapidly as the option approaches the expiration day. That is good news for the option seller, who tries to benefit from time decay, especially during that final month when it occurs most rapidly.

(c) **Volatility:** The beginning point of understanding volatility is a measure called statistical (sometimes called historical) volatility, or SV for short. SV is a statistical measure of the past price movements of the stock; it tells you how volatile the stock has actually been over a given period of time.

(d) **Interest Rate:** Another feature which affects the value of an Option is the time value of money. The greater the interest rates, the present value of the future exercise price is less.

**Q. No. 7 : Define the term Greeks with respect to options.**

1) **Delta**

A by-product of the Black-Scholes model is the calculation of the delta. It is the degree to which an option price will move given a small change in the underlying stock price. For example, an option with a delta of 0.5 will move half a rupee for every full rupee movement in the underlying stock.

A deeply out-of-the-money call will have a delta very close to zero; a deeply in-the-money call will have a delta very close to 1.

The formula for a delta of a European call on a non-dividend paying stock is: \( \text{Delta} = N(d_1) \) (see Black-Scholes formula above for \( d_1 \))

Call deltas are positive; put deltas are negative, reflecting the fact that the put option price and the underlying stock price are inversely related. The put delta equals the call delta - 1.

The delta is often called the hedge ratio: If you have a portfolio short 'n' options (e.g. you have written n calls) then n multiplied by the delta gives you the number of shares (i.e. units of the underlying) you would need to create a riskless position - i.e. a portfolio which would be worth the same whether the stock price rose by a very small amount or fell by a very small amount. In such a "delta neutral" portfolio any gain in the value of the shares held due to a rise in the share price would be exactly offset by a loss on the value of the calls written, and vice versa.

Note that as the delta changes with the stock price and time to expiration the number of shares would need to be continually adjusted to maintain the hedge. How quickly the delta changes with the stock price are given by gamma.

In addition to delta there are some other "Greeks" which some find useful when constructing option strategies.

2) **Gamma**

It measures how fast the delta changes for small changes in the underlying stock price. i.e. the delta of the delta. If you are hedging a portfolio using the delta-hedge technique described under "Delta", then you will want to keep gamma as small as possible, the smaller it is the less often you will have to adjust the hedge to maintain a delta neutral position. If gamma is too large, a small change in stock price could wreck your hedge. Adjusting gamma, however, can be tricky and is generally done using options.

3) **Theta**

The change in option price given a one day decrease in time to expiration. Basically it is a measure of time decay. Unless you and your portfolio are travelling at close to the speed of light the passage of time is
constant and inexorable. Thus, hedging a portfolio against time decay, the effects of which are completely predictable, would be pointless.

4) **Rho**

The change in option price given a one percentage point change in the risk-free interest rate. It is sensitivity of option value to change in interest rate. Rho indicates the absolute change in option value for a one percent change in the interest rate. For example, a Rho of .060 indicates the option's theoretical value will increase by .060 if the interest rate is decreased by 1.0.

5) **Vega**

Sensitivity of option value to change in volatility. Vega indicates an absolute change in option value for a one percent change in volatility. For example, a Vega of .090 indicates an absolute change in the option's theoretical value will increase by .090 if the volatility percentage is increased by 1.0 or decreased by .090 if the volatility percentage is decreased by 1.0. Results may not be exact due to rounding. It can also be stated as the change in option price given a one percentage point change in volatility. Like delta and gamma, Vega is also used for hedging.

Q. No. 8 : Write a short note on Embedded Derivatives.

- An embedded derivative is a derivative instrument that is embedded in another contract - the host contract. The host contract might be a debt or equity instrument, a lease, an insurance contract or a sale or purchase contract. Derivatives require to be marked-to-market through the income statement, other than qualifying hedging instruments. This requirement on embedded derivatives are designed to ensure that mark-to-market through the income statement cannot be avoided by including - embedding - a derivative in another contract or financial instrument that is not marked-to-market through the income statement.

- A coal purchase contract may include a clause that links the price of the coal to a pricing formula based on the prevailing electricity price or a related index at the date of delivery. The coal purchase contract, which qualifies for the executory contract exemption, is described as the host contract, and the pricing formula is the embedded derivative. The pricing formula is an embedded derivative because it changes the price risk from the coal price to the electricity price.

- An embedded derivative that modifies an instrument's inherent risk (such as a fixed to floating interest rate swap) would be considered closely related. Conversely, an embedded derivative that changes the nature of the risks of a contract is not closely related.

- Most equity- or commodity-linked features embedded in a debt instrument will not be closely related. This includes puts that force the issuer to reacquire an instrument based on changes in commodity price or index, equity or commodity indexed interest or principal payments and equity conversion features. Puts or calls on equity instruments at specified prices (that is, not market on date of exercise) are seldom closely related, neither are calls, puts or prepayment penalties on debt instruments. Credit derivatives embedded in a host debt instrument are seldom closely related to it.

- The economic characteristics and risks of an embedded derivative are closely related to the economic characteristics and risks of the host contract when the host contract is a debt instrument and the embedded derivative is an interest rate floor or a cap out of the money when the instrument is issued. An entity would not account for the embedded derivative separately from the host contract. The same principle applies to caps and floors in a sale or purchase contract.

- Closely related- Examples of embedded derivatives that need not be separated
  - A derivative embedded in a host lease contract is closely related to the host contract if the embedded derivative comprises contingent rentals based on related sales;
  - An inflation index term in a debt instrument as long as it is not leveraged and relates to the inflation index in the economic environment in which the instrument is denominated or issued;
Not closely related - Examples of embedded derivatives that must be separated

- Equity conversion feature embedded in a debt instrument e.g. investment in convertible bonds;
- Option to extend the term of a debt instrument unless there is a concurrent adjustment of the interest rate to reflect market prices;
- Equity-indexed interest embedded in a debt instrument

Fair Valuing Embedded Derivatives: Embedded derivatives that are separated from the host contract are accounted for at fair value with changes in fair value taken through the income statement. Published price quotations in an active market are normally the best evidence of fair value.

Valuation techniques are used to determine the fair value of the derivative if there is no active market that matches the exact terms of the embedded derivative.

In the case of option derivatives (e.g. puts & calls), the embedded derivatives should be separated from the host contract and valued based on the stated terms of the option. It is assumed that an option derivative will not normally have a fair value of zero at initial recognition. In the case of non-option derivatives, the embedded derivatives should be separated from the host contract based on its stated and implied terms and is assumed to have a fair value of zero at initial recognition.
Q. No. 1 : Write a note on Nostro, Vostro & Loro Accounts.

**Nostro Account [Ours account with you]**
This is a current account maintained by a domestic bank/dealer with a foreign bank in foreign currency.
**Example:** Current account of SBI bank (an Indian Bank) with swizz bank in Swizz Franc. (CHF) is a Nostro account.

**Vostro Account [Yours account with us]**
This is a current account maintained by a foreign bank with a domestic bank/dealer in Rupee currency.
**Example:** Current account of Swizz bank in India with SBI bank in Rupee (₹) currency

**Loro Account [Our account of their Money with you]**
This is a current account maintained by one domestic bank on behalf of other domestic bank in foreign bank in a foreign currency.
In other words, Loro account is a Nostro account for one bank who opened the bank and Loro account for other bank who refers first one account.
**Example:** SBI opened Current account with swizz bank. If PNB refers that account of SBI for its correspondence, then it is called Loro account for PNB and it is Nostro account for SBI.
10.2 FOREIGN EXCHANGE EXPOSURE AND RISK MANAGEMENT

**Note:**
❖ SPOT purchase/sale of CHF affects both exchange position as well as Nostro account.
❖ However, forward purchase/sale affects only the exchange position.

1. **Nostro A/c (Cash A/c) in Foreign Currency**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Dr. [Debit] outflow of Dollars (FC)</th>
<th>Cr. [Credit] Inflow of Dollars (FC)</th>
</tr>
</thead>
</table>

2. **Exchange Position A/c**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Long Dollar Buy (FC)</th>
<th>Short Dollar Sell (FC)</th>
</tr>
</thead>
</table>

**Q. No. 2 : What is the meaning of:**

(i) **Interest Rate Parity**

(ii) **Purchasing Power Parity**?

(iii) **International Fishers Effect (IFE)**

**Interest Rate Parity (IRP)**
❖ Interest rate parity is a theory which states that ‘the size of the forward premium (or discount) should be equal to the interest rate differential between the two countries of concern”. When interest rate parity exists, covered interest arbitrage (means foreign exchange risk is covered) is not feasible, because any interest rate advantage in the foreign country will be offset by the discount on the forward rate. Thus, the act of covered interest arbitrage would generate a return that is no higher than what would be generated by a domestic investment.

The Covered Interest Rate Parity equation is given by:

\[
(1 + r_D) = \frac{F}{S} (1 + r_F)
\]

Where

\[(1 + r_D) = \text{Amount that an investor would get after a unit period by investing a rupee in the domestic market at } r_D \text{ rate of interest and } \frac{F}{S} (1 + r_F) \text{ is the amount that an investor by investing in the foreign market at } r_F \text{ that the investment of one rupee yield same return in the domestic as well as in the foreign market.}

Thus IRP is a theory which states that the size of the forward premium or discount on a currency should be equal to the interest rate differential between the two countries of concern.

**Purchasing Power Parity (PPP)**
❖ Purchasing Power Parity theory focuses on the ‘inflation– exchange rate’ relationship. There are two forms of PPP theory:-

❖ The ABSOLUTE FORM, also called the ‘Law of One Price’ suggests that “prices of similar products of two different countries should be equal when measured in a common currency”. If a discrepancy in prices as measured by a common currency exists, the demand should shift so that these prices should converge.

❖ The RELATIVE FORM is an alternative version that accounts for the possibility of market imperfections such as transportation costs, tariffs, and quotas. It suggests that ‘because of these market imperfections, prices of similar products of different countries will not necessarily be the same when measured in a common currency.’ However, it states that the rate of change in the prices of products should be somewhat similar
when measured in a common currency, as long as the transportation costs and trade barriers are unchanged.

The formula for computing the forward rate taking the inflation rates in domestic and foreign countries is as follows:

$$E(S) = s_0 \times \frac{(1 + i_D)}{(1 + i_F)}$$

Where $F =$ Forward Rate of Foreign Currency and $S =$ Spot Rate

$$i_D = \text{Domestic Inflation Rate}$$ and $$i_F = \text{Inflation Rate in foreign country}$$

Thus PPP theory states that the exchange rate between two countries reflects the relative purchasing power of the two countries i.e. the price at which a basket of goods can be bought in the two countries.

**International Fisher Effect (IFE)**

- International Fisher Effect theory uses interest rate rather than inflation rate differentials to explain why exchange rates change over time, but it is closely related to the Purchasing Power Parity (PPP) theory because interest rates are often highly correlated with inflation rates.

- According to the International Fisher Effect, ‘nominal risk-free interest rates contain a real rate of return and anticipated inflation’. This means if investors of all countries require the same real return, interest rate differentials between countries may be the result of differential in expected inflation.

- The IFE theory suggests that foreign currencies with relatively high interest rates will depreciate because the high nominal interest rates reflect expected inflation. The nominal interest rate would also incorporate the default risk of an investment.

The IFE equation can be given by: $r_D - P_D = r_F - \Delta P_F$

or

$$P_D - P_F = \Delta S = r_D - r_F$$

- The above equation states that if there are no barriers to capital flows the investment will flow in such a manner that the real rate of return on investment will equalize. In fact, the equation represents the interaction between real sector, monetary sector and foreign exchange market.

- If the IFE holds, then a strategy of borrowing in one country and investing the funds in another country should not provide a positive return on average. The reason is that exchange rates should adjust to offset interest rate differentials on the average. As we know that purchasing power has not held over certain periods, and since the International Fisher Effect is based on Purchasing Power Parity (PPP). It does not consistently hold either, because there are factors other than inflation that affect exchange rates, the exchange rates do not adjust in accordance with the inflation differential.

**Q. No. 3 : “Operations in foreign exchange market are exposed to number of risks.” Discuss.**

A firm dealing with foreign exchange may be exposed to foreign currency exposures. The exposure is the result of possession of assets and liabilities and transactions denominated in foreign currency. When exchange rate fluctuates, assets, liabilities, revenues, expenses that have been expressed in foreign currency it will result in either foreign exchange gain or loss. A firm dealing with foreign exchange may be exposed to the following types of risks:

(i) **Transaction Exposure** : A firm may have some contractually fixed payments and receipts in foreign currency, such as, import payables, export receivables, interest payable on foreign currency loans etc. All such items are to be settled in a foreign currency. Unexpected fluctuation in exchange rate will have favourable or adverse impact on its cash flows. Such exposures are termed as transactions exposures.

(ii) **Translation Exposure** : The translation exposure is also called accounting exposure or balance sheet exposure. It is basically the exposure on the assets and liabilities shown in the balance sheet and which
are not going to be liquidated in the near future. It refers to the probability of loss that the firm may have to face because of decrease in value of assets due to devaluation of a foreign currency despite the fact that there was no foreign exchange transaction during the year.

(iii) **Economic Exposure**: Economic exposure measures the probability that fluctuations in foreign exchange rate will affect the value of the firm. The intrinsic value of a firm is calculated by discounting the expected future cash flows with appropriate discounting rate. The risk involved in economic exposure requires measurement of the effect of fluctuations in exchange rate on different future cash flows.

