

THEORY QUESTION BOOK

Investment Decisions, Project Planning and Control

QUESTION NO. 1:- How would you choose indivisible projects under capital rationing? Can there be a situation where a project with lower NPV is chosen while discarding a project with higher NPV? Explain.

Capital Rationing: This refers to prioritizing the projects based on NPV. The available capital is limited and therefore all projects with positive NPV cannot be selected. Hence, projects are arranged in the order of NPV (descending order) and the cumulative project cost is tabulated. When available capital is exhausted, the process of selection has to stop. But in the case of indivisible project, i.e. part project cannot be undertaken and therefore, we may have unutilized capital. Therefore, we may leave out the last one and choose the combination which maximizes the NPV. While doing so, we may have a situation where the project with better NPV is not selected since its selection would involve under utilization of capital. For example, consider the following table:

<u>Project</u>	<u>Capital Outlay</u>	<u>NPV (‘ lacs)</u>	<u>Cumulative outlay</u>
A	200	+250	200
B	225	+200	425
C	400	+180	825
D	175	+100	600

Suppose that available capital is ‘ 600 lacs. If we stop with B, since funds will be insufficient for C, we are not utilizing ‘ 175 lacs of capital. Hence, We can go for D, which has lesser NPV. The project is indivisible. Hence we cannot go for part of C which yields proportional NPV.

QUESTION NO. 2:- Cost of capital is used by a company as a minimum benchmark for its yield?. Comment. Also enumerate the applications of cost of capital in managerial decisions.

The cost of capital is a term used in the field of financial investment to refer to the cost of a company's funds (both debt and equity), or, from an investor's point of view "the shareholder's required return on a portfolio of all the company's existing securities". It is used to evaluate new projects of a company as it is the minimum return that investors expect for providing capital to the company, thus setting a benchmark that a new project has to meet.

For an investment to be worthwhile, the expected return on capital must be greater than the cost of capital. The cost of capital is the rate of return that capital could be expected to earn in an alternative investment of equivalent risk. If a project is of similar risk to a company's average business activities it is reasonable to use the company's average cost of capital as a basis for the evaluation. A company's securities typically include both debt and equity; one must therefore calculate both the cost of debt and the cost of equity to determine a company's cost of capital. However, a rate of return larger than the cost of capital is usually required.

IMPORTANCE OF COST OF CAPITAL IN DECISION MAKING

The cost of capital is critically important in finance. It plays a crucial role in the capital budgeting decision. The progressive management always takes notice of the cost of capital while taking a financial decision. The concept is quite relevant in the managerial decisions as:

(1) It may be used as the measuring rod for adopting an investment proposal. The firm, naturally, will choose the project which gives a satisfactory return on investment which would in no case be less than the cost of capital incurred for its financing. In various methods of capital budgeting, cost of capital is the key factor in deciding the project out of various proposals pending before the management. It measures the financial performance and determines the acceptability of all investment opportunities.

(2) It is significant in designing the firm's capital structure. A capable financial executive always keeps an eye on capital market fluctuations and tries to achieve the sound and economical capital structure for the firm. He may try to substitute the various methods of finance in an attempt to minimize the cost of capital so as to increase the market price and the earning per share.

(3) A capable financial executive must have knowledge of the fluctuations in the capital market and should analyze the rate of interest on loans and normal dividend rates in the market from time to time. Whenever company requires additional finance, he may have a better choice of the source of finance which bears the minimum cost of capital.

(4) It can be used to evaluate the financial performance of the top executives. Evaluation of the financial performance will involve a comparison of actual profitabilities of the projects and taken with the projected overall cost of capital and an appraisal of the actual cost incurred in raising the required fund.

(5) It is also important in many others areas of decision making, such as dividend decisions, working capital policy etc.

QUESTION NO.3:- "Fixed Costs are unrelated to output and irrelevant for decision making purpose in all circumstances

"- Justify.

Fixed Costs are unrelated to output and are generally irrelevant for decision making purpose. **However, in the following circumstances, Fixed Costs become relevant for decision-making:**

(1) When Fixed Costs are specifically incurred for any contract,

(2) When Fixed Costs are incremental in nature,

(3) When the fixed portion of Semi-Variable Cost increases due to change in level of activity consequent to acceptance of a contract,

(4) When Fixed Costs are avoidable or discretionary,

(5) When Fixed Costs are such that one cost is incurred in lieu of another (the difference in costs will be relevant for decision-making).

QUESTION NO. 4- List the relevance of Social Cost Benefit Analysis for Private Enterprise.

Relevance of Social Cost Benefit Analysis for Private Enterprises

(1) Social cost benefit analysis is important for private corporations also which have a moral responsibility to undertake socially desirable projects.

(2) If the private sector includes social cost benefit analysis in its project evaluation techniques, it will ensure that it is not ignoring its own long-term interest, since in the long run only projects that are socially beneficial and acceptable, will survive.

(3) Methodology of social cost benefit analysis can be adopted either from the guidelines issued by the United Nations Industrial Development Organisation (UNIDO) or the Organisation of Economic Cooperation and Development (OECD). Financial Institutions e.g. IDBI, IFCI, etc. even insist on social cost benefit analysis of a private sector project before sanctioning any loan.

(4) Private enterprise cannot afford to lose sight of social aspects of a project.

QUESTION NO. 5:- List the problems in determination of cost of capital.

Problems in determination of cost of capital:

(i) Conceptual controversy regarding the relationship between cost of capital and capital structure is a big problem.

(ii) Controversy regarding the relevance or otherwise of historic costs or future costs in decision making process.

(iii) Computation of cost of equity capital depends upon the expected rate of return by its investors. But the quantification of expectations of equity shareholders is a very difficult task.

(iv) Retained earnings have the opportunity cost of dividends forgone by the shareholders. Since different shareholders may have different opportunities for reinvesting dividends, it is very difficult to compute cost of retained earnings.

(v) Whether to use book value or market value weights in determining weighted average cost of capital poses another problem.

QUESTION NO. 6:- What is marginal cost of capital? When will this be equal to the average cost of capital?

Marginal Cost of Capital (MCC) is the cost of raising an additional rupee of capital. When fresh capital is raised in the same proportion as the current funds with the same cost component, the marginal cost of capital will be equal to the average cost of capital.

QUESTION NO. 7:- What is Risk Adjusted Discount Rate (RADR)? Explain its advantages and disadvantages.

Risk Adjusted Discount Rate (RADR) is similar to the NPV. It is defined as the present value of expected or mean value of future cash flow distributions discounted at a discount rate, k , which includes a risk premium for the riskiness of the cash flows from the project.

RADR = Risk free rate + Risk premium

Advantages:

- (i) It is simple and can be easily understood;
- (ii) It has a great deal of intuitive appeal for risk-averse businessmen; and
- (iii) It incorporates an attitude towards uncertainty.

Disadvantages:

- (i) There is no easy way of deriving a risk-adjusted discount rate;
- (ii) It does not make any risk adjusted in the numerator for the cash flows that are forecast over the future years; and
- (iii) It is based on the assumption that investors are risk-averse.

QUESTION NO. 8:- What are the situations in which Net Present Value (NPV) and Internal Rate of Return (IRR) give conflicting results?

Causes for Conflict: Higher the NPV, higher will be the IRR. However, NPV and IRR may give conflicting results in the evaluation of different projects, in the following situations:

- (i) **Initial Investment Disparity**, i.e. Different Project Sizes
- (ii) **Project Life Disparity**- i.e. Difference in Project Lives.
- (iii) **Outflow Patterns**, i.e., when cash outflows arise at different point of time during the Project Life, rather than as initial investment (Time 0) only.
- (iv) **Cash Flow Disparity**- when there is a huge difference between initial CFAT and late years CFAT. A project with heavy initial CFAT than compared to later years will have higher IRR and vice versa.

QUESTION NO. 9:- Explain the basic differences between Commercial Calculation and Social Cost Benefit Analysis (SCBA)

The economic analysis in project appraisal for evaluating investment projects is an important consideration in the analysis of social cost benefit. Basic differences between commercial calculation and SCBA computations in project appraisal lies in the following:

Commercial calculation

- (1) Structured objective of higher Profitability
- (2) Private interest is kept in mind

SCBA

- (1) Effect on society, health of society, rest on use, product, etc.
- (2) Wider view on national interest is considered.