### Q. No. 4: Distinction between Futures and Forward Contracts

<table>
<thead>
<tr>
<th>Feature</th>
<th>Forward Contract</th>
<th>Futures Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
<td>Flexible</td>
<td>Standard amount</td>
</tr>
<tr>
<td>Maturity</td>
<td>Any valid business date agreed to by the two parties</td>
<td>Standard date. Usually one delivery date such as the second Tuesday of every month</td>
</tr>
<tr>
<td>Furthest maturity date</td>
<td>Open</td>
<td>12 months forward</td>
</tr>
<tr>
<td>Currencies traded</td>
<td>All currencies</td>
<td>Majors</td>
</tr>
<tr>
<td>Cross rates</td>
<td>Available in one contract; Multiple contracts avoided</td>
<td>Usually requires two contracts</td>
</tr>
<tr>
<td>Market-place</td>
<td>Global network</td>
<td>Regular markets — futures market and exchanges</td>
</tr>
<tr>
<td>Price fluctuations</td>
<td>No daily limit in many currencies</td>
<td>Daily price limit set by exchange</td>
</tr>
<tr>
<td>Risk</td>
<td>Depends on counter party</td>
<td>Minimal due to margin requirements</td>
</tr>
<tr>
<td>Honouring of contract</td>
<td>By taking and giving delivery</td>
<td>Mostly by a reverse transaction</td>
</tr>
<tr>
<td>Cash flow</td>
<td>None until maturity date</td>
<td>Initial margin plus ongoing variation margin because of market to market rate and final payment on maturity date</td>
</tr>
<tr>
<td>Trading hours</td>
<td>24 hours a day</td>
<td>4 - 8 hours trading sessions</td>
</tr>
</tbody>
</table>

### Q. No. 5: Distinction between Options and Futures

<table>
<thead>
<tr>
<th>Options</th>
<th>Futures</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Only the seller (writer) is obliged to perform</td>
<td>Both the parties are obligated to perform.</td>
</tr>
<tr>
<td>(b) Premium is paid by the buyer to the seller at the inception of the contract</td>
<td>No premium is paid by any party.</td>
</tr>
<tr>
<td>(c) Loss is restricted while there is unlimited gain potential for the option buyer.</td>
<td>There is potential/risk for unlimited gain/loss for the futures buyer.</td>
</tr>
<tr>
<td>(d) An American option contract can be exercised any time during its period by the buyer.</td>
<td>A futures contract has to be honoured by both the parties only on the date specified.</td>
</tr>
</tbody>
</table>
Q. No. 1: Write a note on Foreign Currency Convertible Bonds (FCCB’s).

❖ A type of convertible bond issued in a currency different than the issuer’s domestic currency. In other words, the money being raised by the issuing company is in the form of a foreign currency. A convertible bond is a mix between a debt and equity instrument. It acts like a bond by making regular coupon and principal payments, but these bonds also give the bondholder the option to convert the bond into stock.

❖ These types of bonds are attractive to both investors and issuers. The investors receive the safety of guaranteed payments on the bond and are also able to take advantage of any large price appreciation in the company’s stock. Bondholders take advantage of this appreciation by means of warrants attached to the bonds, which are activated when the price of the stock reaches a certain point. Due to the equity side of the bond, which adds value, the coupon payments on the bond are lower for the company, thereby reducing its debt-financing costs.

**Advantages of FCCBs**

(i) The convertible bond gives the investor the flexibility to convert the bond into equity at a price or redeem the bond at the end of a specified period, normally three years if the price of the share has not met his expectations.

(ii) Companies prefer bonds as it leads to delayed dilution of equity and allows company to avoid any current dilution in earnings per share that a further issuance of equity would cause.

(iii) FCCBs are easily marketable as investors enjoy the option of conversion into equity if resulting to capital appreciation. Further investor is assured of a minimum fixed interest earnings.

**Disadvantages of FCCBs**

(i) Exchange risk is more in FCCBs as interest on bonds would be payable in foreign currency. Thus companies with low debt equity ratios, large forex earnings potential only opt for FCCBs.

(ii) FCCBs mean creation of more debt and a forex outgo in terms of interest which is in foreign exchange.

(iii) In the case of convertible bonds, the interest rate is low, say around 3–4% but there is exchange risk on the interest payment as well as re-payment if the bonds are not converted into equity shares. The only major advantage would be that where the company has a high rate of growth in earnings and the conversion takes place subsequently, the price at which shares can be issued can be higher than the current market price.

Q. No. 2: Write short note on American Depository Receipts (ADRs).

❖ A depository receipt is basically a negotiable certificate denominated in US dollars that represent a non-US Company’s publicly traded local currency (INR) equity shares/securities. While the term refer to them as global depository receipts however, when such receipts are issued outside the US, but issued for trading in the US they are called ADRs.

❖ An ADR is generally created by depositing the securities of an Indian company with a custodian bank. In arrangement with the custodian bank, a depository in the US issues the ADRs. The ADR subscriber/holder in the US is entitled to trade the ADR and generally enjoy rights as owner of the underlying Indian security. ADRs with special/unique features have been developed over a period of time and the practice of issuing ADRs by Indian Companies is catching up.
Only such Indian companies that can stake a claim for international recognition can avail the opportunity to issue ADRs. The listing requirements in US and the US GAAP requirements are fairly severe and will have to be adhered. However if such conditions are met ADR becomes an excellent sources of capital bringing in foreign exchange.

These are depository receipts issued by a company in USA and are governed by the provisions of Securities and Exchange Commission of USA. As the regulations are severe, Indian companies tap the American market through private debt placement of GDRs listed in London and Luxemburg stock exchanges.

Apart from legal impediments, ADRs are costlier than Global Depository Receipts (GDRs). Legal fees are considerably high for US listing. Registration fee in USA is also substantial. Hence, ADRs are less popular than GDRs.

**Q. No. 3 : What is the impact of GDRs on Indian Capital Market?**

**Impact of GDRs on Indian Capital Market**

Since the inception of GDRs a remarkable change in Indian capital market has been observed as follows:

(i) Indian stock market to some extent is shifting from Bombay to Luxemburg.

(ii) There is arbitrage possibility in GDR issues.

(iii) Indian stock market is no longer independent from the rest of the world. This puts additional strain on the investors as they now need to keep updated with world wide economic events.

(iv) Indian retail investors are completely sidelin. GDRs/Foreign Institutional Investors' placements + free pricing implies that retail investors can no longer expect to make easy money on heavily discounted rights/public issues.

As a result of introduction of GDRs a considerable foreign investment has flown into India.

**Markets of GDRs**

(i) GDR's are sold primarily to institutional investors.

(ii) Demand is likely to be dominated by emerging market funds.

(iii) Switching by foreign institutional investors from ordinary shares into GDRs is likely.

(iv) Major demand is also in UK, USA (Qualified Institutional Buyers), South East Asia (Hong kong, Singapore), and to some extent continental Europe (principally France and Switzerland).

**Mechanism of GDR:** The mechanics of a GDR issue may be described with the help of following diagram.

![Mechanism of GDR Diagram](image-url)
Characteristics

(i) Holders of GDRs participate in the economic benefits of being ordinary shareholders, though they do not have voting rights.

(ii) GDRs are settled through CEDEL & Euro-clear international book entry systems.

(iii) GDRs are listed on the Luxemburg stock exchange.

(iv) Trading takes place between professional market makers on an OTC (over the counter) basis.

(v) The instruments are freely traded.

(vi) They are marketed globally without being confined to borders of any market or country as it can be traded in more than one currency.

(vii) Investors earn fixed income by way of dividends which are paid in issuer currency converted into dollars by depository and paid to investors and hence exchange risk is with investor.

(viii) As far as the case of liquidation of GDRs is concerned, an investor may get the GDR cancelled any time after a cooling off period of 45 days. A non-resident holder of GDRs may ask the overseas bank (depository) to redeem (cancel) the GDRs. In that case overseas depository bank shall request the domestic custodians bank to cancel the GDR and to get the corresponding underlying shares released in favour of non-resident investor. The price of the ordinary shares of the issuing company prevailing in the Bombay Stock Exchange or the National Stock Exchange on the date of advice of redemption shall be taken as the cost of acquisition of the underlying ordinary share.

Q. No. 4 : Write short note on Instruments of International Finance.

1) Euro-Convertible Bonds (ECBs)

A convertible bond is a debt instrument which gives the holders of the bond an option to convert the bond into a predetermined number of equity shares of the company. Usually, the price of the equity shares at the time of conversion will have a premium element. The bonds carry a fixed rate of interest. If the issuer company desires, the issue of such bonds may carry two options viz.

(i) Call Options: (Issuer's option) - where the terms of issue of the bonds contain a provision for call option, the issuer company has the option of calling (buying) the bonds for redemption before the date of maturity of the bonds. Where the issuer's share price has appreciated substantially, i.e. far in excess of the redemption value of the bonds, the issuer company can exercise the option. This call option forces the investors to convert the bonds into equity. Usually, such a case arises when the share prices reach a stage near 130% to 150% of the conversion price.

(ii) Put options - A provision of put option gives the holder of the bonds a right to put (sell) his bonds back to the issuer company at a pre-determined price and date. In case of Euro-convertible bonds, the payment of interest on and the redemption of the bonds will be made by the issuer company in US dollars.

2) Other Sources

(i) Euro Bonds: Plain Euro-bonds are nothing but debt instruments. These are not very attractive for an investor who desires to have valuable additions to his investments.

(ii) Euro-Convertible Zero Bonds: These bonds are structured as a convertible bond. No interest is payable on the bonds. But conversion of bonds takes place on maturity at a pre-determined price. Usually there is 5 years maturity period and they are treated as a deferred equity issue.

(iii) Euro-bonds with Equity Warrants: These bonds carry a coupon rate determined by the market rates. The warrants are detachable. Pure bonds are traded at a discount. Fixed income funds' managements may like to invest for the purposes of regular income.
(iv) **Syndicated bank loans:** One of the earlier ways of raising funds in the form of large loans from banks with good credit rating, can be arranged in reasonably short time and with few formalities. The maturity of the loan can be for a duration of 5 to 10 years. The interest rate is generally set with reference to an index, say, LIBOR plus a spread which depends upon the credit rating of the borrower. Some covenants are laid down by the lending institution like maintenance of key financial ratios.

(v) **Euro-bonds:** These are basically debt instruments denominated in a currency issued outside the country of that currency for examples Yen bond floated in France. Primary attraction of these bonds is the refuge from tax and regulations and provide scope for arbitraging yields. These are usually bearer bonds and can take the form of

(i) Traditional fixed rate bonds.
(ii) Floating rate Notes (FRNs)
(iii) Convertible Bonds.

(vi) **Foreign Bonds:** Foreign bonds are denominated in a currency which is foreign to the borrower and sold at the country of that currency. Such bonds are always subject to the restrictions and are placed by that country on the foreigners funds.

(vii) **Euro Commercial Papers:** These are short term money market securities usually issued at a discount, for maturities less than one year.

(viii) **Credit Instruments:** The foregoing discussion relating to foreign exchange risk management and international capital market shows that foreign exchange operations of banks consist primarily of purchase and sale of credit instruments. There are many types of credit instruments used in effecting foreign remittances. They differ in the speed, with which money can be received by the creditor at the other end after it has been paid in by the debtor at his end. The price or the rate of each instrument, therefore, varies with extent of the loss of interest and risk of loss involved. There are, therefore, different rates of exchange applicable to different types of credit instruments.

**Q. No. 5 : Write a short note on Leading and Lagging.**

- Leading means advancing a payment i.e. making a payment before it is due. Lagging involves postponing a payment i.e. delaying payment beyond its due date.

  In forex market Leading and lagging are used for two purposes:

  1) Hedging foreign exchange risk: A company can lead payments required to be made in a currency that is likely to appreciate. For example, a company has pay to $100000 after one month from today. The company apprehends the USD to appreciate. It can make the payment now. Leading involves a finance cost i.e. one month’s interest cost of money used for purchasing $100000.

  2) A company may lag the payment that it needs to make in a currency that it likely to depreciate, provided the receiving party agrees for this proposition. The receiving party may demand interest for this delay and that would be the cost of lagging. Decision regarding leading and lagging should be made after considering (i) likely movement in exchange rate (ii) interest cost and (iii) discount (if any).

**Q. No. 6 : Write a short note on Netting.**

- It is a technique of optimising cash flow movements with the combined efforts of the subsidiaries thereby reducing administrative and transaction costs resulting from currency conversion. There is a co-ordinated international interchange of materials, finished products and parts among the different units of MNC with many subsidiaries buying/selling from/to each other. Netting helps in minimising the total volume of inter-company fund flow.
Advantages derived from netting system includes:

1) Reduces the number of cross-border transactions between subsidiaries thereby decreasing the overall administrative costs of such cash transfers
2) Reduces the need for foreign exchange conversion and hence decreases transaction costs associated with foreign exchange conversion.
3) Improves cash flow forecasting since net cash transfers are made at the end of each period
4) Gives an accurate report and settles accounts through co-ordinated efforts among all subsidiaries

There are two types of Netting:

1) **Bilateral Netting System**: It involves transactions between the parent and a subsidiary or between two subsidiaries. If subsidiary X purchases $20 million worth of goods from subsidiary Y and subsidiary Y in turn buy $30 million worth of goods from subsidiary X, then the combined flows add up to $50 million. But in bilateral netting system subsidiary Y would pay subsidiary X only $10 million. Thus, bilateral netting reduces the number of foreign exchange transactions and also the costs associated with foreign exchange conversion. A more complex situation arises among the parent firm and several subsidiaries paving the way to multinational netting system.

2) **Multilateral Netting System**: Each affiliate nets all its inter affiliate receipts against all its disbursements. It transfers or receives the balance on the position of it being a net receiver or a payer thereby resulting in savings in transfer / exchange costs. For an effective multilateral netting system, these should be a centralised communication system along with disciplined subsidiaries. This type of system calls for the consolidation of information and net cash flow positions for each pair of subsidiaries.
INTEREST RATE RISK MANAGEMENT

Study Session 12

Q. No. 1 : What is Interest Rate Risk and what are the types of Interest Rate Risk?

1) How interest rates are determined

The factors affecting interest rates are largely macro-economic in nature:

(a) **Supply and Demand**: Demand/supply of money. When economic growth is high, demand for money increases, pushing the interest rates up and vice versa.

(b) **Inflation**: The higher the inflation rate, the more interest rates are likely to rise.

(c) **Government**: Government is the biggest borrower. The level of borrowing also determines the interest rates. Central bank i.e. RBI by either printing more notes or through its Open Market Operations (OMO) changes the key rates (CRR, SLR and bank rates) depending on the state of the economy or to combat inflation.

2) Interest Rate Risk

Interest risk is the change in prices of bonds that could occur because of change in interest rates. It also considers change in impact on interest income due to changes in the rate of interest. In other words, price as well as reinvestment risks require focus. Insofar as the terms for which interest rates were fixed on deposits differed from those for which they fixed on assets, banks incurred interest rate risk i.e., they stood to make gains or losses with every change in the level of interest rates.