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|---|--|
| (3) Singular objective | (3) Divergent objectives not conflicting each other. |
| (4) Return on investment - maximization. | (4) Rate of return to be compared with social economy, apportionment of benefits and cost to different time periods, even generation differences are analysed. |
| (5) Objective is at any cost Achievement. | (5) Systematizing complex problems of project planning from point of View of society and nation. |

QUESTION NO.10:- Write short note on Project Life Cycle:

The method of dividing the phases in a project. It provides a framework for budgeting manpower and resources allocation and for scheduling project milestones and project reviews. **The various phases are:**

- (i) **Concept or initialization phase** – Project idea emerges and the management decides on the need for a project.
- (ii) **Project definition phase** – techno- economic viability – technical configuration – performance requirement- cost estimates with limits and schedule of implementation.
- (iii) **Growth or organization phase**- includes establishing infrastructure, Project Engineering design, setting up Project organization, Preparation of schedules and budgets- raising finance- obtain licenses- tenders etc.
- (iv) **Implementation phase**- preparation of specifications, placing orders- Invite bids- Evaluating bid- issuing construction drawings- Installation – Piping – testing – Commissioning of the plant.
- (v) **Project shutdown and clean-up** – P & M built and erected with the active involvement handed over for production to a different agency.

QUESTION NO.11:- Briefly explain the salient features of non-recourse project financing

Project financing is different from conventional direct financing. In relation to conventional direct financing, lenders to the firm look at the firm's asset portfolio that generates cash flows to service their loans. The assets and their financing are integrated into the firm's asset and liability portfolios. Often, such loans are not secured by any pledge or collateral security. The critical distinguishing feature of a project financing is that the project is a distinct legal entity; project assets, project related contracts, and project cash flow are segregated to substantial degree from the sponsoring entity. The financing structure is designed to allocated financial returns and risks efficiently than a conventional financial structure.

In a project financing, the sponsors provide at most, limited recourse to cash flows from their other assets that are not part of the project. Also, they typically pledge the project assets, but none of their other assets, to secure the project loans. Project financing arrangements invariably involve strong contractual relationships among multiple parties, and maintaining them at a reasonable cost. Project financing will usually be cost-effective than conventional direct financing when —

- (1) project financing permits a higher degree of leverage than the sponsors could achieve on their own; and
- (2) the increase in leverage produces tax shield benefits sufficient to offset the higher cost of debt funds, resulting in a lower overall cost of capital for the project.

QUESTION NO.12:- The concept of capital Budgeting arises in scenarios of uncertainty in cash flows? Explain it.

Option is right to do an activity, which does not carry any obligation to do the same. Options in Capital Budgeting refers to those rights or choices purchased, whereby, the Firm can choose whether or not to exercise the option depending upon the outcomes till that point. Value of Option = NPV with Option Less NPV without Option [Note: Generally, the price of the option would be available, and the requirement would be to ascertain the project worth by considering the value of option as an alternative cash flow.]

Circumstances

(i) The concept of Options in Capital Budgeting arises in scenarios of uncertainty in cash flows. Since Capital Budgeting involves huge capital outlay and generally the decision is not reversible, negative effect of uncertainty can cripple an organisation.

(ii) Generally, the viability or otherwise of a project will be known only after a certain point in time. Only at that time a clearer picture will emerge, putting at rest to major portion of uncertainty. However, waiting for that clearer picture may also result in losing an opportunity.

Examples:

(i) **Option to Expand:** An important option is to expand production if conditions turn favourable and to contract production if conditions turn bad. The former is sometimes called a growth option, and the latter may actually involve the shutdown of production.

(ii) **Option to Abandon:** If a project has abandonment value, selling off the project on “as is where is” basis. This represents a put option (i.e. right to sell). Example: A Flat Promoter may dispose of his unfinished building to an Industrial House or another Flat Promoter, instead of proceeding further to sell it as individual units.

(iii) **Option to Postpone:** The option to postpone, also known as an investment timing option. For some projects there is the option to wait, thereby obtaining new information.

QUESTION NO.13:- Write the limitations of Social Cost Benefits Analysis?

Social Cost Benefit Analysis is a systematic evaluation of an organization's social performance as distinguished from its economic performance. Social Cost Benefits Analysis is an approach for evaluation of projects. It assesses gains/losses to society as a whole from the acceptance of a particular project. (i) Successful application depends upon reasonable accuracy and dependability of the underlying forecasts as well as assessment of intangibles. (ii) Technique does not indicate whether given project evaluated on socio-economic considerations is best choice to reach national goals or whether same resources if employed in another project would yield better results. (iii) Cost of evaluation by such technique could be enormous for smaller projects. (iv) Social Cost Benefit Analysis takes into consideration those aspects of social costs and benefits which can be quantified.

QUESTION NO.14:- Write down the steps in Project Management.

Project management consists of the following steps:

(a) Combining activities into “Work packages”, which have the features of a project i.e., the work packages are related to one another, and they all contribute to the same goal(s), and bound by time, cost and performance targets.

(b) Entrusting whole project to a single responsibility centre called the “Project Manager” for coordinating, directing and controlling the project.

(c) Choosing a suitable organisation structure to support and service the project internally, and through vendors and contractors externally.

(d) Building up commitment through negotiations, coordinating and directing towards goals through schedules, budgets and contracts.

(e) On the basis of schedules, budgets and contracts, ensuring that goals are achieved through continuous monitoring and control

QUESTION NO.15:- Describe the Little – Mirrlees approach to Social Cost Benefit Analysis (SCBA) of a project and the Indian modification of the same.

In Social Cost Benefit Analysis (SCBA), the focus is on social costs and benefits of a project. These often tend to differ from the costs incurred in monetary terms and benefits earned in monetary terms of the project.

The principal reasons for the discrepancies are: i. Market imperfections ii. Externalities iii. Taxes and levies iv. Concern for savings v. Concern for redistribution and vi. Merit and demerit of goods. Little-Mirrlees approach to SCBA involved determining the accounting of shadow prices particularly for foreign exchange, savings and unskilled

labour, considering the equity factor and the use of Discounted Cash Flow (DCF) analysis. It seeks to measure costs and benefits in terms of international prices, rather than in terms of domestic prices and also in terms of uncommitted social income. The Project Appraisal Division of the Planning Commission uses a modified and simplified version of the Little-Mirrlees approach. All industrial projects are evaluated on three aspects – economic rate of return, effective rate of protection and domestic resource cost. To calculate economic rate of return, the domestic market prices are substituted with international prices for all non-labour inputs and outputs. CIF prices for inputs and FOB prices for outputs are used for all tradable items. For tradable items where international prices are not available and for non-tradable items, social conversion factors are used. The effective rate of protection is calculated as follows:

Domestic selling prices are net of taxes and excise duty but inclusive of selling commission. The selling price at world prices is the CIF value for imports and FOB value for exports.

Domestic Resource Cost is computed as: $[(\text{Value added at domestic prices}) / (\text{Value added at world prices})] \times \text{Exchange Rate}$.

QUESTION NO.16:- What do you mean by Zero Date?

Zero Date of the project indicates the date from which the implementation of the project starts and fixation of zero date is the last important step in establishing a project. It is from this date the project has to be monitored to see whether the project is progressing as per schedule of implementation. This signals the effective start of the project and it is from this date the clock starts ticking. The project completion period will be counted from this point of time. The activities which have to be completed before zero date are known as pre-project activities.

Evaluation of Risky Proposals for Investment decisions

QUESTION NO. 1:- Explain the concept of 'option' in relation to a capital budgeting decision. What would be the value of the option?

Answer:

An option is a special contract under which the option owner enjoys the right to buy or sell something without any obligation to do the same. The option to buy is a 'call option' and the option to sell is a 'put option'. In the context of capital budgeting decision, the opportunities that managers have are called managerial option or real option, involving the real assets, not financial assets. The options provide the managers opportunity or flexibility to increase gains or reduce losses. The holder of a real option is often unclear as to what the precise right is and how long the same will last.

Value of the option = NPV with option - NPV without option.

QUESTION NO.2:- Write short notes on Decision Tree Analysis.

Decision Tree Analysis is a useful tool for analysis of investment proposals incorporating project flexibility. The decision-tree method analyzes investment opportunities involving a sequence of decisions over time. Various decision points are defined in relation to subsequent chance events. The Expected NPV for each decision point is computed based on the series of NPVs and their probabilities that branch out or follow the decision point in question. In other words, once the range of possible decisions and chance events are laid out in tree diagram form, the NPVs associated with each decision are computed by working backwards on the diagram from the expected cash flows defined for each path on the diagram. The optimal decision path is chosen by selecting the highest expected NPV for the first decision point.