3) Types of Interest Rate Risk

Various types of Interest rate risk faced by companies/ banks are as follows:

i) **Gap Exposure**

- A gap or mismatch risk arises from holding assets and liabilities and off-balance sheet items with different principal amounts, maturity dates or re-pricing dates, thereby creating exposure to unexpected changes in the level of market interest rates. This exposure is more important in relation to banking business.

- The positive Gap indicates that banks have more interest Rate Sensitive Assets (RSAs) than interest Rate Sensitive Liabilities (RSLs). A positive or asset sensitive Gap means that an increase in market interest rates could cause an increase in Net Interest Income (NII). Conversely, a negative or liability sensitive Gap implies that the banks’ NII could decline as a result of increase in market interest rates.

- A negative gap indicates that banks have more RSLs than RSAs. The Gap is used as a measure of interest rate sensitivity.

- Positive or Negative Gap is multiplied by the assumed interest rate changes to derive the Earnings at Risk (EaR). The EaR method facilitates to estimate how much the earnings might be impacted by an adverse movement in interest rates. The changes in interest rate could be estimated on the basis of past trends, forecasting of interest rates, etc. The banks should fix EaR which could be based on last/current year’s income and a trigger point at which the line management should adopt on-or off- balance sheet hedging strategies may be clearly defined.

- Gap calculations can be augmented by information on the average coupon on assets and liabilities in each time band and the same could be used to calculate estimates of the level of NII from positions maturing or due for repricing within a given time-band, which would then provide a scale to assess the changes in income implied by the gap analysis.
The periodic gap analysis indicates the interest rate risk exposure of banks over distinct maturities and suggests magnitude of portfolio changes necessary to alter the risk profile.

ii) **Basis Risk**

- Market interest rates of various instruments seldom change by the same degree during a given period of time. The risk that the interest rate of different assets, liabilities and off-balance sheet items may change in different magnitude is termed as basis risk. For example, while assets may be benchmarked to Fixed Rate of Interest, liabilities may be benchmarked to floating rate of interest. The degree of basis risk is fairly high in respect of banks that create composite assets out of composite liabilities. The Loan book in India is funded out of a composite liability portfolio and is exposed to a considerable degree of basis risk. The basis risk is quite visible in volatile interest rate scenarios.
- When the variation in market interest rate causes the NII to expand, the banks have experienced favourable basis shifts and if the interest rate movement causes the NII to contract, the basis has moved against the banks.

iii) **Embedded Option Risk**

- Significant changes in market interest rates create another source of risk to banks’ profitability by encouraging prepayment of cash credit/demand loans/term loans and exercise of call/put options on bonds/debentures and/or premature withdrawal of term deposits before their stated maturities. The embedded option risk is becoming a reality in India and is experienced in volatile situations. The faster and higher the magnitude of changes in interest rate, the greater will be the embedded option risk to the banks’ NII. Thus, banks should evolve scientific techniques to estimate the probable embedded options and adjust the Gap statements (Liquidity and Interest Rate Sensitivity) to realistically estimate the risk profiles in their balance sheet. Banks should also endeavour to stipulate appropriate penalties based on opportunity costs to stem the exercise of options, which is always to the disadvantage of banks.

iv) **Yield Curve Risk**

- In a floating interest rate scenario, banks may price their assets and liabilities based on different benchmarks, i.e. TBs yields, fixed deposit rates, call money rates, MIBOR, etc. In case the banks use two different instruments maturing at different time horizon for pricing their assets and liabilities, any non-parallel movements in yield curves would affect the NII. The movements in yield curve are rather frequent when the economy moves through business cycles. Thus, banks should evaluate the movement in yield curves and the impact of that on the portfolio values and income.

v) **Price Risk**

- Price risk occurs when assets are sold before their stated maturities. In the financial market, bond prices and yields are inversely related. The price risk is closely associated with the trading book, which is created for making profit out of short-term movements in interest rates.
- Banks which have an active trading book should, therefore, formulate policies to limit the portfolio size, holding period, duration, defeasance period, stop loss limits, marking to market, etc.

vi) **Reinvestment Risk**

- Uncertainty with regard to interest rate at which the future cash flows could be reinvested is called reinvestment risk. Any mismatches in cash flows would expose the banks to variations in NII as the market interest rates move in different directions.

vii) **Net Interest Position Risk**

- The size of non-paying liabilities is one of the significant factors contributing towards profitability of banks. Where banks have more earning assets than paying liabilities, interest rate risk arises
when the market interest rates adjust downwards. Thus, banks with positive net interest positions will experience a reduction in NII as the market interest rate declines and increases when interest rate rises. Thus, large float is a natural hedge against the variations in interest rates.

Q. No. 2 : Explain the meaning of the following relating to Swap transactions:

(i) **Plain Vanilla Swaps**
(ii) **Basis Rate Swaps**
(iii) **Asset Swaps**
(iv) **Amortising Swaps**

(a) **Plain Vanilla Swap**: Also called Generic Swap and it involves the exchange of a fixed rate loan to a floating rate loan. Floating rate basis can be LIBOR, MIBOR, Prime Lending Rate etc.

For example, Fixed interest payments on a generic swap are calculated assuming each month has 30 days and the quoted interest rate is based on a 360-day year. Given an All-In-Cost of the swap, the semi-annual fixed-rate payment would be:

\[(N)(AIC)(180/360),\]

Where,

\(N\) denotes the notional principal amount of the agreement.
\(AIC\) denotes the fixed rate

Then, the floating-rate receipt is determined by the formula:

\[(N)(R)(dt/360)\]

Where,

\(dt\) denote the number of days since the last settlement date
\(R\) denotes the reference rate such as LIBOR, MIBOR etc.

(b) **Basis Rate Swap**: Also, called Non-Generic Swap. Similar to plain vanilla swap with the difference payments based on the difference between two different variable rates. For example one rate may be 1 month LIBOR and other may be 3-month LIBOR. In other words two legs of swap are floating but measured against different benchmarks.

(c) **Asset Swap**: Like plain vanilla swaps with the difference that it is the exchange fixed rate investments such as bonds which pay a guaranteed coupon rate with floating rate investments such as an index.

(d) **Amortising Swap**: An interest rate swap in which the notional principal for the interest payments declines during the life of the swap. They are particularly useful for borrowers who have issued redeemable bonds or debentures. It enables them to interest rate hedging with redemption profile of bonds or debentures.

Q. No. 3 : What do you know about swaptions and their uses?

❖ An interest rate swaption is simply an option on an interest rate swap. It gives the holder the right but not the obligation to enter into an interest rate swap at a specific date in the future, at a particular fixed rate and for a specified term.

There are two types of swaption contracts: -

➢ **A fixed rate payer swaption** gives the owner of the swaption the right but not the obligation to enter into a swap where they pay the fixed leg and receive the floating leg.
A **fixed rate receiver swaption** gives the owner of the swaption the right but not the obligation to enter into a swap in which they will receive the fixed leg, and pay the floating leg.

1) **Principal Features of Swaptions**
   
   A. A swaption is effectively an option on a forward-start IRS, where exact terms such as the fixed rate of interest, the floating reference interest rate and the tenor of the IRS are established upon conclusion of the swaption contract.
   
   B. A 3-month into 5-year swaption would therefore be seen as an option to enter into a 5-year IRS, 3 months from now.
   
   C. The 'option period' refers to the time which elapses between the transaction date and the expiry date.
   
   D. The swaption premium is expressed as basis points.
   
   E. Swaptions can be cash-settled; therefore at expiry they are marked to market off the applicable forward curve at that time and the difference is settled in cash.

2) **Pricing of Swaptions**

   The pricing methodology depends upon setting up a model of probability distribution of the forward zero-coupon curve which undoes a Market process.

3) **Uses of Swaptions**

   a) Swaptions can be applied in a variety of ways for both active traders as well as for corporate treasurers.
   
   b) Swap traders can use them for speculation purposes or to hedge a portion of their swap books.
   
   c) Swaptions have become useful tools for hedging embedded optionality which is common to the natural course of many businesses.
   
   d) Swaptions are useful to borrowers targeting an acceptable borrowing rate.
   
   e) Swaptions are also useful to those businesses tendering for contracts.
   
   f) Swaptions also provide protection on callable/puttable bond issues.
Q. No. 1: Relative Valuation is the method to arrive at a ‘relative’ value using a ‘comparative’ analysis to its peers or similar enterprises. Elaborate this statement.

- The three approaches that we saw to arriving at the value of an enterprise viz. the asset based, the earnings based and the cash flow based are for arriving at the ‘intrinsic value’ of the same. Relative Valuation is the method to arrive at a ‘relative’ value using a ‘comparative’ analysis to its peers or similar enterprises. However, increasingly the contemporary financial analysts are using relative valuation in conjunction to the afore-stated approaches to validate the intrinsic value arrived earlier.

- The Relative valuation, also referred to as ‘Valuation by multiples,’ uses financial ratios to derive at the desired metric (referred to as the ‘multiple’) and then compares the same to that of comparable firms. (Comparable firms would mean the ones having similar asset and risk dispositions, and assumed to continue to do so over the comparison period). In the process, there may be extrapolations set to the desired range to achieve the target set. To elaborate –
  1. Find out the ‘drivers’ that will be the best representative for deriving at the multiple
  2. Determine the results based on the chosen driver(s) thru financial ratios
  3. Find out the comparable firms, and perform the comparative analysis, and,
  4. Iterate the value of the firm obtained to smoothen out the deviations

- **Step 1:** Finding the correct driver that goes to determine the multiple is significant for relative valuation as it sets the direction to the valuation approach. Thereby, one can have two sets of multiple based approaches depending on the tilt of the drivers –
  a) Enterprise value based multiples, which would consist primarily of EV/EBITDA, EV/Invested Capital, and EV/Sales.
  b) Equity value based multiples, which would comprise of P/E ratio and PEG.

We have already seen the concept and application of Enterprise Value in previous section. However, in light of relative valuation, we can definitely add that whereas EV/EBITDA is a popular ratio and does provide critical inputs, the EV/Invested Capital will be more appropriate to capital intensive enterprises, and EV/Sales will be used by companies who are cash rich, have a huge order book, and forecast organic growth thru own capital.

The P/E has a celebrated status amongst Equity based multiples, and the PEG is more suitable where we are doing relative valuation of either high growth or sunrise industries.

- **Step 2:** Choosing the right financial ratio is a vital part of success of this model. A factor based approach may help in getting this correct – for example – a firm that generates revenue mostly by exports will be highly influenced by future foreign exchange fluctuations. A pure P/E based ratio may not be reflective of this reality, which couldn’t pre-empt the impacts that Brexit triggered on currency values. Likewise, an EV/Invested Capital would be a misfit for a company which may be light on core assets, or if has significant investment properties.

- **Step 3:** Arriving at the right mix of comparable firms: This is perhaps the most challenging of all the steps – No two entities can be same – even if they may seem to be operating within the same risk and opportunity perimeter. So, a software company ‘X’ that we are now comparing to a similar sized company ‘Y’ may have a similar capital structure, a similar operative environment, and head count size – so far the two firms are
on even platform for returns forecast and beta values. On careful scrutiny, it is now realized that the revenue
generators are different – X may be deriving its revenues from dedicated service contracts having FTE pricing,
whereas Y earns thru UTP pricing model. This additional set of information dramatically changes the risk
structure – and this is precisely what the discerning investor has to watch for. In other words, take benchmarks
with a pinch of salt.

Take another example – a firm is operating in a niche market, and that obviously leads to getting comparable
firms become a difficult task. In such cases, one may have to look beyond the current operating market and
identify similar structured companies from other industries – like for example – a medium sized LPO may
have to evaluate based on the specific divisional figures of a Big 4 firm.

The comparable firm can either be from a peer group operating within the same risks and opportunities
perimeter, or alternatively can be just take closely relevant firms and then perform a regression to arrive at
the comparable metrics. You would notice that in our example, the LPO is adopting the later approach.
Whereas the company ‘X’ will have to ignore ‘Y’ and search for a similar revenue-risk based company.
However, as a last resort, it may adopt a regression based model as above.

❖ **Step 4:** Iterate / extrapolate the results obtained to arrive at the correct estimate of the value of the firm.

Q. No. 2 : Write a note on Shareholder Value Analysis (SVA).

SVA looks to plug in this gap by tweaking the value analysis to take into its forage certain ‘drivers’ that can
expand the horizon of value creation. The key drivers considered are of ‘earnings potential in terms of sales,
investment opportunities, and cost of incremental capital.

The following are the steps involved in SVA computation:

a) Arrive at the Future Cash Flows (FCFs) by using a judicious mix of the ‘value drivers’
b) Discount these FCFs using the WACC
c) Add the terminal value to the present values computed in step (b)
d) Add the market value of non-core assets
e) Reduce the value of debt from the result in step (d) to arrive at value of equity.
MERGERS, ACQUISITIONS & CORPORATE RESTRUCTURING

Study Session 14

Q. No 1 : Explain some of the rationale for Mergers & Acquisitions?

The most common reasons for Mergers and Acquisition (M&A) are:

❖ Synergistic operating economics: Synergy may be defined as follows:

\[ V(AB) > V(A) + V(B). \]

➢ In other words the combined value of two firms or companies shall be more than their individual value. Synergy is the increase in performance of the combined firm over what the two firms are already expected or required to accomplish as independent firms (Mark L Sirower of Boston Consulting Group, in his book “The Synergy Trap”). This may be result of complimentary services economics of scale or both.

➢ A good example of complimentary activities can a company may have a good networking of branches and other company may have efficient production system. Thus the merged companies will be more efficient than individual companies.

➢ On similar lines, economics of large scale is also one of the reasons for synergy benefits. The main reason is that, the large scale production results in lower average cost of production.

➢ e.g. reduction in overhead costs on account of sharing of central services such as accounting and finances, office executives, top level management, legal, sales promotion and advertisement etc.

➢ These economics can be “real” arising out of reduction in factor input per unit of output, whereas pecuniary economics are realized from paying lower prices for factor inputs for bulk transactions.

❖ Diversification: In case of merger between two unrelated companies would lead to reduction in business risk, which in turn will increase the market value consequent upon the reduction in discount rate/ required rate of return. Normally, greater the combination of statistically independent or negatively correlated income streams of merged companies, there will be higher reduction in the business risk in comparison to companies having income streams which are positively correlated to each other.