QUESTION NO. 3:- How does “Risk Adjusted Discount Rate” differ from “Certainty Equivalent Approach” As techniques of risk analysis in capital budgeting?

Both the Risk Adjusted Discount Rate (RADR) and the Certainty Equivalents (CE) Approaches attempt to incorporate project risk. However, the way of approach differs. The RADR is concerned with the denominator- it increases the discount rate of the NPV formula. The CE deflates the cash flows and deals with the numerator of the NPV formula. For RADR the discount rate is a constant one over the life of the project, for CE different degrees of risk are taken care of the different years of the project life. The RADR tends to club together the risk free rate, the risk involved and the risk premium, while the CE approach maintains a distinction between the risk free rate and the risk. In CE the discount rate is risk free as the risk is adjusted by reducing the numerator- the cash flow.

QUESTION NO. 4:- Explain the steps involved in ‘Decision Tree Approach’ in investment decision.

While constructing a Decision Tree for a given problem, the following steps may be required: (i) Break the project into clearly defined stages. For example, a computer software company may take up the project of new package in different stages, i.e, research and development, market testing, limited production, and then full production. (ii) List all the possible outcomes at each stage. Specify the probability of each outcome at each stage based on the information available. This task will become progressively more difficult as more stages are involved. (iii) Specify the effect of each outcome on the expected cash flows from the project. (iv) Evaluate the optimal action to be taken at each stage in the decision tree, based on the outcome of the previous stage and its effect on cash flow.

QUESTION NO.5:- Write short notes on Project Feasibility Report.

This is prepared to present an in-depth techno-commercial analysis carried out on the project idea for considerations of the financial institutions and other authorities to make the decision, as to whether the investment on the project is to be made or not. The government guidelines on the contents of it include inter alia (i) Survey of material requirements; (ii) Study of demand of product or services (market analysis); (iii) Study of the configuration of the project idea in all aspects, like, technical, product pattern, process, plant size and raw material requirements, (iv) Study of location - geographical, political, social, etc (v) Project schedule; (vi) Project cost and source of finance - estimates; (vii) Profitability and cash flow analysis; (viii) Cost benefit analysis vs. social cost benefit analysis. Survey of material requirements primarily relates to raw material survey with all its forms, e.g. deposits, finished products, by-products, imports, etc. Identification of uses of products or service, their present and future consumption, supply pattern and demand, etc. are needed to be specially studied.

QUESTION NO. 6:- Write short notes on Sensitivity Analysis (SA) :

It refers to studying the impact of changes on one or more variables on the results, which can either be NPV or IRR or EPS etc. It means that value of NPV/IRR/EPS is sensitive to all these variables. This will help in understanding the critical variables on which the results depend. It is also one way of understanding the risks related to a project or policy. The SA deals with the consideration of sensitivity of NPV in relation to different variables contributing to the NPV. The sensitivity analysis can be performed a model of projected cash flows for capital budgeting. It helps to decision making to the management. When a project proves to be very sensitive to certain aspects such as raw material price, power cost, selling price etc. the management has to provide adequate weightage to these aspects before the investment decision is frozen. The sensitivity of a capital budgeting proposal, in general, may be analyzed with reference to; (i) level of revenues; (ii) the expected growth rate in revenues; (iii) the operating margin; (iv) the working capital requirements as a percentage of revenue, etc., with each such variables, the NPV and IRR of a proposal may be ascertained by keeping the other variables unchanged.

QUESTION NO. 7:- Explain the main causes of uncertainty?

Uncertainty usually arises because it is impossible to predict the different variables and, consequently, the magnitudes of benefits and costs exactly as they will occur. One hundred per cent predictability in project analysis is not feasible for many reasons, the most important being

i) Inflation, by which it is understood that the prices of most items, inputs or outputs, increase with time, causing changes in relative prices. The exact magnitude of price increases will always be unknown. Prices may change upwards or downwards for other reasons, too,

ii) Changes in technology quantities and qualities of inputs and outputs used for project evaluation are estimated according to the present state of knowledge, yet new technologies might be introduced in the future that would alter these estimates,

iii) The rated capacity used in project evaluation may never be attained. This in turn will affect operating costs as well as sales revenue,

iv) It often turns out that the needed investment for both fixed and working capital is underestimated and that the construction and running-in periods are considerably longer than expected. This affects the size of investment, operating costs and sales revenue.

Some uncertainties are outside the control of planners, others can be influenced by their policies. The extent of risk associated with an investment project may be reduced either by making advance arrangements for dealing with uncertainty or by substituting a less risky alternative for a more risky one.

QUESTION NO. 8:- What are the differences between NPV and IRR?

(a) Causes for Conflict: Higher the NPV, higher will be the IRR. However, NPV and IRR may give conflicting results in the evaluation of different projects, in the following situations –

i) Initial Investment Disparity - i.e. Different Project Sizes,

ii) Project Life Disparity - i.e. Difference in Project Lives,

iii) Outflow Patterns - i.e. when Cash Outflows arise at different points of time during the Project Life, rather than as Initial Investment (Time 0) only.

iv) Cash Flow Disparity - when there is a huge difference between initial CFAT and later years' CFAT. A project with heavy initial CFAT than compared to later years will have higher IRR and vice-versa.

(b) Superiority of NPV: In case of conflicting decisions based on NPV and IRR, the NPV method must prevail. Decisions are based on NPV, due to the comparative superiority of NPV, as given from the following points –

i) NPV represents the surplus from the project but IRR represents the point of no surplus-no deficit.

ii) NPV considers Cost of Capital as constant. Under IRR, the Discount Rate is determined by reverse working, by setting $NPV = 0$.

iii) NPV aids decision-making by itself i.e. projects with positive NPV are accepted. IRR by itself does not aid decision-making. For example, a project with $IRR = 18\%$ will be accepted if $KO < 18\%$. However, the project will be rejected if $KO = 21\%$ (say $> 18\%$). **iv)** NPV method considers the timing differences in Cash Flows at the appropriate discount rate. IRR is greatly affected by the volatility / variance in Cash Flow patterns.

v) IRR presumes that intermediate cash inflows will be reinvested at that rate (IRR), whereas in the case of NPV method, intermediate cash inflows are presumed to be reinvested at the cut-off rate. The latter presumption viz. Reinvestment at the Cut-Off Rate, is more realistic than reinvestment at IRR.

vi) There may be projects with negative IRR/ Multiple IRR etc. if cash outflows arise at different points of time. This leads to difficulty in interpretation. NPV does not pose such interpretation problems.

QUESTION NO. 9:- What do you mean by risk adjusted discount rate method?

The risk adjusted discount rate method (RADR) is similar to the NPV. It is defined as the present value of the expected or mean value of future cash flow distributions discounted at a discount rate, k , which includes a risk premium for the riskiness of the cash flows from the project.

QUESTION NO. 10:- List out the steps involved to determine the financial viability of a project.

The steps involved to determine the financial viability of a project are as follows:

(i) Determination of project cost **(ii)** Sources of fund/means of financing and proper utilization of fund **(iii)** Profitability analysis **(iv)** Break-even analysis **(v)** Cash flow/fund flow statement **(vi)** Debt service coverage ratio.

QUESTION NO. 11:- Describe Sensitivity Analysis as a technique of Risk Analysis in Capital Budgeting Decisions

Sensitivity Analysis : The NPV of a project is based upon the series of cash flows and the discount factor. Both these determinants depend upon so many variables such as sales revenue, input cost, competition, etc. Given the level of all these variables, there will be a series of cash flows and there will be NPV of the proposal. If any of these variables changes, the value of NPV will also change. It means that the value of NPV is sensitive to all these variables. The Sensitivity of a capital budgeting proposal, in general, may be analysed with reference to

- (a)** Level of revenues,
- (b)** The expected growth rate in revenues,
- (c)** The operating margin, and
- (d)** The working capital requirements as a percentage of revenue, etc., with each such variable, the NPV and IRR of a proposal may be ascertained by keeping the other variable unchanged.

Sensitivity Analysis helps in identifying the different variables having effect on the NPV of a proposal. It helps in establishing the sensitivity or vulnerability of the proposal to a given variable and showing areas where additional analysis may be undertaken before a proposal is finally selected. The final decision on whether or not to take up the proposal will be based on regular budgeting analysis and the information generated by the sensitivity analysis. It is entirely possible that decision maker, when faced with the result from the Sensitivity Analysis, might decide to override a proposal originally approved by capital budgeting analysis. He may point that a small change in any one variable makes the proposal unaccepted.

Leasing Decisions

QUESTION NO.1:- Write down the steps in financial planning process? Define cross border leasing. Mention the objectives of cross border leasing.

The financial planning process involves the following steps:

(i) Clearly defined Mission and Goal — At the outset, the top management should realize and recognize the importance of setting the organizational mission, goal and objectives, which should be clearly defined and communicated.

(ii) Determination of Financial Objectives — In developing the financial objectives, a firm must consider its purpose, mission, goal and overall objectives of the firm. The financial objectives can again be transformed into strategic planning. The financial objectives can be classified into: (a) long-term objectives, and (b) short-term objective. The long-term financial objectives may relate to earnings in excess over the targeted return on capital employed, increase in EPS and market value of share, increase in market share of its product, achieve targeted growth rate in sales, maximization of value for shareholders etc. The short-term financial objectives relate to profitability, liquidity, working capital management, current ratio, operational efficiency etc.

(iii) Formulation of Financial Policies — The next step in financial planning and decision making process is to formulate the financial policies which provide guides to decision making for attainment of both long-term and short-term financial objectives. For example, the company can frame its financial policies like:

- a.** Debt-equity ratio and current ratio of the firm may be fixed at 3:2 and 2:1 respectively.
- b.** A minimum cash balance has to be maintained at '1,00,000 always.
- c.** The minimum and maximum levels are to be fixed for all items of raw material and consumable.

- d. The equity to be raised only by issue of equity shares.
- e. Profitability centre concept to be implemented for all divisions in the organization.
- f. The inter-divisional transfers to be priced at pre-determined transfer prices etc.

(iv) Designing Financial Procedures — The financial procedures help the Finance manager in day to day functioning, by following the pre-determined procedures. The financial decisions are implemented to achieve the organizational goals and financial objectives. The financial procedures outline the cash flow control system, setting up of standards of performance, continuous evaluation process, capital budgeting procedures, capital expenditure authorization procedures, financial forecasting techniques to be used, preparation standard set of ratios, using of budgetary control system etc.

(v) Search for Opportunities — This involves a continuous search for opportunities which are compatible with the firm's objectives. The earlier opportunity is identified the greater should be the potential returns before competitors and imitators react.

(vi) Identifying Possible Course of Action — This requires the development of business strategies from which individual decisions emanate. The available courses of action should be identified keeping in view the marketing, financial and legal restrictions or other forces not within the control of decision maker. For example, the additional funds requirement for expansion of the plant can be met by raising of finances from various sources.

(vii) Screening of Alternatives — Each course of action is subjected to preliminary screening process in order to assess its feasibility considering the resources required, expected returns and risks involved. Readily available information must be used to ascertain whether the course of action is compatible with existing business and corporate objectives and likely returns can compensate for the risks involved.

(viii) Assembling of Information — The Finance manager must be able to recognize the information needs and sources of information relevant to the decision. The cost/benefit trade-off must be kept in view in information gathering. To obtain more reliable information, the costs may be heavy in data gathering. The relevant and reliable information ensures the correct decision making and confidence in the decision outcome.

(ix) Evaluation of Alternatives and Reaching a Decision — This step will involve the evaluation of different alternatives and their possible outcomes. This involves comparing the options by using the relevant data in such a way as to identify the best possible course of action that can enable in achieving the corporate objectives in the light of prevailing circumstances.

(x) Implementation, Monitoring and Control — After the course of decision is selected, attempts to be made to implement the decision to achieve the desired results. The progress of action should be continuously monitored by comparing the actual results with the desired results. The progress should be monitored with feedback reports, control reports, post audits, performance audits, progress reports etc. Any deviations from planned course of action should be rectified by making supplementary decisions.

Cross Border Leasing

Cross-border leasing is a leasing arrangement where lessor and lessee are situated in different countries. Cross-border leasing can be considered as an alternative to equipment loans to foreign buyers, the only difference being the documentation, with down payments, payment streams, and lease-end options the same as offered under Equipment Loans. Operating leases may be feasible for exports of large equipment with a long economic life relative to the lease term.

Objectives of Cross Border Leasing:

i) Overall Cost of Financing: A major objective of cross-border leases is to reduce the overall cost of financing through utilization by the lessor of tax depreciation allowances to reduce its taxable income. The tax savings are passed through to the lessee as a lower cost of finance. The basic prerequisites are relatively high tax rates in the lessor's country, liberal depreciation rules and either very flexible or very formalistic rules governing tax ownership.

ii) Security: The lessor is often able to utilize non-recourse debt to finance a substantial portion of the equipment cost. The debt is secured by among other things, a mortgage on the equipment and by an assignment of the right to receive payments under the lease.

iii) Accounting Treatment: Also, depending on the structure, in some countries the lessor can utilize very favourable "Leveraged Lease" Financial Accounting treatment for the overall transaction. iv) Repossession: In

some countries, it is easier for a lessor to repossess the leased equipment following a Lessee default because the lessor is an owner and not a mere secured lender.

QUESTION NO. 2:- State and explain the characteristic features of Financial Lease and Operating Lease.

<u>Aspects</u>	<u>Financial Lease</u>	<u>Operating Lease</u>
Lease term	Ranges from intermediate to long-term arrangement.	Significantly less than the economic life of the equipment.
Cancellation	During primary lease period, the lease cannot be cancelled.	It can be cancelled by the lessee prior to the expiration date.
Amortization of cost	The lease is more or less fully amortized during the primary lease period.	The lease rental is generally not sufficient to fully amortize the cost of the asset.
Maintenance & taxes	The costs of maintenance, taxes, insurance are to be incurred by the lessee, unless the contract provides otherwise.	The costs of maintenance, taxes and insurance are the responsibility of the lessor.
Risk of obsolescence	The lessee is required to take the risk of the obsolescence.	The lessee is protected against the risk of obsolescence.
Interest of the asset	The lessor is only the financier and is not interested in the assets.	Lessor has the option to recover the cost of asset from another party, on cancellation of the lease by leasing out the asset.

QUESTION NO. 3:- Write a short note on Leveraged Lease

Under a Leveraged Lease arrangement, the lessor borrows a substantial portion of the purchase price of the asset from a lender, which is typically a commercial bank or a financial institution, with full recourse to the lessee and without recourse to it (lessor). The lender obtains an assignment of the lease and the rentals to be paid by the lessee and insists on first mortgage on the asset. The trustee through whom the transaction is rented receives the rentals from the lessee and passes on to lender and the surplus left after satisfying the claims of the lender goes to the lessor who as owner of the asset is entitled to the tax benefits.

QUESTION NO. 4:- One of the advantages of Cross Border leasing is Double Dip Lease. – Justify.

Cross Border leasing has been widely used to arbitrage the difference in the tax laws of different countries thus making them tax avoidance and tax shelters. This is possible since each country applies differing rules for determining whether the party acting as lessor under a cross-border lease is the owner of the leased asset for tax purposes enabling him to claim tax allowances.

QUESTION NO. 5:- Write a short note on Lease Financing:

A number of non-banking financial companies and even some banks are engaged in the business of lease financing. The leasing companies pay the full price of all required equipment and then lease them out to the lessee under a lease agreement providing for repayment of principal and interest in quarterly or monthly installments. At the end of the lease period, the ownership of the equipment is transferred to the lessee at a nominal residual value. The rate of interest charged for lease financing is higher than lending rate. The repayment capacity of the lessee is the main factor of credit worthiness.

Lease financing has several advantages. The lessee need not invest the capital in full as one time single investment. Generally, the processing time for sanctioning lease finance is fast. When the equipment is no longer needed, the lessee can terminate the agreement and ask lessor to take away the equipment. The lease installment is allowed as deductible expense for tax purpose.

Lease financing has also certain drawbacks. First the interest payment is high. Second, the leased assets do not contribute to the net worth. Third, depreciation allowance cannot be claimed during the period of lease agreement i.e. until the equipment is legally transferred in the name of lessee. Four in case of termination of lease agreement before its expiry, the installments paid towards principal are not fully refunded, because the lessor will charge penal interest for pre-closing the account and since he may not readily find another lessee to take over and use the equipment. And lastly, the lessee has no freedom to move the leased equipment from one place to another.