❖ Taxation: The provisions of set off and carry forward of losses as per Income Tax Act may be another strong season for the merger and acquisition. Thus, there will be Tax saving or reduction in tax liability of the merged firm. Similarly, in the case of acquisition the losses of the target company will be allowed to be set off against the profits of the acquiring company.

❖ Growth: Merger and acquisition mode enables the firm to grow at a rate faster than the other mode viz., organic growth. The reason being the shortening of ‘Time to Market’. The acquiring company avoids delays associated with purchasing of building, site, setting up of the plant and hiring personnel etc.

❖ Consolidation of Production Capacities and increasing market power: Due to reduced competition, marketing power increases. Further, production capacity is increased by combined of two or more plants. The following table shows the key rationale for some of the well known transactions which took place in India in the recent past.

As mentioned above amalgamation is effected basically for growth and sometimes for image. But some of the objectives for which amalgamation may be resorted to are:
— Horizontal growth to achieve optimum size, to enlarge the market share, to curb competition or to use unutilised capacity;

— Vertical combination with a view to economising costs and eliminating avoidable sales-tax and/or excise duty;

— Diversification of business;

— Mobilising financial resources by utilising the idle funds lying with another company for the expansion of business. (For example, nationalisation of banks provided this opportunity and the erstwhile banking companies merged with industrial companies);

— Merger of an export, investment or trading company with an industrial company or vice versa with a view to increasing cash flow;

— Merging subsidiary company with the holding company with a view to improving cash flow;

— Taking over a ‘shell’ company which may have the necessary industrial licences etc., but whose promoters do not wish to proceed with the project.

Q. No. 2: What are the forms (Types) of Mergers?

(i) **Horizontal Merger**: The two companies which have merged are in the same industry, normally the market share of the new consolidated company would be larger and it is possible that it may move closer to being a monopoly or a near monopoly to avoid competition.

(ii) **Vertical Merger**: This merger happens when two companies that have ‘buyer-seller’ relationship (or potential buyer-seller relationship) come together.

(iii) **Conglomerate Mergers**: Such mergers involve firms engaged in unrelated type of business operations. In other words, the business activities of acquirer and the target are neither related to each other horizontally (i.e., producing the same or competing products) nor vertically (having relationship of buyer and supplier). In a pure conglomerate merger, there are no important common factors between the companies in production, marketing, research and development and technology. There may however be some degree of overlapping in one or more of these common factors. Such mergers are in fact, unification of different kinds of businesses under one flagship company. The purpose of merger remains utilization of financial resources, enlarged debt capacity and also synergy of managerial functions.

(iv) **Congeneric Merger**: In these mergers, the acquirer and the target companies are related through basic technologies, production processes or markets. The acquired company represents an extension of product-line, market participants or technologies of the acquirer. These mergers represent an outward movement by the acquirer from its current business scenario to other related business activities within the overarching industry structure.

(v) **Reverse Merger**: Such mergers involve acquisition of a public (Shell Company) by a private company, as it helps private company to by-pass lengthy and complex process required to be followed in case it is interested in going public.

(vi) **Acquisition**: This refers to the purchase of controlling interest by one company in the share capital of an existing company. This may be by:

(i) an agreement with majority holder of Interest.

(ii) Purchase of new shares by private agreement.

(iii) Purchase of shares in open market (open offer)

(iv) Acquisition of share capital of a company by means of cash, issuance of shares.

(v) Making a buyout offer to general body of shareholders.
Q. No. 3 : What are Takeover & Defensive Tactics?

Normally acquisitions are made friendly, however when the process of acquisition is unfriendly (i.e., hostile) such acquisition is referred to as ‘takeover’). Hostile takeover arises when the Board of Directors of the acquiring company decide to approach the shareholders of the target company directly through a Public Announcement (Tender Offer) to buy their shares consequent to the rejection of the offer made to the Board of Directors of the target company.

Take Over Strategies

Other than Tender Offer the acquiring company can also use the following techniques:

➢ **Street Sweep:** This refers to the technique where the acquiring company accumulates larger number of shares in a target before making an open offer. The advantage is that the target company is left with no choice but to agree to the proposal of acquirer for takeover.

➢ **Bear Hug:** When the acquirer threatens the target company to make an open offer, the board of target company agrees to a settlement with the acquirer for change of control.

➢ **Strategic Alliance:** This involves disarming the acquirer by offering a partnership rather than a buyout. The acquirer should assert control from within and takeover the target company.

➢ **Brand Power:** This refers to entering into an alliance with powerful brands to displace the target’s brands and as a result, buyout the weakened company.

Defensive Tactics

A target company can adopt a number of tactics to defend itself from hostile takeover through a tender offer.

➢ **Divestiture:** In a divestiture the target company divests or spins off some of its businesses in the form of an independent, subsidiary company. Thus, reducing the attractiveness of the existing business to the acquirer.

➢ **Crown jewels:** When a target company uses the tactic of divestiture it is said to sell the crown jewels. In some countries such as the UK, such tactic is not allowed once the deal becomes known and is unavoidable.

➢ **Poison pill:** Sometimes an acquiring company itself becomes a target when it is bidding for another company. The tactics used by the acquiring company to make itself unattractive to a potential bidder is called poison pills. For instance, the acquiring company may issue substantial amount of convertible debentures to its existing shareholders to be converted at a future date when it faces a takeover threat. The task of the bidder would become difficult since the number of shares to having voting control of the company increases substantially.

➢ **Poison Put:** In this case the target company issue bonds that encourage holder to cash in at higher prices. The resultant cash drainage would make the target unattractive.

➢ **Greenmail:** Greenmail refers to an incentive offered by management of the target company to the potential bidder for not pursuing the takeover. The management of the target company may offer the acquirer for its shares a price higher than the market price.

➢ **White knight:** In this a target company offers to be acquired by a friendly company to escape from a hostile takeover. The possible motive for the management of the target company to do so is not to lose the management of the company. The hostile acquirer may change the management.

➢ **White squire:** This strategy is essentially the same as white knight and involves sell out of shares to a company that is not interested in the takeover. As a consequence, the management of the target company retains its control over the company.

➢ **Golden parachutes:** When a company offers hefty compensations to its managers if they get ousted due to takeover, the company is said to offer golden parachutes. This reduces their resistance to takeover.
➢ **Pac-man defence**: This strategy aims at the target company making a counter bid for the acquirer company. This would force the acquirer to defend itself and consequently may call off its proposal for takeover.

**Q. No. 4 : What is Takeover by Reverse Bid or Reverse Merger?**

In ordinary case, the company taken over is the smaller company; in a 'reverse takeover', a smaller company gains control of a larger one. The concept of takeover by reverse bid, or of reverse merger, is thus not the usual case of amalgamation of a sick unit which is non-viable with a healthy or prosperous unit but is a case whereby the entire undertaking of the healthy and prosperous company is to be merged and vested in the sick company which is non-viable. A company becomes a sick industrial company when there is erosion in its net worth. This alternative is also known as taking over by reverse bid.

The three tests should be fulfilled before an arrangement can be termed as a reverse takeover is specified as follows:

(i) the assets of the transferor company are greater than the transferee company,

(ii) equity capital to be issued by the transferee company pursuant to the acquisition exceeds its original issued capital, and

(iii) the change of control in the transferee company through the introduction of a minority holder or group of holders.

This type of merger is also known as ‘back door listing’. This kind of merger has been started as an alternative to go for public issue without incurring huge expenses and passing through cumbersome process. Thus, it can be said that reverse merger leads to the following benefits for acquiring company:

➢ Easy access to capital market.
➢ Increase in visibility of the company in corporate world.
➢ Tax benefits on carry forward losses acquired (public) company.
➢ Cheaper and easier route to become a public company.

**Q. No. 5 : What are the different forms of divestitures or demerger?**

1) **Sell off / Partial Sell off**

➢ A sell off is the sale of an asset, factory, division, product line or subsidiary by one entity to another for a purchase consideration payable either in cash or in the form of securities. Partial Sell off, is a form of divestiture, wherein the firm sells its business unit or a subsidiary to another because it deemed to be unfit with the company’s core business strategy.

➢ Normally, sell-offs are done because the subsidiary doesn't fit into the parent company's core strategy. The market may be undervaluing the combined businesses due to a lack of synergy between the parent and the subsidiary. So the management and the board decide that the subsidiary is better off under a different ownership. Besides getting rid of an unwanted subsidiary, sell-offs also raise cash, which can be used to pay off debts. In the late 1980s and early 1990s, corporate raiders would use debt to finance acquisitions. Then, after making a purchase they would sell-off its subsidiaries to raise cash to service the debt. The raiders' method certainly makes sense if the sum of the parts is greater than the whole. When it isn't, deals are unsuccessful.

2) **Spin-off**

➢ In this case, a part of the business is separated and created as a separate firm. The existing shareholders of the firm get proportionate ownership. So there is no change in ownership and the same shareholders continue to own the newly created entity in the same proportion as previously in the original firm. The management of spun-off division is however, parted with. Spin-off does not bring fresh cash. The reasons for spin off may be:
(i) Separate identity to a part/division.
(ii) To avoid the takeover attempt by a predator by making the firm unattractive to him since a valuable division is spun-off.
(iii) To create separate Regulated and unregulated lines of business.

Example: Kishore Biyani led Future Group spin off its consumer durables business, Ezone, into a separate entity in order to maximise value from it.

3) Split-up
- This involves breaking up of the entire firm into a series of spin off (by creating separate legal entities). The parent firm no longer legally exists and only the newly created entities survive. For instance a corporate firm has 4 divisions namely A, B, C, D. All these 4 division shall be split-up to create 4 new corporate firms with full autonomy and legal status. The original corporate firm is to be wound up. Since de-merged units are relatively smaller in size, they are logistically more convenient and manageable. Therefore, it is understood that spin-off and split-up are likely to enhance shareholders value and bring efficiency and effectiveness.

Example: Philips, the Dutch conglomerate that started life making light bulbs 123 years ago, is splitting off its lighting business in a bold step to expand its higher-margin healthcare and consumer divisions. The new structure should save 100 million euros ($128.5 million) next year and 200 million euros in 2016. It expects restructuring charges of 50 million euros from 2014 to 2016.

4) Equity Carve outs
- This is like spin off, however, some shares of the new company are sold in the market by making a public offer, so this brings cash. More and more companies are using equity carve-outs to boost shareholder value. A parent firm makes a subsidiary public through an initial public offering (IPO) of shares, amounting to a partial sell-off. A new publicly-listed company is created, but the parent keeps a controlling stake in the newly traded subsidiary.

- A carve-out is a strategic avenue a parent firm may take when one of its subsidiaries is growing faster and carrying higher valuations than other businesses owned by the parent. A carve-out generates cash because shares in the subsidiary are sold to the public, but the issue also unlocks the value of the subsidiary unit and enhances the parent's shareholder value.

- The new legal entity of a carve-out has a separate board, but in most carve-outs, the parent retains some control over it. In these cases, some portion of the parent firm's board of directors may be shared. Since the parent has a controlling stake, meaning that both firms have common shareholders, the connection between the two is likely to be strong. That said, sometimes companies carve-out a subsidiary not because it is doing well, but because it is a burden. Such an intention won't lead to a successful result, especially if a carved-out subsidiary is too loaded with debt or trouble, even when it was a part of the parent and lacks an established track record for growing revenues and profits.

5) Sale of a Division
In the case of sale of a division, the seller company is demerging its business whereas the buyer company is acquiring a business. For the first time the tax laws in India propose to recognise demergers.

Q. No. 6 : Write a note on Financial Restructuring?

- Financial restructuring refers to a kind of internal changes made by the management in Assets and Liabilities of a company with the consent of its various stakeholders. This is a suitable mode of restructuring for corporate entities who have suffered from sizeable losses over a period of time. Consequent upon losses the share capital or net worth of such companies get substantially eroded. In
fact, in some cases, the accumulated losses are even more than the share capital and thus leading to negative net worth, putting the firm on the verge of liquidation. In order to revive such firms, financial restructuring is one of the technique to bring into health such firms which are having potential and promise for better financial performance in the years to come. To achieve this desired objective, such firms need to re-start with a fresh balance sheet free from losses and fictitious assets and show share capital at its true worth.

❖ To nurse back such firms a plan of restructuring need to be formulated involving a number of legal formalities (which includes consent of court, and other stake-holders viz., creditors, lenders and shareholders etc.). An attempt is made to do refinancing and rescue financing while Restructuring. Normally equity shareholders make maximum sacrifice by foregoing certain accrued benefits, followed by preference shareholders and debenture holders, lenders and creditors etc. The sacrifice may be in the form of waving a part of the sum payable to various liability holders. The foregone benefits may be in the form of new securities with lower coupon rates so as to reduce future liabilities. The sacrifice may also lead to the conversion of debt into equity. Sometime, creditors, apart from reducing their claim, may also agree to convert their dues into securities to avert pressure of payment. These measures will lead to better financial liquidity. The financial restructuring leads to significant changes in the financial obligations and capital structure of corporate firm, leading to a change in the financing pattern, ownership and control and payment of various financial charges.

In nutshell it may be said that financial restructuring (also known as internal re-construction) is aimed at reducing the debt/payment burden of the corporate firm. This results into

(i) Reduction/Waiver in the claims from various stakeholders;
(ii) Real worth of various properties/assets by revaluing them timely;
(iii) Utilizing profit accruing on account of appreciation of assets to write off accumulated losses and fictitious assets (such as preliminary expenses and cost of issue of shares and debentures) and creating provision for bad and doubtful debts. In practice, the financial re-structuring scheme is drawn in such a way so that all the above requirements of write off are duly met. The following illustration is a good example of financial restructuring.

Q. No. 7 : Write a note on LBO ?

❖ A Leveraged buy-out (LBO) is an acquisition of a company in which the acquisition is substantially financed through debt. Typically in the LBO 90% or more of the purchase price is financed with debt.
❖ While some leveraged buyouts involve a company in its entirety most involve a business unit of a company. After the buyout, the company invariably becomes a Private Company.
❖ A large part of the borrowings is secured by the firm’s assets, and the lenders, because of a high risk, take a portion of the firm’s equity. Junk bonds have been routinely used to raise amounts of debt needed to finance LBO transaction.
❖ The success of the entire operation it depends on their ability to improve the performance of the unit, curtail its business risk, exercise cost controls and liquidate disposable asset. If they fail to do so, the high fixed financial costs can jeopardize the venture.
❖ An attractive candidate for acquisition through leveraged buyout should possess three basic attributes
   a) If firm have a good position in its industry with a solid profit history and reasonable expectations of growth.
   b) The firm should have a relatively low level of debt and a high level of bankable assets that can be used as loan collateral.
c) It must have a stable and predictable cash flows that are adequate to meet interest and principle payment of the debt and provide adequate working capital.