Institutions in Financial Markets

QUESTION NO.1:- Fill in the following table - Identify the function of the bank under the appropriate classification and tick to mention whether it is a banking or a non-banking function:

(You are required to write only columns I, III, IV and V in your answer.)

<u>I</u> <u>Sl. No</u>	<u>II</u> <u>Activity</u>	<u>III</u> <u>Category of</u> <u>Function</u>	<u>IV</u> <u>Banking</u> <u>Function</u>	<u>V</u> <u>Non-Banking</u> <u>Function</u>
(i)	Discounting bills of exchange			
(ii)	Electronic Funds Transfer between accounts of customers			
(iii)	Periodic payments of electricity bills of customers			
(iv)	Acceptance of Public Provident Fund Deposits			

<u>I</u> <u>Sl. No.</u>	<u>II</u> <u>Activity</u>	<u>III</u> <u>Category of</u> <u>Function</u>	<u>IV</u> <u>Banking</u> <u>Function</u>	<u>V</u> <u>Non Banking</u> <u>Function</u>
(i)	Discounting bills of exchange	Advancing loans	Yes	
(ii)	Electronic funds transfer between accounts	Remittance of Funds	Yes	
(iii)	Periodic payments of electricity bills of customers	Agency service		Yes
(iv)	Acceptance of Public Provident Fund Deposits	General Utility Service		Yes

QUESTION NO.2:- What are the tools and techniques used by RBI to maintain financial stability?

Tools and Techniques The Reserve Bank makes use of a variety of tools and techniques to assess the buildup of systemic risks in the economy and to provide critical inputs in this respect to its policy making departments.

The tools include:

- (i) A Financial Stress Indicator - a contemporaneous indicator of conditions in financial markets and in the banking sector;
- (ii) Systemic Liquidity Indicator for assessing stresses in availability of systemic liquidity;
- (iii) A Fiscal Stress Indicator for assessing build up of risks from the fiscal;
- (iv) A Network Model of the bilateral exposures in the financial system - for assessing the inter-connectedness in the system;
- (v) A Banking Stability Indicator for assessing risk factors having a bearing on the stability of the banking sector; and
- (vi) A series of Banking Stability Measures for assessing the systemic importance of individual banks.

QUESTION NO. 3:- Write down the main activities of RBI.

The Reserve Bank is the umbrella network for numerous activities, all related to the nation's financial sector, encompassing and extending beyond the functions of a typical central bank:

• Monetary Authority • Issuer of Currency • Banker and Debt Manager to Government • Banker to Banks • Regulator of the Banking System • Manager of Foreign Exchange • Maintaining Financial Stability • Regulator and Supervisor of the Payment and Settlement Systems • Developmental Role

QUESTION NO. 4:- How does commercial banks grant loans?

Banks grant loan in following ways:-

(i) Overdraft: - Banks grant overdraft facilities to current account holder to draw amount in excess of balance held.

(ii) Cash credit: - Banks grant credit in cash to current account holder against hypothecation of goods.

(iii) Discounting trade bills:- The banks facilitate trade and commerce by discounting bills of exchange.

(iv) Term loan: - Banks grant term loan to traders and to agriculturists against some collateral securities.

(v) Consumer credit:- Banks grant credit to households in a limited amount to buy durable goods.

(vi) Money at call or short term advances:- Banks grant loan for a very short period not exceeding 7 days to dealers / brokers in stock exchange against collateral securities.

QUESTION NO. 5:- NBFCs lend and make investments and hence their activities are akin to that of banks. – State the differences.

NBFCs lend and make investments and hence their activities are akin to that of banks; however there are a few differences as given below:

(1) NBFC cannot accept demand deposits;

(2) NBFCs do not form part of the payment and settlement system and cannot issue cheques drawn on itself.

(3) Deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation is not available to depositors of NBFCs, unlike in case of banks.

QUESTION NO. 6:- Discuss any 4 statutory functions of IRDA.

Statutory functions of IRDA are as follows: • Issue to the applicant a certificate of registration, renew, modify, withdraw, suspend or cancel such registration • Protection of the interests of the policyholders 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 • Specifying requisite qualifications, code of conduct and practical training for intermediaries or insurance Intermediaries and agents • Specifying the code of conduct for surveyors and loss assessors.

QUESTION NO. 7:- Discuss Regulatory role of RBI

As the nation's financial regulator, the Reserve Bank handles a range of activities, including: **(1)** Licensing **(2)** Prescribing capital requirements **(4)** Monitoring governance **(4)** Setting prudential regulations to ensure solvency and liquidity of the banks **(5)** Prescribing lending to certain priority sectors of the economy **(6)** Regulating interest rates in specific areas **(7)** Setting appropriate regulatory norms related to income recognition, asset classification, provisioning, investment valuation, exposure limits and the like ? Initiating new regulation

QUESTION NO. 8:- Write are the Key elements of a well-functioning Financial System.

The basic elements of a well-functional financial system are: **(i)** a strong legal and regulatory environment; **(ii)** stable money; **(iii)** sound public finances and public debt management; **(iv)** a central bank; **(v)** a sound banking system; **(vi)** an information system; and **(vii)** well functioning securities market.

QUESTION NO. 9:- Write short note on NBFC-MFI.

NBFC-MFI is a non-deposit taking NBFC having not less than 85% of its assets in the nature of qualifying assets which satisfy the following criteria:

- (i) loan disbursed by an NBFC-MFI to a borrower with a rural household annual income not exceeding ₹ 60,000 or urban and semi-urban household income not exceeding ₹ 1,20,000;
- (ii) loan amount does not exceed ₹ 35,000 in the first cycle and ₹ 50,000 in subsequent cycles;
- (iii) total indebtedness of the borrower does not exceed ₹ 50,000;
- (iv) tenure of the loan not to be less than 24 months for loan amount in excess of ₹ 15,000 with prepayment without penalty;
- (v) loan to be extended without collateral;
- (vi) aggregate amount of loans, given for income generation, is not less than 75 per cent of the total loans given by the MFIs;
- (vii) loan is repayable on weekly, fortnightly or monthly installments at the choice of the borrower

QUESTION NO.10:- Describe the role of RBI as Governments' Debt Manager.

In this role, RBI set policies, in consultation with the government and determine the operational aspects of rising money to help the government finance its requirements: ? Determine the size, tenure and nature (fixed or floating rate) of the loan ? Define the issuing process including holding of auctions ? Inform the public and potential investors about upcoming government loan auctions.

The Reserve Bank also undertakes market development efforts, including enhanced secondary market trading and settlement mechanisms, authorization of primary dealers and improved transparency of issuing process to increase investor confidence, with the objective of broadening and deepening the government securities market.

QUESTION NO.11:- State the objective and functions of State Co-operative Bank.

The chief objectives of State Cooperative Bank are to coordinate the work of the Central Banks, and to link Cooperative Credit Societies with the general money market and the Reserve Bank of India.

These banks work as real pivots of the Cooperative movement in the state. They act as initial source of credit for seasonal and urgent needs of their members.

Their main functions are:

- (i) They act as banker's bank to the Central Cooperative Banks in the districts. These banks not only mobilise the financial resources needed by the societies, but they also deploy them properly among the various sectors of the movement.
- (ii) They coordinate their own policies with those of the cooperative movement and the government.
- (iii) They form a connecting link between the cooperative credit societies and the commercial money market and the RBI.
- (iv) They formulate and execute uniform credit policies for the cooperative movement as a whole.
- (v) They promote the wise of cooperation in general by granting subsidiaries to the Central Cooperative Banks for the development of cooperative activities.
- (vi) They act as a clearing house for capital i.e., money flows from, the Apex Banks to the Central Banks and from the Central Banks to the rural societies and from them to individual borrowers.
- (vii) They supervise, control and guide the activities of the Central Bank through regular inspections by their inspection staff and rectify the defects in their work. Thus, they act as their friend, philosopher and guide.
- (viii) They also perform general utility functions such as issuing drafts, cheques and letters of credit on various centres and thereby help remittance of funds.
- (ix) They collect and discount bills with the permission of the Registrar.

QUESTION NO.12:- Explain the responsibilities of the NBFCs accepting public deposits with regard to submission of returns and other information to RBI.

The NBFCs accepting public deposits should furnish to RBI

- (i)** Audited balance sheet of each financial year and an audited profit and loss account in respect of that year as passed in the annual general meeting together with a copy of the report of the Board of Directors and a copy of the report and the notes on accounts furnished by its Auditors;
- (ii)** Statutory Quarterly Return on deposits - NBS 1;
- (iii)** Certificate from the Auditors that the company is in a position to repay the deposits as and when the claims arise;
- (iv)** Quarterly Return on prudential norms-NBS 2;
- (v)** Quarterly Return on liquid assets-NBS 3;
- (vi)** Annual return of critical parameters by a rejected company holding public deposits – NBS 4
- (vii)** Half-yearly ALM Returns by companies having public deposits of ' 20 crores and above or asset size of ' 100 crores and above irrespective of the size of deposits holding
- (viii)** Monthly return on exposure to capital market by deposit taking NBFC with total assets of ' 100 crores and above–NBS 6; and
- (ix)** A copy of the Credit Rating obtained once a year

QUESTION NO.13:- Explain the function of Forward market commission of India

- (i)** To advice the Central Government in respect of the recognition or withdrawal of recognition from any association. It also advices government about any other matter arising out of the administration of this act.
- (ii)** Second function of the act includes the task of keeping forward market s under observation and take necessary actions. The actions taken should be according to powers given to the commission by the "Forward Contract Regulation Act".
- (iii)** To collect information regarding the trading conditions in respect of goods (to which any of the provisions of this Act is made applicable) including information regarding supply, demand and prices. And publish information whenever the Commission thinks it necessary, It also performs the task of submitting to the Central Government periodical reports on the operation of this Act and on the working of forward markets relating to such goods.
- (iv)** To make recommendations generally with a view to improving the organization and working of forward markets.
- (v)** To undertake the inspection of the accounts and other documents of [any recognized association or registered association or any member of such association] whenever it considers it necessary.
- (vi)** To perform such specified duties and exercise assigned powers by the "Forward Contract Regulation Act".

QUESTION NO.14:- Define Cash Reserve Ratio.

The share of net demand and time liabilities that banks must maintain as cash balance with the Reserve Bank. The Reserve Bank requires banks to maintain a certain amount of cash in reserve as percentage of their deposits to ensure that banks have sufficient cash to cover customer withdrawals. The adjustment of this ratio is done as an instrument of monetary policy, depending on prevailing conditions. Our centralized and computerized system allows for efficient and accurate monitoring of the balances maintained by banks with the Reserve Bank of India.

QUESTION NO.15:- State five important regulations prescribed by SEBI for the investments that can be made by a Mutual Fund.

SEBI REGULATIONS FOR INVESTMENTS OF A MUTUAL FUND:

The investments of a mutual fund are governed by a set of regulations of the SEBI and the five import; ones are as under:

- (i)** In all the schemes taken together, a mutual fund shall not own more than 10% of the company's paid up capital;
- (ii)** A scheme shall not invest more than 15% of the NAV in debt instruments issued by a single issuer which are rated not below investment grade by an authorized credit rating agency;

- (iii) Barring certain exceptions, a scheme shall not invest more than 10% of its NAV in the equity shares or equity related instruments of one company;
- (iv) A scheme shall not invest more than 5% of its NAV in unlisted equity shares or equity related instruments in case of an open ended scheme and 10% of its NAV in case of close ended scheme;
- (v) Mutual funds shall mark all investments to market.

QUESTION NO.16:- NBFC are not being compulsorily registered with RBI. - Justify.

In terms of Section 45-IA of the RBI Act, 1934, no Non-banking Financial company can commence or carry on business of a non-banking financial institution without a) obtaining a certificate of registration from the Bank and without having a Net Owned Funds of ' 25 lakhs (' two crore since April 1999). However, in terms of the powers given to the Bank. to obviate dual regulation, certain categories of NBFCs which are regulated by other regulators are exempted from the requirement of registration with RBI viz. Venture Capital Fund/Merchant Banking companies/ Stock broking companies registered with SEBI, Insurance Company holding a valid Certificate of Registration issued by IRDA, Nidhi companies as notified under Section 620A of the Companies Act, 1956, Chit companies as defined in clause (b) of Section 2 of the Chit Funds Act, 1982, Housing Finance Companies regulated by National Housing Bank, Stock Exchange or a Mutual Benefit company.

QUESTION NO.17:- Explain the financial meaning of investment?

- (1) Financial investment involves of funds in various assets, such as stock, Bond, Real Estate, Mortgages etc.
- (2) Investment is the employment of funds with the aim of achieving additional income or growth in value.
- (3) It involves the commitment of resources which have been saved or put away from current consumption in the hope some benefits will accrue in future. Investment involves long term commitment of funds and waiting for a reward in the future.
- (4) From the point of view people who invest their finds, they are the supplier of 'Capital' and in their view investment is a commitment of a person's funds to derive future income in the form of interest, dividend, rent, premiums, pension benefits or the appreciation of the value of their principle capital.
- (5) To the financial investor it is not important whether money is invested for a productive use or for the purchase of second hand instruments such as existing shares and stocks listed on the stock exchange.
- (6) Most investments are considered to be transfers of financial assets from one person to another.

QUESTION NO.18:- Nomination facility is available to the Depositors of NBFCs. - Justify.

Nomination facility is available to the depositors of NBFCs. The Rules for nomination facility are provided for in section 45QB of the Reserve Bank of India Act, 1934. NonBanking Financial Companies have been advised to adopt the Banking Companies (Nomination) Rules, 1985 made under Section 45ZA of the Banking Regulation Act, 1949. Accordingly, depositor/s of NBFCs are permitted to nominate one person to whom the NBFC can return the deposit in the event of the death of the depositor/s. NBFCs are advised to accept nominations made by the depositors in the form similar to one specified under the said rules, viz Form DA 1 for the purpose of nomination, and Form DA2 and DA3 for cancellation of nomination and change of nomination respectively.

QUESTION NO.19:- Write a short note on Liquidity Adjustment Facility

LAF is facility extended by the Reserve Bank of India to the scheduled commercial banks (excluding RRBs) and primary dealers to avail of liquidity in case of requirement or park excess funds with the RBI in case of excess liquidity on an overnight basis against the collateral of Government securities including State Government securities. Basically LAF enables liquidity management on a day to day basis. The operations of LAF are conducted by way of repurchase agreements with RBI being the counter party to all the transactions. The interest rate in LAF is fixed

by the RBI from time to time. LAF is an important tool of monetary policy and enables RBI to transmit interest rate signals to the market.

QUESTION NO. 20:- List the aspects that should be borne in mind by a depositor while making deposits with an NBFC.

While making deposits with an NBFC, the following aspects should be borne in mind:

- (i)** Public deposits are unsecured.
- (ii)** A proper deposit receipt is issued, giving details such as the name of the depositor/s, the date of deposit, the amount in words and figures, rate of interest payable and the date of repayment of matured deposit along with the maturity amount. Depositor/s should insist on the above and also ensure that the receipt is duly signed and stamped by an officer authorised by the company on its behalf.
- (iii)** In the case of brokers/agents etc collecting public deposits on behalf of NBFCs, the depositors should satisfy themselves that the brokers/agents are duly authorized by the NBFC.
- (iv)** The Reserve Bank of India does not accept any responsibility or guarantee about the present position as to the financial soundness of the company or for the correctness of any of the statements or representations made or opinions expressed by the company and for repayment of deposits/discharge of the liabilities by the company. Deposit Insurance facility is not available to the depositors of NBFCs.

QUESTION NO.21:- What are the requirements for registration of Non-Banking Financial Company (NBFC's) with RBI?

A company incorporated under the Companies Act, 1956 and desirous of commencing business of non-banking financial institution as defined under Section 45 I (a) of the RBI Act, 1934 should comply with the following: **(1)** it should be a company registered under Section 3 of the companies Act, 1954 **(2)** It should have a minimum net owned fund of ' 200 lakhs. (The minimum net owned fund (NOF) required for specialized NBFCs like NBFC-MFIs, NBFC-Factors, CICs.

QUESTION NO. 22:- Can all NBFCs accept deposits?- Justify.

All NBFCs are not entitled to accept public deposits. Only those NBFCs to which the Bank had given a specific authorisation are allowed to accept/hold public deposits.

QUESTION NO.23:- State Debt Financing by Indian Commercial Banks.

Many Indian banks such as SBI, IDBI, and PNB give loan for infrastructure financing. Indian government has legalized few banks in country to issue debt for infrastructure financing in urban area. These loans are easily available but contain complex procedure, as for banks there are high default risk involves. Moreover one more disadvantage with commercial banks loan is high interest rates which discourage investors to raise money from these resources.