❖ Typical advantages of the leveraged buy-out method include:

a) **Low capital or cash requirement** for the acquiring entity
b) **Synergy gains**, by expanding operations outside own industry or business,
c) **Efficiency gains** by eliminating the value-destroying effects of excessive diversification.

d) **Improved Leadership and Management**: Sometimes managers run companies in ways that improve their authority (control and compensation) at the expense of the companies’ owners, shareholders, and long-term strength. Takeovers weed out or discipline such managers. Large interest and principal payments can force management to improve performance and operating efficiency. This “discipline, of debt” can force management to focus on certain initiatives such as divesting non-core businesses, downsizing, cost cutting or investing in technological upgrades that might otherwise be postponed or rejected outright.

e) **Leveraging**: as the debt ratio increases, the equity portion of the acquisition financing shrinks to a level at which a private equity firm can acquire a company by putting up anywhere from 20-40% of the total purchase price.

f) Acquiring Company **pay less taxes** because interest payments on debt are tax-deductible

❖ **Critics of Leveraged buy-outs**:

a) The major risk of the leveraged buyout is **bankruptcy** of the acquired company. If the company’s cash flow and the sale of assets are insufficient to meet the interest payments arising from its high levels of debt, the LBO is likely to fail and the company may go bankrupt.

b) The risk associated with a leveraged buyout is that **of financial distress, and unforeseen events** such as recession, litigation, or changes in the regulatory environment can lead to difficulties meeting scheduled interest payments, technical default (the violation of the terms of a debt covenant) or outright liquidation.

c) **Leveraged buyouts can harm the long-term competitiveness** of firms involved

d) Attempting an LBO can be particularly dangerous for companies that are **vulnerable to industry competition** or volatility in the overall economy.

e) If the company does fail following an LBO, this can cause **significant problems for employees and suppliers**, as lenders are usually in a better position to collect their money.

f) Another disadvantage is that paying high interest rates on LBO debt **can damage a company’s credit rating**.

g) Finally, it is possible that management may propose an LBO only **for short-term personal profit**.

Recent example: In India the first LBO took place in the year 2000 when Tata Tea acquired Tetley in the United Kingdom. The deal value was Rs 2135 crores out of which almost 77% was financed by the company using debt. The intention behind this deal was to get direct access to Tetley’s international market. The largest LBO deal in terms of deal value (7.6 Billion) by an Indian company is the buyout of Corus by Tata Steel.

**Q. No. 8 : Write a note on Equity Buy-back?**

❖ This refers to the situation wherein a company buys back its own shares back from the market. This results in reduction in the equity capital of the company. This strengthen the promoters’ position by increasing his stake in the equity of the company.
The buyback is a process in which a company uses its surplus cash to buy shares from the public. It is almost the opposite of initial public offer in which shares are issued to the public for the first time. In buyback, shares which have already been issued are bought back from the public. And, once the shares are bought back, they get absorbed and cease to exist.

For example, a company has one crore outstanding shares and owing a huge cash pile of Rs. 5 crores. Since, the company has very limited investment options it decides to buyback some of its outstanding shares from the shareholders, by utilizing some portion of its surplus cash. Accordingly, it purchases 10 lakh shares from the existing shareholders by paying Rs. 20 per share. total cash of say, Rs. 2 crore. The process of buyback can be shown with the help of following diagram:

Example Cairn India bought back 3.67 crores shares and spent nearly ` 1230 crores by May 2014.

Effects of Buyback

There are several effects or consequences of buyback some of which are as follows:

(i) It increases the proportion of shares owned by controlling shareholders as the number of outstanding shares decreases after the buyback.

(ii) Earning Per Share (EPS) escalates as the number of shares reduces leading the market price of shares to step up.

(iii) A share repurchase also affects a company’s financial statements as follows:
(a) In balance sheet, a share buyback will reduce the company’s total assets position as cash holdings will be reduced and consequently as shareholders’ equity reduced it results in reduction on the liabilities side by the same amount.
(b) Amount spent on share buybacks shall be shown in Statement of Cash Flows in the “Financing Activities” section, as well as from the Statement of Changes in Equity or Statement of Retained Earnings.

(iv) Ratios based on performance indicators such as Return on Assets (ROA) and Return on Equity (ROE) typically improve after a share buyback. This can be understood with the help of following Statement showing Buyback Effect of a hypothetical company using Rs. 1.50 crore of cash out of total cash of Rs. 2.00 for buyback.

<table>
<thead>
<tr>
<th></th>
<th>Before Buyback</th>
<th>After Buyback (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash (Rs.)</td>
<td>2,00,00,000</td>
<td>50,00,000</td>
</tr>
<tr>
<td>Assets (Rs.)</td>
<td>5,00,00,000</td>
<td>3,50,00,000</td>
</tr>
<tr>
<td>Earnings (Rs.)</td>
<td>20,00,000</td>
<td>20,00,000</td>
</tr>
<tr>
<td>No. of Shares outstanding (Nos.)</td>
<td>10,00,000</td>
<td>9,00,000</td>
</tr>
<tr>
<td>Return on Assets (%)</td>
<td>4.00%</td>
<td>5.71%</td>
</tr>
<tr>
<td>Earnings Per Share (EPS) (Rs.)</td>
<td>0.20</td>
<td>0.22</td>
</tr>
</tbody>
</table>
As visible from the above figure, the company’s cash pile has been reduced from Rs. 2 crore to Rs. 50 lakh after the buyback. Because cash is an asset, this will lower the total assets of the company from Rs. 5 crore to Rs. 3.5 crore. Now, this leads to an increase in the company’s ROA, even though earnings have not changed. Prior to the buyback, its ROA was 4% but after the repurchase, ROA increases to 5.71%. A similar effect can be seen in the EPS number, which increases from 0.20 to 0.22.

Q. No. 9 : Write a note on Cross-Border M&A ?

❖ Cross-border M&A is a popular route for global growth and overseas expansion. Cross-border M&A is also playing an important role in global M&A. This is especially true for developing countries such as India. Kaushik Chatterjee, CFO, of Tata Steel in an interview with McKenzie Quarterly in September 2009 articulates this point very clearly. To the following question

❖ The Quarterly : Last year was the first in which Asian and Indian companies acquired more businesses outside of Asia than European or US multinationals acquired within it. What’s behind the Tata Group’s move to go global?

His response is as follows:-

“India is clearly a very large country with a significant population and a big market, and the Tata Group’s companies in a number of sectors have a pretty significant market share. India remains the main base for future growth for Tata Steel Group, and we have substantial investment plans in India, which are currently being pursued. But meeting our growth goals through organic means in India, unfortunately, is not the fastest approach, especially for large capital projects, due to significant delays on various fronts. Nor are there many opportunities for growth through acquisitions in India, particularly in sectors like steel, where the value to be captured is limited—for example, in terms of technology, product profiles, the product mix, and good management.”

Other major factors that motivate multinational companies to engage in cross-border M&A in Asia include the following:

➢ Globalization of production and distribution of products and services.
➢ Integration of global economies.
➢ Expansion of trade and investment relationships on International level.
➢ Many countries are reforming their economic and legal systems, and providing generous investment and tax incentives to attract foreign investment.
➢ Privatisation of state-owned enterprises and consolidation of the banking industry.
INTERNATIONAL FINANCIAL CENTRE (IFC)

Study Session 15

Q. No. 1 : Write a short note on IFC & its benefits ?

❖ International Financial Centre (IFC) is the financial center that caters to the needs of the customers outside their own jurisdiction. Although appears to be similar terms. Broadly, speaking IFC is a hub that deals with flow of funds, financial products and financial services though in own land but with different set of regulation and laws.

❖ Thus, these centers provide flexibility in currency trading, insurance, banking and other financial services. This flexible regime attracts foreign investors which is of potential benefit not only to the stakeholders but as well as for the country hosting IFC itself.

❖ Accordingly, through IFCs, businesses that currently cannot be done in India can be done at IFC. Although there are numberless direct and indirect benefits of setting up IFC but some major benefits emanating from establishing IFC are as follows:

(i) Opportunity for qualified professionals working outside India come here and practice their profession.

(ii) A platform for qualified and talented professionals to pursue global opportunities without leaving their homeland.

(iii) Stops Brain Drain from India.

(iv) Bringing back those financial services transactions presently carried out abroad by overseas financial institutions/entities or branches or subsidiaries of Indian Financial Market.

(v) Trading of complicated financial derivative can be started from India.

Q. No. 2 : What are the Constituents of IFC ?

Although there are many constituents for IFC but some of the important constituent are as follows:

(i) **Highly developed Infrastructure**: A leading edge infrastructure is prerequisite for creating a platform to offer internationally competitive financial services.

(ii) **Stable Political Environment**: Destabilized political environment brings country risk investment by foreign nationals. Hence, to accelerate foreign participation in growth of financial center, stable political environment is prerequisite.

(iii) **Strategic Location**: The geographical location of the finance center should be strategic such as near to airport, seaport and should have friendly weather.

(iv) **Quality Life**: The quality of life at the center showed be good as center retains highly paid professional from own country as well from outside.

(v) **Rationale Regulatory Framework**: Rationale legal regulatory framework is another prerequisite of international finance center as it should be fair and transparent.

(vi) **Sustainable Economy**: The economy should be sustainable and should possess capacity to absorb all the shocks as it will boost investors’ confidence.

Q. No. 3 : Write a short note on ISLAMIC FINANCE & How Islamic Finance different from Conventional Finance ?

❖ Since India is becoming a globalized economy and world where about 1/4th population is of Muslims, the concept of Islamic finance based on Islamic principles and values cannot be ignored.
While Islamic finance has roots in the past but there is resurgence in past 30 years. Though Islamic finance is different from the conventional finance but it has same objective of providing economic benefits to the society.

Islamic Finance Banking or Sharia Complaint finance is banking or financing activity that complies with Sharia (Islamic law) and its practical application through the development of Islamic economies.

Since under Islamic finance money is considered as only a mean of carrying out transactions any earning on the same in form of interest (Riba) is strictly prohibited.

1) Sharia Board
To ensure that all Islamic finance products and service offered follow principles of Sharia Rules, there is a board called Sharia Board which oversees and reviews all new product offered by financial institutions.

2) How Islamic Finance is different from Conventional Finance
Major differences between Islamic finance and other form of finance (Conventional Finance) are as follows:

<table>
<thead>
<tr>
<th>Basis</th>
<th>Islamic Finance</th>
<th>Conventional Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion</td>
<td>Islamic Finance promotes just, fair and balanced society. Hence, interest is prohibited.</td>
<td>Based on commercial objectives and interest must be paid irrespective of outcome of business.</td>
</tr>
<tr>
<td>Ethical framework</td>
<td>Structured on ethical and moral framework of Sharia. Verses from the holy Quran and tradition from As-Sunnah are two divine guidance.</td>
<td>No such framework.</td>
</tr>
<tr>
<td>Speculation</td>
<td>The financial transactions should be free from the element of uncertainty (Gharar) and gambling (Maisir)</td>
<td>No such restrictions.</td>
</tr>
<tr>
<td>Unlawful Goods and Services</td>
<td>Islamic Finance must not be involved in any transactions not involve trade not allowed as per Islamic principles such as alcohol, armaments, pork and other socially detrimental products.</td>
<td>There are no such restrictions.</td>
</tr>
</tbody>
</table>

Q. No. 4 : Write a short note on RIBA?

In Islamic Finance, the meaning of Riba is interest or usury. As mentioned earlier in Islamic Finance money is considered as medium of exchange, store of value or unit of measurement only, hence Riba is considered haram i.e. unfair reward to the provider of capital for little or no effort or risk undertaken. Due to this reason, Islamic finance models are based on risks and profit/loss sharing contract (as clear from the financial products discussed above).

Riba is equated with wrongful appropriation of property belonging to others and hence Muslims are asked to accept principal only and forego principal even, if borrower is unable to repay the same.

In this backdrop in Islamic banking a link must be established between money and profit as an alternative to interest. This is in sharp contrast of conventional banking which is simply based on lender borrower’s relationship.

Since, interest is not allowed in Islamic Finance, depositors are rewarded by a share in the profit from the underlying business (after deduction of management fees) in which the funds of depositors have been channeled.

Thus, it can be said that money has no intrinsic value i.e. time value of money. The relationship between depositor and banker can be viewed as:
Q. No. 5 : Explain the Major Islamic Financial Instruments ?

Mudaraba
The Mudaraba is a kind of profit sharing arrangement wherein one party provides 100% of the capital involved and other party provides specialized knowledge and entrusted with exclusive responsibility of working. In case there is profit it shared among them in the pre-decided ratio and if there is loss only financier will borne the same.

Musharaka
It is a kind of joint business venture wherein all parties provide the capital in the business in agreed ratio and also have right to participate in the business. While the loss is strictly shared in the ratio of their capital contribution, the profit is shared as per pre-agreed ratio.

Sukuk
It is one of the most popular Islamic financial products. It is a kind of ‘Debt Certificate’ representing ownership in business or assets and through this instrument company borrows the money. Although it appears to be conventional debt instruments but it differs in following aspects:
- To have share in profit of assets.
- To have share in the underlying assets on realization of assets.

Ijara (Differentiate between ordinary lease as per conventional finance and ‘Ijara’ as per Islamic Finance)
It is a kind of lease financing arrangement wherein one party transfer the asset to other partly for some specific time for specific fee which includes capital cost of assets and profit margin of the lessor. In this arrangement, the responsibility for maintenance of the leased items remains with the lessor.

Murabaha (Which Islamic Financial Instrument is closer to the concept of Venture Financing as per conventional finance and why?)
Also, known as cost plus contract it is a kind of trade credit or loans and mainly helps exporters and importer in meeting their funding requirements. The main feature of this arrangement is that profit margin of the financier is known to the buyer. In this arrangement financier buys thee assets and sells to the client (buyer) and buyer pays to the financier in installments consisting of following two elements:
- Cost of asset financed.
- Financier’s profit on acquisition of asset.