QUESTION NO.24:- Mention any three economic functions of Financial markets

- (1)** Price discovery; **(2)** Liquidity; and **(3)** reduction of transaction costs.

QUESTION NO.25:- List two direct instruments used by RBI in the implementation of its monetary policy.

- (1)** Cash Reserve Ratio (CRR) **(2)** Statutory Liquidity Ratio (SLR)

QUESTION NO. 26:- Enumerate in brief the various prudential norms/regulations applicable to NBFCs.

As per Non-banking Financial Companies Prudential Norms(Reserve Bank) Directions, 1998, the directions prescribe guidelines on income recognition, asset classification and provisioning requirements applicable to NBFCs, exposure norms, constitution of audit committee, disclosure in the Balance Sheet, requirement of capital adequacy, restrictions of investment in land and building and unquoted shares, besides others. Deposit accepting NBFCs have also to comply with statutory liquidity requirements.

QUESTION NO.27:- What are the guidelines governing privately managed provident funds regarding the minimum per cent of investment?

Provident Fund – Minimum Investment requirement:

<u>Security Minimum</u>	<u>% to be invested</u>
Central Govt. Securities	25
Govt. Securities or State Govt. securities or guaranteed by them	15
Public Sector units and Financial Institution Bonds	30
Any of the above three categories	30

QUESTION NO.28:- Name the Regulatory Authority of the following entities:

(i) Chit Funds (ii) Insurance Companies (iii) Housing Finance Companies (iv) Venture Capital Funds (v) Non-Banking Financial Companies (vi) Stock Broking Companies (vii) Nidhi Companies (viii) Private Banks

<u>Sl. No</u>	<u>Regulatory Authority</u>	<u>Entity</u>
(i)	Respective State Govts.	Chit Fund
(ii)	IRDA	Insurance Companies
(iii)	NHB (National Housing Bank)	Housing Finance Companies
(iv)	SEBI	Venture Capital Funds
(v)	RBI	NBFC
(vi)	SEBI	Stock Broking Companies
(vii)	Ministry of Corporate Affairs (MCA), Govt. of India	Nidhi Companies
(viii)	RBI	Private Banks

QUESTION NO.29:- As an executive of a lending institution, what factors should you critically evaluate with respect to a large industrial project, from the perspectives of environmental and economic viability?

Factors to consider to consider for critical evaluation of a large industrial projects, from the perspectives of environmental and economic viability are:

- (i)** Employment potential.
- (ii)** Utilisation of domestically available raw material and other facilities.
- (iii)** Development of industrially backward areas as per government policy.
- (iv)** Effect of the project on the environment with particular emphasis on the pollution of water and air to be caused by it.
- (v)** Arrangements for effective disposal of effluent as per government policy.
- (vi)** Energy conservation devices, etc. employed for the project. Other economic factors that influence the final approval of a particular project are: Internal Rate of return (IRR) and Domestic resources Cost (DRC)

QUESTION NO.30:- Explain the steps taken by SEBI for the Development of Capital Market in India.

To introduce improved practices and greater transparency in the capital markets and for capital market development, the roles of SEBI are:

- (1) SEBI has drawn up a programme for inspecting stock exchanges. Under this programme, inspections of some stock exchanges have already been carried out. The basic objective of such inspections is to improve the functioning of stock exchanges.
- (2) SEBI has been authorised to conduct inspections of various mutual funds. In this respect, it has already undertaken inspection of some mutual funds. Various deficiencies of the individual mutual funds have been pointed out in the inspection reports and corrective steps undertaken to rectify these deficiencies.
- (3) SEBI has introduced a number of measures to reform the primary market in order to make stronger the standards of disclosure. SEBI has introduced certain procedural norms for the issuers and intermediaries, and removed the inadequacies and systemic deficiencies in the issue procedures.
- (4) The process of registration of intermediaries such as stockbrokers has been provided under the provisions of the Securities and Exchange Board of India Act, 1992.
- (5) In order to encourage companies to exercise greater care for timely actions in matters relating to the public issue of capital. SEBI has advised the stock exchanges to collect from companies making public issues, a deposit of 1 % of the issue amount which could be forfeited in case of non-compliance with the provisions of the listing agreement and non-despatch of refund orders and share certificates by registered post within the prescribed time.
- (6) Through an order under the Securities Contracts (Regulations) Act 1956, SEBI has directed the stock exchanges to broad base their governing boards and change the composition of their arbitration, default and disciplinary committees. The broad basing of the governing boards of the stock exchanges would help them function with greater degree of autonomy and independence or that they become truly self-regulatory organizations.
- (7) Merchant banking has been statutorily brought under the regulatory framework of SEBI. The merchant bankers have to be authorised by SEBI. They will have to hold to specific capital adequacy norms and bear by a code of conduct, which specifies a high degree of responsibility towards inspectors in respect of the pricing and premium fixation of issues.
- (8) SEBI issued regulations pertaining to 'Insider Trading' in November 1992 prohibiting dealings, communication in matters relating to insider trading. Such regulations will help in protecting the market's integrity, and in the long run inspire investor confidence in the market.
- (9) SEBI issued a separate set of guidelines for development financial institutions in September 1992 for disclosure and investment protection regarding their raising of funds from the market. As per the guidelines, there is no need for promoter's contribution. Besides, underwriting is not mandatory.
- (10) SEBI has notified the regulations for mutual funds. For the first time mutual fund's are governed by a uniform set of regulations which require them to be formed as trusts and managed by a separate Asset Management Company (AMC) and supervised by a board of trustees. SEBI (Mutual fund) regulations provide for laissez-faire relationship between the various constituents of the mutual funds and thus bring about a structural change which will ensure qualitative improvement in the functioning of the mutual funds and require that the AMCs have a minimum net worth of Rs. 6 crores of which the sponsors must contribute at least 40 percent. The SEBS (Mutual Fund) Regulations also provide for an approval of the offer documents of schemes by SEBI. The regulations are intended to ensure that the mutual funds grow on healthy lines and investors' interest is protected.
- (11) To bring about greater transparency in transactions, SEBI has made it mandatory for brokers to maintain separate accounts for their clients and for themselves. They must disclose the transaction price and brokerage separately in the contract notes issued to their clients. They must also have their books audited and audit reports filed with SEBI.
- (12) SEBI has issued directives to the stock exchanges to ensure that contract notes are issued by brokers to clients within 24 hours of the execution of the contract. Exchanges are to see that time limits for payment of sale proceeds and deliveries by brokers and payment of margins by clients to brokers are complied with.
- (13) In August 1994, guidelines were issued in respect of preferential issues for orderly development of the securities market and to protect the interest of investors.
- (14) The 'Banker to the issue' has been brought under purview of SEBI for investor protection. Unit Trust of India (UTI) has also been brought under the regulatory jurisdiction of SEBI.

(15) In July 1995, the Committee set up by SEBI under the chairmanship of Y. H. Malegam to look into the disclosure of norms for public issues, recommended stricter regulations to control irregularities affecting the primary market. Following the recommendations of the Malegam Committee, SEBI issued a number of guidelines in September and October 1995 to protect the interest of investors.

(16) A series of measures to control the prices and to check other malpractices on the stock exchanges were announced by SEBI on December 21, 1995

(17) Guidelines for reduction the entry norms for companies accessing capital market were issued by SEBI on April 16, 1996.

The above discussion shows that SEBI has undertaken a number of steps to establish a fair, transparent and a strong regulatory structure for the efficient functioning of the capital market and for protecting the interest of the investors. These steps have helped in developing the capital market on healthy lines.

QUESTION NO. 31:- Define Non-Banking Financial Company (NBFC). What are the differences between banks & NBFCs. Point out the main problems in the working of State Cooperative Banks?

Non-Banking Financial Company A Non-Banking Financial Company (NBFC) is a company registered under the Companies Act, 1956 engaged in the business of loans and advances, acquisition of shares/stocks/bonds/debentures/securities issued by Government or local authority or other marketable securities of a like nature, leasing, hire-purchase, insurance business, chit business but does not include any institution whose principal business is that of agriculture activity, industrial activity, purchase or sale of any goods (other than securities) or providing any services and sale/purchase/construction of immovable property. A non-banking institution which is a company and has principal business of receiving deposits under any scheme or arrangement in one lump sum or in instalments by way of contributions or in any other manner, is also a nonbanking financial company (Residuary non-banking company).