Istisna
It is a kind of funding arrangements for long term construction contracts wherein client pays some initial amount and balance amount is payable is repaid in installments. The whole project is funded by the financier and completion of project it is delivered to the client.

Salam
It is analogues to forward contract in the conventional finance. Though cash is received by the seller immediately on sale but goods as per pre-decided quality, quantity and time shall only be delivered in future. This sale shall be at the discounted price so that financier could make some profit out of the deal. However, it is important to note that Salam is prohibited in commodities such a gold, silver and other type of monetary assets.
Q. No. 1 : Explain some of the sources for funding a start-up?

Every startup needs access to capital, whether for funding product development, acquiring machinery and inventory, or paying salaries to its employee. Most entrepreneurs think first of bank loans as the primary source of money, only to find out that banks are really the least likely benefactors for startups. So, innovative measures include maximizing non-bank financing.

Here are some of the sources for funding a startup:

(i) **Personal financing**: It may not seem to be innovative but you may be surprised to note that most budding entrepreneurs never thought of saving any money to start a business. This is important because most of the investors will not put money into a deal if they see that you have not contributed any money from your personal sources.

(ii) **Personal credit lines**: One qualifies for personal credit line based on one’s personal credit efforts. Credit cards are a good example of this. However, banks are very cautious while granting personal credit lines. They provide this facility only when the business has enough cash flow to repay the line of credit.

(iii) **Family and friends**: These are the people who generally believe in you, without even thinking that your idea works or not. However, the loan obligations to friends and relatives should always be in writing as a promissory note or otherwise.

(iv) **Peer-to-peer lending**: In this process group of people come together and lend money to each other. Peer to peer lending has been there for many years. Many small and ethnic business groups having similar faith or interest generally support each other in their start up endeavours.

(v) **Crowdfunding**: Crowdfunding is the use of small amounts of capital from a large number of individuals to finance a new business initiative. Crowdfunding makes use of the easy accessibility of vast networks of people through social media and crowdfunding websites to bring investors and entrepreneurs together.

(vi) **Microloans**: Microloans are small loans that are given by individuals at a lower interest to a new business ventures. These loans can be issued by a single individual or aggregated across a number of individuals who each contribute a portion of the total amount.

(vii) **Vendor financing**: Vendor financing is the form of financing in which a company lends money to one of its customers so that he can buy products from the company itself. Vendor financing also takes place when many manufacturers and distributors are convinced to defer payment until the goods are sold. This means extending the payment terms to a longer period for e.g. 30 days payment period can be extended to 45 days or 60 days. However, this depends on one’s credit worthiness and payment of more money.

(viii) **Purchase order financing**: The most common scaling problem faced by startups is the inability to find a large new order. The reason is that they don’t have the necessary cash to produce and deliver the product. Purchase order financing companies often advance the required funds directly to the supplier. This allows the transaction to complete and profit to flow up to the new business.

(ix) **Factoring accounts receivables**: In this method, a facility is given to the seller who has sold the good on credit to fund his receivables till the amount is fully received. So, when the goods are sold on credit, and the credit period (i.e. the date up to which payment shall be made) is for example 6 months, factor will pay most of the sold amount upfront and rest of the amount later. Therefore, in this way, a startup can meet his day to day expenses.
Q. No. 2 : What do you mean by Pitch Presentation in context of Start-up Business?

Pitch deck presentation is a short and brief presentation (not more than 20 minutes) to investors explaining about the prospects of the company and why they should invest into the startup business. So, pitch deck presentation is a brief presentation basically using PowerPoint to provide a quick overview of business plan and convincing the investors to put some money into the business. Pitch presentation can be made either during face to face meetings or online meetings with potential investors, customers, partners, and co-founders. Here, some of the methods have been highlighted below as how to approach a pitch presentation:

(i) **Introduction**

To start with, first step is to give a brief account of yourself i.e. who are you? What are you doing? But care should be taken to make it short and sweet. Also, use this opportunity to get your investors interested in your company. One can also talk up the most interesting facts about one’s business, as well as any huge milestones one may have achieved.

(ii) **Team**

The next step is to introduce the audience the people behind the scenes. The reason is that the investors will want to know the people who are going to make the product or service successful. Moreover, the investors are not only putting money towards the idea but they are also investing in the team. Also, an attempt should be made to include the background of the promoter, and how it relates to the new company. Moreover, if possible, it can also be highlighted that the team has worked together in the past and achieved significant results.

(iii) **Problem**

Further, the promoter should be able to explain the problem he is going to solve and solutions emerging from it. Further the investors should be convinced that the newly introduced product or service will solve the problem convincingly.

For instance, when Facebook was launched in 2004, it added some new features which give it a more professional and lively look in comparison to Orkut which was there for some time. It enabled Facebook to become an instant hit among the people. Further, customers have no privacy while using Orkut. However, in Facebook, you can view a person’s profile only if he adds you to his list. These simple yet effective advantages that Facebook has over Orkut make it an extremely popular social networking site.

(iv) **Solution**

It is very important to describe in the pitch presentation as to how the company is planning to solve the problem. For instance, when Flipkart first started its business in 2007, it brought the concept of e-commerce in India. But when they started, payment through credit card was rare. So, they introduced the system of payment on the basis of cash on delivery which was later followed by other e-commerce companies in India. The second problem was the entire supply chain system. Delivering goods on time is one of the most important factors that determine the success of an ecommerce company. Flipkart addressed this issue by launching their own supply chain management system to deliver orders in a timely manner. These innovative techniques used by Flipkart enabled them to raise large amount of capital from the investors.

(v) **Marketing/Sales**

This is a very important part where investors will be deeply interested. The market size of the product must be communicated to the investors. This can include profiles of target customers, but one should be prepared to answer questions about how the promoter is planning to attract the customers. If a business is already selling goods, the promoter can also brief the investors about the growth and forecast future revenue.
(vi) Projections or Milestones

It is true that it is difficult to make financial projections for a startup concern. If an organization doesn’t have a long financial history, an educated guess can be made. Projected financial statements can be prepared which gives an organization a brief idea about where is the business heading? It tells us that whether the business will be making profit or loss?

Financial projections include three basic documents that make up a business’s financial statements.

• Income statement: This projects how much money the business will generate by projecting income and expenses, such as sales, cost of goods sold, expenses and capital. For your first year in business, you’ll want to create a monthly income statement. For the second year, quarterly statements will suffice. For the following years, you’ll just need an annual income statement.

• Cash flow statement: A projected cash flow statement will depict how much cash will be coming into the business and out of that cash how much cash will be utilized into the business. At the end of each period (e.g. monthly, quarterly, annually), one can tally it all up to show either a profit or loss.

• Balance sheet: The balance sheet shows the business’s overall finances including assets, liabilities and equity. Typically, one will create an annual balance sheet for one’s financial projections.

(vii) Competition

Every business organization has competition even if the product or service offered is new and unique. It is necessary to highlight in the pitch presentation as to how the products or services are different from their competitors. If any of the competitors have been acquired, there complete details like name of the organization, acquisition prices etc. should be also be highlighted.

(viii) Business Model

The term business model is a wide term denoting core aspects of a business including purpose, business process, target customers, offerings, strategies, infrastructure, organizational structures, sourcing, trading practices, and operational processes and policies including culture.

Further, as per Investopedia, a business model is the way in which a company generates revenue and makes a profit from company operations. Analysts use the term gross profit as a way to compare the efficiency and effectiveness of a firm’s business model. Gross profit is calculated by subtracting the cost of goods sold from revenues. A business model can be illustrated with the help of an example. There are two companies – company A and company B. Both the companies are engaged in the business of renting movies. Prior to the advent of internet both the companies rent movies physically. Both the companies made ₹ 5 crore as revenues. Cost of goods sold was ₹ 400000. So, the companies made ₹ 100000 as gross profit. After the introduction of internet, company A started to offer movies online instead of renting or selling it physically. This change affected the business model of company A positively. Revenue is still ₹ 500000. But the significant part is that cost of goods sold is now ₹ 200000 only. This is because online sales lead to significant reduction of storage and distribution costs. So, the gross profit increases from 20% to 60%.

Therefore, Company A isn’t making more in sales, but it figured out a way to revolutionize its business model, which greatly reduces costs. Managers at company A have an additional 40% more in margin to play with than managers at company A. Managers at company A have little room for error and they have to tread carefully.

Hence, every investor wants to get his money back, so it’s important to tell them in a pitch presentation as to how they should plan on generating revenue. It is better to show the investors a list of the various revenue streams for a business model and the timeline for each of them. Further, how to
price the product and what does the competitor charge for the same or similar product shall also be highlighted. It is also beneficial to discuss the lifetime value of the customer and what should be the strategy to keep him glued to their product.

(ix) Financing

If a startup business firm has raised money, it is preferable to talk about how much money has already been raised, who invested money into the business and what they did about it. If no money has been raised till date, an explanation can be made regarding how much work has been accomplished with the help of minimum funding that the company is managed to raise.

It is true that investors like to see entrepreneurs who have invested their own money. If a promoter is pitching to raise capital he should list how much he is looking to raise and how he intend to use the funds.

Q. No. 3 : What are the modes of financing for start-ups?

(i) Bootstrapping

An individual is said to be boot strapping when he or she attempts to found and build a company from personal finances or from the operating revenues of the new company.

A common mistake made by most founders is that they make unnecessary expenses towards marketing, offices and equipment they cannot really afford. So, it is true that more money at the inception of a business leads to complacency and wasteful expenditure. On the other hand, investment by startups from their own savings leads to cautious approach. It curbs wasteful expenditures and enable the promoter to be on their toes all the time.

Here are some of the methods in which a startup firm can bootstrap:

a) Trade Credit

When a person is starting his business, suppliers are reluctant to give trade credit. They will insist on payment of their goods supplied either by cash or by credit card. However, a way out in this situation is to prepare a well-crafted financial plan. The next step is to pay a visit to the supplier’s office. If the business organization is small, the owner can be directly contacted. On the other hand, if it is a big firm, the Chief Financial Officer can be contacted and convinced about the financial plan.

Communication skills are important here. The financial plan has to be shown. The owner or the financial officer has to be explained about the business and the need to get the first order on credit in order to launch the venture. The owner or financial officer may give half the order on credit and balance on delivery. The trick here is to get the goods shipped and sell them before paying to them. One can also borrow to pay for the good sold. But there is interest cost also. So trade credit is one of the most important ways to reduce the amount of working capital one needs. This is especially true in retail operations.

When you visit your supplier to set up your order during your startup period, ask to speak directly to the owner of the business if it's a small company. If it's a larger business, ask to speak to the chief financial officer or any other person who approves credit. Introduce yourself. Show the officer the financial plan that you have prepared. Tell the owner or financial officer about your business, and explain that you need to get your first orders on credit in order to launch your venture.

The owner or financial officer may give half the order on credit, with the balance due upon delivery. Of course, the trick here is to get the goods shipped, and sell them before one has to pay for them. One could borrow money to pay for the inventory, but you have to pay interest on that money. So trade credit is one of the most important ways to reduce the amount of working capital one needs. This is especially true in retail operations.
(b) **Factoring**

This is a financing method where accounts receivable of a business organization is sold to a commercial finance company to raise capital. The factor then gets hold of the accounts receivable of a business organization and assumes the task of collecting the receivables as well as doing what would’ve been the paperwork. Factoring can be performed on a non-notification basis. It means customers may not be told that their accounts have been sold.

However, there are merits and demerits to factoring. The process of factoring may actually reduce costs for a business organization. It can actually reduce costs associated with maintaining accounts receivable such as bookkeeping, collections and credit verifications. If comparison can be made between these costs and fee payable to the factor, in many cases it has been observed that it even proved fruitful to utilize this financing method.

In addition to reducing internal costs of a business, factoring also frees up money that would otherwise be tied to receivables. This is especially true for businesses that sell to other businesses or to government; there are often long delays in payment that this would offset. This money can be used to generate profit through other avenues of the company. Factoring can be a very useful tool for raising money and keeping cash flowing.

(c) **Leasing**

Another popular method of bootstrapping is to take the equipment on lease rather than purchasing it. It will reduce the capital cost and also help lessee (person who take the asset on lease) to claim tax exemption. So, it is better to take a photocopy machine, an automobile or a van on lease to avoid paying out lump sum money which is not at all feasible for a startup organization.

Further, if you are able to shop around and get the best kind of leasing arrangement when you're starting up a new business, it's much better to lease. It's better, for example, to lease a copier, rather than pay $3,000 for it; or lease your automobile or van to avoid paying out $8,000 or more.

There are advantages for both the startup businessman using the property or equipment (i.e. the lessee) and the owner of that property or equipment (i.e. the lessor.) The lessor enjoys tax benefits in the form of depreciation on the fixed asset leased and may gain from capital appreciation on the property, as well as making a profit from the lease. The lessee benefits by making smaller payments retain the ability to walk away from the equipment at the end of the lease term. The lessee may also claim tax benefit in the form of lease rentals paid by him.

(ii) **Angel Investors**

Despite being a country of many cultures and communities traditionally inclined to business and entrepreneurship, India still ranks low on comparative ratings across entrepreneurship, innovation and ease of doing business. The reasons are obvious. These include our old and outdated draconian rules and regulations which provides a hindrance to our business environment for a long time. Other reasons are redtapism, our time consuming procedures, and lack of general support for entrepreneurship. Of course, things are changing in recent times.

As per Investopedia, Angel investors invest in small startups or entrepreneur’s. Often, angel investors are among an entrepreneur’s family and friends. The capital angel investors provide may be a one-time investment to help the business propel or an ongoing injection of money to support and carry the company through its difficult early stages.

Angel investors provide more favourable terms compared to other lenders, since they usually invest in the entrepreneur starting the business rather than the viability of the business. Angel investors are focused on helping startups take their first steps, rather than the possible profit they may get from the business. Essentially, angel investors are the opposite of venture capitalists.
Angel investors are also called informal investors, angel funders, private investors, seed investors or business angels. These are affluent individuals who inject capital for startups in exchange for ownership equity or convertible debt. Some angel investors invest through crowdfunding platforms online or build angel investor networks to pool in capital. Angel investors typically use their own money, unlike venture capitalists who take care of pooled money from many other investors and place them in a strategically managed fund.

Though angel investors usually represent individuals, the entity that actually provides the fund may be a limited liability company, a business, a trust or an investment fund, among many other kinds of vehicles.

Angel investors who seed startups that fail during their early stages lose their investments completely. This is why professional angel investors look for opportunities for a defined exit strategy, acquisitions or initial public offerings (IPOs).

(iii) Venture Capital Funds

Evolution

Venture Capital in India stated in the decade of 1970, when the Government of India appointed a committee to tackle the issue of inadequate funding to entrepreneurs and start-ups. However, it is only after ten years that the first all Indiaventure capital funding was started by IDBI, ICICI and IFCI.

With the institutionalization of the industry in November 1988, the government announced its guidelines in the “CCI” (Controller of Capital Issues). These focused on a very narrow description of Venture Capital and proved to be extremely restrictive and encumbering, requiring investment in innovative technologies started by first generation entrepreneur. This made investment in VC highly risky and unattractive.

At about the same time, the World Bank organized a VC awareness seminar, giving birth to players like: TDICICI, GVFL, Canbank and Pathfinder. Along with the other reforms the government decided to liberalize the VC Industry and abolish the “CCI”, while in 1995 Foreign Finance companies were allowed to invest in the country.

Nevertheless, the liberalization was short-spanned, with new calls for regulation being made in 1996. The new guidelines’ loopholes created an unequal playing ground that favoured the foreign players and gave no incentives to domestic high net worth individuals to invest in this industry.

VC investing got considerably boosted by the IT revolution in 1997, as the venture capitalists became prominent founders of the growing IT and telecom industry. Many of these investors later floundered during the dotcom bust and most of the surviving ones shifted their attention to later stage financing, leaving the risky seed and start-up financing to a few daring funds.

Formation of Venture Capital has been depicted in the diagram below:

![Diagram of Venture Capital Formation]

Investors in Venture Capital Funds are shown in the following diagram:

![Diagram of Venture Capital Investors]
Structure of Venture Capital Fund in India

Three main types of fund structure exist: one for domestic funds and two for offshore ones:

(a) **Domestic Funds**: Domestic Funds (i.e. one which raises funds domestically) are usually structured as: i) a domestic vehicle for the pooling of funds from the investor, and ii) a separate investment adviser that carries those duties of asset manager. The choice of entity for the pooling vehicle falls between a trust and a company, (India, unlike most developed countries does not recognize a limited partnership), with the trust form prevailing due to its operational flexibility.

(b) **Offshore Funds**: Two common alternatives available to offshore investors are: the “offshore structure” and the “unified structure”.

- **Offshore structure**: Under this structure, an investment vehicle (an LLC or an LP organized in a jurisdiction outside India) makes investments directly into Indian portfolio companies. Typically, the assets are managed by an offshore manager, while the investment advisor in India carries out the due diligence and identifies deals.

- **Unified Structure**: When domestic investors are expected to participate in the fund, a unified structure is used. Overseas investors pool their assets in an offshore vehicle that invests in a locally managed trust, whereas domestic investors directly contribute to the trust. This is later device used to make the local portfolio investments.

Q. No. 4 : Define concept of Venture Capital Fund?

Venture capital means funds made available for startup firms and small businesses with exceptional growth potential. Venture capital is money provided by professionals who alongside management invest in young, rapidly growing companies that have the potential to develop into significant economic contributors.

**Venture Capitalists generally:**

- Finance new and rapidly growing companies
- Purchase equity securities
- Assist in the development of new products or services
- Add value to the company through active participation.

**Characteristics of Venture Capital Financing:**

(i) **Long time horizon**: The fund would invest with a long time horizon in mind. Minimum period of investment would be 3 years and maximum period can be 10 year

(ii) **Lack of liquidity**: When VC invests, it takes into account the liquidity factor. It assumes that there would be less liquidity on the equity it gets and accordingly it would be investing in that format. They adjust this liquidity premium against the price and required return.

(iii) **High Risk**: VC would not hesitate to take risk. It works on principle of high risk and high return. So, high risk would not eliminate the investment choice for a venture capital.

(iv) **Equity Participation**: Most of the time, VC would be investing in the form of equity of a company. This would help the VC participate in the management and help the company grow. Besides, a lot of board decisions can be supervised by the VC if they participate in the equity of a company.

**Advantages of bringing VC in the company:**

- It injects long-term equity finance which provides a solid capital base for future growth.
- The venture capitalist is a business partner, sharing both the risks and rewards. Venture capitalists are rewarded with business success and capital gain.
- The venture capitalist is able to provide practical advice and assistance to the company based on past experience with other companies which were in similar situations.
➢ The venture capitalist also has a network of contacts in many areas that can add value to the company.
➢ The venture capitalist may be capable of providing additional rounds of funding should it be required to finance growth.
➢ Venture capitalists are experienced in the process of preparing a company for an initial public offering (IPO) of its shares onto the stock exchanges or overseas stock exchange such as NASDAQ.
➢ They can also facilitate a trade sale.

**Stages of funding for VC:**

1. **Seed Money**: Low level financing needed to prove a new idea.
2. **Start-up**: Early stage firms that need funding for expenses associated with marketing and product development.
3. **First-Round**: Early sales and manufacturing funds.
4. **Second-Round**: Working capital for early stage companies that are selling product, but not yet turning in a profit.
5. **Third Round**: Also called Mezzanine financing, this is expansion money for a newly profitable company.
6. **Fourth-Round**: Also called bridge financing, it is intended to finance the “going public” process. Risk in each stage is different. An indicative Risk matrix is given below:

<table>
<thead>
<tr>
<th>Financial Stage</th>
<th>Period (Funds locked in years)</th>
<th>Risk Perception</th>
<th>Activity to be financed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed Money</td>
<td>7-10</td>
<td>Extreme</td>
<td>For supporting a concept or idea or R&amp;D for product development</td>
</tr>
<tr>
<td>Start Up</td>
<td>5-9</td>
<td>Very High</td>
<td>Initializing prototypes operations or developing</td>
</tr>
<tr>
<td>First Stage</td>
<td>3-7</td>
<td>High</td>
<td>Start commercials marketing production and</td>
</tr>
<tr>
<td>Second Stage</td>
<td>3-5</td>
<td>Sufficiently high</td>
<td>Expand market and growing working capital need</td>
</tr>
<tr>
<td>Third Stage</td>
<td>1-3</td>
<td>Medium</td>
<td>Market expansion, acquisition &amp; product development for profit making company</td>
</tr>
<tr>
<td>Fourth Stage</td>
<td>1-3</td>
<td>Low</td>
<td>Facilitating public issue</td>
</tr>
</tbody>
</table>

**VC Investment Process**

The entire VC Investment process can be segregated into the following steps:

1. **Deal Origination**: VC operates directly or through intermediaries. Mainly many practicing Chartered Accountants would work as intermediary and through them VC gets the deal.

   Before sourcing the deal, the VC would inform the intermediary or its employees about the following so that the sourcing entity does not waste time:
   - Sector focus
   - Stages of business focus
   - Promoter focus
   - Turn over focus

   Here the company would give a detailed business plan which consists of business model, financial plan and exit plan. All these aspects are covered in a document which is called Investment Memorandum (IM). A tentative valuation is also carried out in the IM.
2. **Screening**: Once the deal is sourced the same would be sent for screening by the VC. The screening is generally carried out by a committee consisting of senior level people of the VC. Once the screening happens, it would select the company for further processing.

3. **Due Diligence**: The screening decision would take place based on the information provided by the company. Once the decision is taken to proceed further, the VC would now carry out due diligence. This is mainly the process by which the VC would try to verify the veracity of the documents taken. This is generally handled by external bodies, mainly renowned consultants. The fees of due diligence are generally paid by the VC. However, in many cases, this can be shared between the investor (VC) and Investee (the company) depending on the veracity of the document agreement.

4. **Deal Structuring**: Once the case passes through the due diligence it would now go through the deal structuring. The deal is structured in such a way that both parties win. In many cases, the convertible structure is brought in to ensure that the promoter retains the right to buy back the share. Besides, in many structures to facilitate the exit, the VC may put a condition that promoter has also to sell part of its stake along with the VC. Such a clause is called tag-along clause.

5. **Post Investment Activity**: In this section, the VC nominates its nominee in the board of the company. The company has to adhere to certain guidelines like strong MIS, strong budgeting system, strong corporate governance and other covenants of the VC and periodically keep the VC updated about certain milestones. If milestone has not been met the company has to give explanation to the VC. Besides, VC would also ensure that professional management is set up in the company.

6. **Exit plan**: At the time of investing, the VC would ask the promoter or company to spell out in detail the exit plan. Mainly, exit happens in two ways: one way is ‘sell to third party(ies)’. This sale can be in the form of IPO or Private Placement to other VCs. The second way to exit is that promoter would give a buy back commitment at a pre agreed rate (generally between IRR of 18% to 25%). In case the exit is not happening in the form of IPO or third party sell, the promoter would buy back. In many deals, the promoter buyback is the first refusal method adopted i.e. the promoter would get the first right of buyback.

**Q. No. 5 : Write a short note on STARTUP INDIA INITIATIVE ?**

Startup India scheme was initiated by the Government of India on 16th of January, 2016. The definition of startup was provided which is applicable only in case of Government Schemes.

Startup means an entity, incorporated or registered in India:

- Not prior to five years,
- With annual turnover not exceeding ₹ 25 crore in any preceding financial year, and
- Working towards innovation, development, deployment or commercialization of new products, processes or services driven by technology or intellectual property.

Provided that such entity is not formed by splitting up, or reconstruction, of a business already in existence. Provided also that an entity shall cease to be a Startup if its turnover for the previous financial years has exceeded ₹ 25 crore or it has completed 5 years from the date of incorporation/registration. Provided further that a Startup shall be eligible for tax benefits only after it has obtained certification from the Inter-Ministerial Board, setup for such purpose.
Q. No. 1 : Write a note on Small and Medium Enterprises.

Small and medium enterprises (SMEs), particularly in developing countries, are the backbone of the nation’s economy. They constitute the bulk of the industrial base and also contribute significantly to their exports as well as to their Gross Domestic Product (GDP). Micro, Small and Medium Enterprises (MSMEs) contributes 8% of the country’s GDP, 45% of the manufactures output and 40% of our exports. It provides employment to about 6 cr. people through 2.6 crore enterprises. The Micro Small and Medium Enterprises (MSME) sector forms the largest generator of employment in the Indian economy. It forms a major portion of the industrial activity.

Special Roles for SMEs were earmarked in the Indian economy with the advent of planned economy from 1951 and the subsequent industrial policy followed by government. By and large, SMEs developed in a manner, which made it possible for them to achieve the desired objectives.

Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, is provided for facilitating the promotion and development and enhancing the competitiveness of micro, small and medium enterprises and for matters connected therewith or incidental thereto, emphasized on the following:

- Remove impediments due to multiple laws
- Introduce statutory consultative and recommendatory bodies in MSME policies
- Statutory registration procedures of MSMEs
- Statutory basis for purchase preference and credit policies
- Improve realization of payments of MSMEs

The MSMED Act, 2006, defines the Micro, Small and Medium Enterprises based (i) on the investment in plant and machinery for those engaged in manufacturing or production, processing or preservation of goods and (ii) on the investment in equipment for enterprises engaged in providing or rendering of Services.

**Definition of Micro, Small & Medium Enterprises**

In accordance with the provision of Micro, Small & Medium Enterprises Development (MSMED) Act, 2006 the Micro, Small and Medium Enterprises (MSME) are classified in two classes:

(i) **Manufacturing Enterprises** : The enterprises engaged in the manufacture or production of goods pertaining to any industry specified in the first schedule to the industries (Development and regulation) Act, 1951) or employing plant and machinery in the process of value addition to the final product having a distinct name or character or use. The Manufacturing Enterprise is defined in terms of investment in Plant & Machinery.

(ii) **Service Enterprises** : The enterprises engaged in providing or rendering of services are defined in terms of investment in equipment.

The limit for investment in plant and machinery / equipment for manufacturing / service enterprises, as notified, vide S.O. 1642(E) dtd.29-09-2006 are as under

**Manufacturing Sector**

<table>
<thead>
<tr>
<th>Enterprises</th>
<th>Investment in plant &amp; machinery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro Enterprises</td>
<td>Does not exceed twenty five lakh rupees</td>
</tr>
<tr>
<td>Small Enterprises</td>
<td>More than twenty five lakh rupees but does not exceed five crore rupees</td>
</tr>
<tr>
<td>Medium Enterprises</td>
<td>More than five crore rupees but does not exceed ten crore rupees</td>
</tr>
</tbody>
</table>
Service Sector

<table>
<thead>
<tr>
<th>Enterprises</th>
<th>Investment in equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro Enterprises</td>
<td>Does not exceed ten lakh rupees:</td>
</tr>
<tr>
<td>Small Enterprises</td>
<td>More than ten lakh rupees but does not exceed two crore rupees</td>
</tr>
<tr>
<td>Medium Enterprises</td>
<td>More than two crore rupees but does not exceed five crore rupees</td>
</tr>
</tbody>
</table>

**Q. No. 2: How to arrange finance for MSME units?**

- No MSME unit can take off without monetary support. This need for finance can be classified into following types:
  - Long and medium term loans
  - Short term or working capital requirements
  - Risk Capital
  - Seed Capital/Marginal Money
  - Bridge loans

- Financial assistance in India for MSME units is available from a variety of institutions. The important ones are:
  - (i) Commercial/Regional Rural/Co-operative Banks.
  - (ii) SIDBI: Small Industries Development Bank of India (refinance and direct lending)
  - (iii) SFCs/SIDCs: State Financial Corporations (e.g. Delhi Financial Corporation)/State Industrial Development Corporations.

- Long and medium term loans are provided by SFCs, SIDBI and SIDCs. Banks also finance term loans. This type of financing is needed to fund purchase of land, construction of factory building/shed and for purchase of machinery and equipment. The short-term loans are required for working capital requirements, which fund the purchase of raw materials and consumables, payment of wages and other immediate manufacturing and administrative expenses. Such loans are generally available from commercial banks. The commercial banks also sanction composite loan comprising of working capital and term loan up to a loan limit of Rs.1 crore.

- For loans from financial institutions and commercial banks a formal application needs to be made. The details of documentation that need to be provided with the loan application are indicated below:
  - Balance Sheet and Profit Loss Statement for last three consecutive years of firms owned by promoters
  - Income Tax Assessment Certificates of Partners/Directors
  - Proof of Possession of Land/Building
  - Architect’s estimate for construction cost
  - Partnership deed/Memorandum and Articles of Associations of Company
  - Project Report
  - Budgetary Quotations of Plant and Machinery

- A sanction or rejection letter is issued by bank after its assessment of the application. After receiving a sanction letter, applicants need to indicate in writing their acceptance of terms and conditions laid down by FI/Banks.

- Subsequently, loan is disbursed according to the phased implementation of the project. In today’s environment there are other choices apart from commercial banks and Government owned financial institutions. These options include venture capital funds and non-government finance companies. (Source : Ministry of Micro, Small and Medium Enterprises)
Q. No. 3 : What World Bank does?

- A key area of the World Bank Group’s work is to improve SMEs’ access to finance and find innovative solutions to unlock sources of capital.
- Our approach is holistic, combining advisory and lending services to clients to increase the contribution that SMEs can make to the economy.

Advisory Support for Financial Sector Infrastructure:

- Credit Reporting Systems are important as better credit information can lead to increased credit for SMEs.
- Secured Transaction Registries ensure that SMEs can provide moveable collateral as the basis for more lending.
- Modernized Insolvency Regimes can help restructure viable businesses while also promoting the efficient and effective “exit” of those firms that are not economically efficient.
- Streamlining of Payments Systems supports the more efficient movement of money throughout the economy, including G2B, B2B, remittances and other payments.

The World Bank can help establish the legal and institutional framework for strong financial infrastructure systems.

Lending Operations and Policy Work:

- SME Lines of Credit provide dedicated bank financing – frequently for longer tenors than are generally available in the market – to support SMEs for investment, growth, export and diversification.
- Partial Credit Guarantee Schemes (PCGs) – the design of PCGs is crucial to SMEs’ success, and support can be provided to design and capitalize such facilities.
- Early Stage Innovation Finance provides equity and debt/quasi-debt to start up or high growth firms which may otherwise not be able to access bank financing.
- Policy work, analytical work, and other Advisory Services can also be provided in support of SME finance activities.

The WBG is increasingly looking to develop more innovative forms of SME financing, including: an extension of early stage innovation financing delivery mechanisms; franchising models; digital finance solutions; crowd funding; P2P financing; and Big Data Solutions.

Q. No. 4 : What are the benefits available to Micro, Small or Medium Enterprises?

(i) It enables reservation of certain items for exclusive manufacture of MSME enterprises. It helps them to protect their interest.

(ii) This policy helps in generating employment for the people and consequently, enhances the standard of living of people.

(iii) To encourage the small scale units, SEZ’s are required to allocate 10% space for small scale units.

(iv) Under the MSME act, protections are offered in relation to timely payment by buyers to MSME’s.

(v) Assistance is also available in obtaining finance; help in marketing; technical guidance; training and technology upgradation, etc.

(vi) Further, an enterprise, whose post-issue face value does not exceed Rs. 25,00,00,000 (Rupees Twenty Five Crores only), is entitled to obtain certain exemptions from the eligibility requirements under the ICDR Regulation.
Q. No. 5: What are the Criteria for New Listing of SME?

1. Incorporation
   The Company shall be incorporated under the Companies Act, 2013.

2. Financials
   - **Post Issue Paid up Capital**
     The post-issue paid up capital of the company shall be at least Rs. 3 crore.
   - **Net worth**
     Net worth (excluding revaluation reserves) of at least Rs. 3 crore as per the latest audited financial results.
   - **Net Tangible Assets**
     At least Rs. 3 crore as per the latest audited financial results.
   - **Track Record**
     Distributable profits in terms of Section 123 of the Companies Act 2013 for at least two years out of immediately preceding three financial years (each financial year has to be a period of at least 12 months). Extraordinary income will not be considered for the purpose of calculating distributable profits.
     Or, the net worth shall be at least Rs. 5 crores.

3. Other Requirements
   - It is mandatory for a company to have a website.
   - It is mandatory for the company to facilitate trading in demat securities and enter into an agreement with both the depositories.
   - There should not be any change in the promoters of the company in preceding one year from date of filing the application to BSE for listing under SME segment.

4. Disclosures
   A certificate from the applicant company / promoting companies stating the following:
   a) “The Company has not been referred to the Board for Industrial and Financial Reconstruction (BIFR).”
   
   **Note**: Cases where company is out of BIFR is allowed.
   b) There is no winding up petition against the company, which has been admitted by the court or a liquidator has not been appointed.

Q. No. 6: What are the Criteria for Migration from BSE SME Platform to the Main Board and what are the guidelines for listing?

The companies seeking migration to Main Board of BSE should satisfy the eligibility criteria. It is mandatory for the company to be listed and traded on the BSE SME Platform for a minimum period of two years and then they can migrate to the Main Board as per the guidelines specified by SEBI vide their circular dated 18th May 2010 and as per the procedures laid down in the ICDR guidelines Chapter X B.

❖ **Guidelines for Listing**

1. **Capital**
   The post issue face value capital should not exceed Rs. Twenty-five crores.
2. **Trading lot size**
   - The minimum application and trading lot size shall not be less than Rs. 1,00,000/-.
   - The minimum depth shall be Rs 1,00,000/- and at any point of time it shall not be less than Rs 1,00,000/-.
   - The investors holding with less than Rs 1,00,000/- shall be allowed to offer their holding to the Market Maker in one lot.
   - However in functionality the market lot will be subject to revival after a stipulated time.

3. **Participants**
   The existing Members of the Exchange shall be eligible to participate in SME Platform.

4. **Underwriting**
   The issues shall be 100% underwritten and Merchant Bankers shall underwrite 15% in their own account.

**Q. No. 7 : What are the Benefits of Listing in SME ?**

1. **Easy access to Capital**
   BSE SME provides an avenue to raise capital through equity infusion for growth oriented SME’s.

2. **Enhanced Visibility and Prestige**
   The SME’s benefit by greater credibility and enhanced financial status leading to demand in the company’s shares and higher valuation of the company.

3. **Encourages Growth of SMEs**
   Equity financing provides growth opportunities like expansion, mergers and acquisitions thus being a cost effective and tax efficient mode.

4. **Ensures Tax Benefits**
   In case of listed securities Short Term Gains Tax is 15% and there is absolutely no Long Term Capital Gains Tax.

5. **Enables Liquidity for Shareholders**
   Equity financing enables liquidity for shareholders provides growth opportunities like expansion, mergers and acquisitions, thus being a cost effective and tax efficient mode.

6. **Equity financing through Venture Capital**
   Provides an incentive for Venture Capital Funds by creating an Exit Route and thus reducing their lock in period.

7. **Efficient Risk Distribution**
   Capital Markets ensure that the capital flows to its best uses and those riskier activities with higher payoffs are funded.

8. **Employee Incentives**
   Employee Stock Options ensures stronger employee commitment, participation and recruitment incentive.

India has a total base of 48.8 million Small and Medium Businesses (SMB), making it one of the fastest growing SMB nation globally, said a report from Zinnov, an advisory firm.

The Indian SMB space today is largely dominated by micro scale businesses, contributing 95% of the SMB landscape, followed by small scale businesses contributing 4.8% and the rest 0.2% by medium scale businesses. [Source: BSE (SME) Website]
FAQ’s RELATING TO MICRO, SMALL AND MEDIUM ENTERPRISES

**Q. No. 8 : What is the status of lending by banks to this sector?**

Bank’s lending to the Micro and Small enterprises engaged in the manufacture or production of goods specified in the first schedule to the Industries (Development and regulation) Act, 1951 and notified by the Government from time to time is reckoned for priority sector advances. However, bank loans up to Rs.5 crore per borrower / unit to Micro and Small Enterprises engaged in providing or rendering of services and defined in terms of investment in equipment under MSMED Act, 2006 are eligible to be reckoned for priority sector advances. Lending to Medium enterprises is not eligible to be included for the purpose of computation of priority sector lending. Detailed guidelines on lending to the Micro, Small and Medium enterprises sector are available in our Master Circular no. RPCD.MSME & NFS.BC.No.5/06.02.31/2013-14 dated July 1, 2013. The Master circulars are issued by RBI, to banks, on various matters are available on RBI website www.rbi.org.in and updated in July each year.

**Q. No. 9 : What is meant by Priority Sector Lending?**

Priority sector lending include only those sectors, as part of the priority sector that impact large sections of the population, the weaker sections and the sectors which are employment-intensive such as agriculture, and Micro and Small enterprises. Detailed guidelines on Priority sector lending are available in RBI Master Circular on Priority sector lending no. RPCD.COPLAN. BC 9 /04.09.01/2013-14 dated July 1, 2013. The Master circulars issued by RBI, to banks, on various matters are available on its website www.rbi.org.in and updated in July each year.

**Q. No. 10 : Are there any targets prescribed for lending by banks to MSMEs?**

As per extant policy, certain targets have been prescribed for banks for lending to the Micro and Small enterprise (MSE) sector. In terms of the recommendations of the Prime Minister’s Task Force on MSMEs banks have been advised to achieve a 20 per cent year-on-year growth in credit to micro and small enterprises, a 10 per cent annual growth in the number of micro enterprise accounts and 60% of total lending to MSE sector as on preceding March 31st to Micro enterprises. In order to ensure that sufficient credit is available to micro enterprises within the MSE sector, banks should ensure that 40 per cent of the total advances to MSE sector should go to micro (manufacturing) enterprises having investment in plant and machinery up to Rs. 10 lakh and micro (service) enterprises having investment in equipment up to Rs. 4 lakh ; 20 per cent of the total advances to MSE sector should go to micro (manufacturing) enterprises with investment in plant and machinery above Rs. 10 lakh and up to Rs. 25 lakh, and micro (service) enterprises with investment in equipment above Rs. 4 lakh and up to Rs. 10 lakh. Thus, 60 per cent of MSE advances should go to the micro enterprises. For details, the RBI Master Circular RPCD.MSME & FS.BC.No.5/06.02.31/2013-14 dated July 1, 2013 on ‘Lending to Micro, Small and Medium Enterprises (MSME) Sector, may please be seen.

**Q. No. 11 : Are there specialized bank branches for lending to the MSMEs?**

Public sector banks have been advised to open at least one specialized branch in each district. The banks have been permitted to categorize their MSME general banking branches having 60% or more of their advances to MSME sector, as specialized MSME branches for providing better service to this sector as a whole. As per the policy package announced by the Government of India for stepping up credit to MSME sector, the public sector banks will ensure specialized MSME branches in identified clusters/centres with preponderance of small enterprises to enable the entrepreneurs to have easy access to the bank credit and to equip bank personnel to develop requisite expertise. Though their core competence will be utilized for extending finance and other services to MSME sector, they will have operational flexibility to extend finance/render other services to other sectors/borrowers.
Q. No. 12 : How many such specialized branches for lending to MSMEs are there?

As on March 2013 there are 2032 specialized MSME branches.

Q. No. 13 : How do banks assess the working capital requirements of borrowers?

The banks have been advised by RBI to put in place loan policies governing extension of credit facilities for the MSE sector duly approved by their Board of Directors Vide RBI circular; RPCD.SME & FS.BC.No.102/06.04.01/2008-09 dated May 4, 2009 ). Banks have, however, been advised to sanction limits after proper appraisal of the genuine working capital requirements of the borrowers keeping in mind their business cycle and short term credit requirement. As per Nayak Committee Report, working capital limits to SSI units is computed on the basis of minimum 20% of their estimated turnover up to credit limit of Rs.5crore. For more details paragraph 4.12.2 of the RBI Master Circular on lending to the MSME sector dated July 1, 2010 may please be seen.

Q. No. 14 : Is there any provision for grant of composite loans by banks?

A composite loan limit of Rs.1crore can be sanctioned by banks to enable the MSME entrepreneurs to avail of their working capital and term loan requirement through Single Window in terms of RBI Master Circular on lending to the MSME sector dated July 1, 2010. All scheduled commercial banks have been advised by our circular RPCD.SME&NFS. BC.No.102/06.04.01/2008-09 on May 4, 2009 that the banks which have sanctioned term loan singly or jointly must also sanction working capital (WC) limit singly (or jointly, in the ratio of term loan) to avoid delay in commencement of commercial production thereby ensuring that there are no cases where term loan has been sanctioned and working capital facilities are yet to be sanctioned. These instructions have been reiterated to schedule commercial banks on March 11, 2010.

Q. No. 15 : What is Cluster financing?

Cluster based approach to lending is intended to provide a full-service approach to cater to the diverse needs of the MSE sector which may be achieved through extending banking services to recognized MSE clusters. A cluster based approach may be more beneficial (a) in dealing with well-defined and recognized groups (b) availability of appropriate information for risk assessment (c) monitoring by the lending institutions and (d) reduction in costs. The banks have, therefore, been advised to treat it as a thrust area and increasingly adopt the same for SME financing. United Nations Industrial Development Organisation (UNIDO) has identified 388 clusters spread over 21 states in various parts of the country. The Ministry of Micro, Small and Medium Enterprises has also approved a list of clusters under the Scheme of Fund for Regeneration of Traditional Industries (SFURTI) and Micro and Small Enterprises Cluster Development Programme (MSE-CDP) located in 121 Minority Concentration Districts. Accordingly, banks have been advised to take appropriate measures to improve the credit flow to the identified clusters. Banks have also been advised that they should open more MSE focused branch offices at different MSE clusters which can also act as counselling. Centres for MSEs. Each lead bank of the district may adopt at least one cluster (Refer circular RPCD.SME & NFS.No.BC.90/06.02.31/2009-10 dated June 29, 2010)

Q. No. 16 : Is credit rating mandatory for the MSE borrowers?

Credit rating is not mandatory but it is in the interest of the MSE borrowers to get their credit rating done as it would help in credit pricing that is cost of funds (interest and other charges etc.) of the loans taken by them from banks. (Source: MSME Website)