Difference between banks & NBFCs

NBFCs lend and make investments and hence their activities are akin to that of banks; however there are a few differences as given below: (i) NBFC cannot accept demand deposits; (ii) NBFCs do not form part of the payment and settlement system and cannot issue cheques drawn on itself; (iii) Deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation is not available to depositors of NBFCs, unlike in case of banks

Problems in the working of State Cooperative Banks:-

i) **Poor deposits mobilisation:** These banks have not been successful in raising deposits as, even now, individual deposits from less than 25 per cent in many States.

ii) **Undesirable investment of funds:** These banks are not followed the guide of RBI about the matter of investment of fund. Despite the advice of the RBI, a cautious policy is not being followed in the matter of investment of the funds which agriculture even now utilised for the purchase of shares in other cooperative institutions; or in making huge advances to the primary cooperative societies; and by way of loans to individuals.

iii) **Failure to assess genuineness of borrowing:** The banks have failed in assessing the genuineness of the borrowings of the Central Cooperative Banks. This is evidenced from the fact that the credit limits of such banks had been fixed on the basis of their owned funds without taking into account their past performance; and the bank's own financial position.

iv) **Ineffective supervision and inspection:** Many of the Banks have not taken up this work in right way. Some of the banks have neither adequate nor separate staff for this work. Officers of these banks sometimes pay only ad-hoc and hurried visits.

v) **Book adjustment:** Book adjustments are often made regarding repayment of loans. The State Cooperative Banks have failed to check the fictitious transactions of the Central cooperative Banks.

vi) **Increasing over dues:** The over dues of the Banks have been showing a rising trend. This is due to the fact that these banks have not followed the prescribed loaning procedure.

vii) They utilise their reserve funds as working capital.

QUESTION NO. 32:- Write Short Notes on Pension System in India

Pension System in India: In India, the pension system coverage is very small at present. The pension market in India is highly unorganised which covers hardly three per cent of the Indian population. The Employees' Provident Fund (EPF), Employees' Pension Scheme (EPS), and the PPF are the only schemes, which cover the pension market in India. The regular salaried employees in the organised sector have been relatively better off in that public policy provided vehicles for compulsory savings and old age provisions. It is estimated that by the year 2000, around 23 per cent of people employed in the government sector were the beneficiaries of the government's defined benefit pension scheme, and 49 per cent of people employed in the private sector were covered by the mandatory employee provident fund.

Last seven years, from 2000 to 2007, have seen a marked shift in pension policy in India through introduction of a new pension system. OASIS committee has recommended two major pension reforms for the government employees and the unorganised sector respectively. These efforts culminated in setting up of the Pension Fund Regulatory and Development Authority (October 2003). Introduction of a new pension system (December 2003), and introduction of the PFRDA Bill in Parliament (March 2005).

Pension Fund Regulatory and Development Authority (PFRDA) was established by the Government of India on August 23, 2003. to promote old age income security by establishing, developing and regulating pension funds, to protect the interests of subscribers to schemes of pension funds and for matters connected therewith or incidental thereto. The authority shall consist of a Chairperson and not more than five members, of whom at least three shall be whole-time members, to be appointed by the Central Government.

The pension schemes in operation in India currently can broadly be divided into the following categories:

(1) Civil Services Pension Schemes (Pay as- you-go), (2) Employees' Provident Fund (EPF), (3) Employees' Pension Scheme (EPS). (4) New Pension Scheme (NPS), (5) Voluntary Pension Schemes under which two schemes are in operation such as (i) Personal / Group Pension Plans, (ii) Public Provident Fund.

QUESTION NO. 33:- Explain briefly the function performed by the Securities and Exchange Board of India (SEBI).

The functions performed by the Securities and Exchange Board of India (SEBI) are enumerated below:

- (1) Regulate the business in stock exchanges and other securities markets;
- (2) Registering and regulating the working of stock brokers, sub-brokers, share transfer agents, bankers to an issue, merchant bankers, underwriters, portfolio managers, investment advisors and such other intermediaries, who are associated with the securities market in any manner.
- (3) Registering and regulating the working of depositories, custodians of securities, FII, credit rating schemes, including mutual funds;
- (4) Promoting and regulating Self-Regulatory Organizations (SROs);
- (5) Prohibiting fraudulent and unfair trade practices relating to the securities market;
- (6) Providing Investors' education and training of intermediaries in securities market;
- (7) Prohibiting & Regulating substantial acquisition of shares and takeovers of companies;
- (8) Calling for information from, undertaking inspection, conducting inquiries and audits in the stock exchanges and intermediaries and self-regulatory organizations in the securities market;
- (9) Performing such functions and exercising such powers under the Securities Contract (Regulations) Act, (SCRA), 1956 as may be delegated to it by the Central Government;
- (10) Levying fees & other charges for carrying out its work;
- (11) Conducting research for the above purposes;
- (12) Performing such other functions that may be prescribed

Under the SEBI Act, some of the powers exercised by the Central Government under SCRA Power prohibit contracts in certain cases. They relate to the -

- (1) Powers to call for periodical returns, direct enquires to be made from any recognized stock exchange;
- (2) Grant approval to any recognized stock exchange & to make bye-laws for the regulation and control of contracts;
- (3) Powers to make & amend bye-laws of recognized stock exchanges;
- (4) Licensing of dealers in securities by public companies;
- (5) Granting approval to amendment to the rules of a recognized stock exchange;
- (6) Powers to ask every recognized stock exchange, to furnish to the SEBI, a copy of the annual report containing particulars that may be prescribed;
- (7) Powers to supercede the governing body of a recognized stock exchange;
- (8) Powers to suspend business of any recognized stock exchange;

QUESTION NO. 34:- Explain the responsibilities of the NBFCs accepting public deposits with regard to submission of returns and other information to RBI.

The NBFCs accepting public deposits should furnish to RBI

- i) Audited balance sheet of each financial year and an audited profit and loss account in respect of that year as passed in the annual general meeting together with a copy of the report of the Board of Directors and a copy of the report and the notes on accounts furnished by its Auditors;
- ii) Statutory Quarterly Return on deposits - NBS 1;
- iii) Certificate from the Auditors that the company is in a position to repay the deposits as and when the claims arise;
- iv) Quarterly Return on prudential norms-NBS 2;
- v) Quarterly Return on liquid assets-NBS 3;
- vi) Annual return of critical parameters by a rejected company holding public deposits – NBS 4
- vii) Half-yearly ALM Returns by companies having public deposits of ' 20 crores and above or asset size of ' 100 crores and above irrespective of the size of deposits holding
- viii) Monthly return on exposure to capital market by deposit taking NBFC with total assets of ' 100 crores and above–NBS 6; and ix) A copy of the Credit Rating obtained once a year

QUESTION NO. 35:- List the aspects that should be borne in mind by a depositor while making deposits with an NBFC.

While making deposits with an NBFC, the following aspects should be borne in mind:

- (i) Public deposits are unsecured.
- (ii) A proper deposit receipt is issued, giving details such as the name of the depositor/s, the date of deposit, the amount in words and figures, rate of interest payable and the date of repayment of matured deposit along with the maturity amount. Depositor/s should insist on the above and also ensure that the receipt is duly signed and stamped by an officer authorised by the company on its behalf.
- (iii) In the case of brokers/agents etc collecting public deposits on behalf of NBFCs, the depositors should satisfy themselves that the brokers/agents are duly authorized by the NBFC.
- (iv) The Reserve Bank of India does not accept any responsibility or guarantee about the present position as to the financial soundness of the company or for the correctness of any of the statements or representations made or opinions expressed by the company and for repayment of deposits/discharge of the liabilities by the company.
- (v) Deposit Insurance facility is not available to the depositors of NBFCs.

QUESTION NO. 36:- Define Non-financial Intermediaries?

Non-financial intermediaries are those institutions which do the loan business but their resources are not directly obtained from the savers. Many non-banking institutions also act as intermediaries and when they do so they are known as non-banking financial intermediaries, e.g. LIC, GIC, IDBI, IFC, NABARD.

QUESTION NO. 37:- State five important regulations prescribed by SEBI for the investments that can be made by a Mutual Fund.

SEBI REGULATIONS FOR INVESTMENTS OF A MUTUAL FUND:

The investments of a mutual fund are governed by a set of regulations of the SEBI and the five important ones are as under:

- (i) In all the schemes taken together, a mutual fund shall not own more than 10% of the company's paid up capital;
- (ii) A scheme shall not invest more than 15% of the NAV in debt instruments issued by a single issuer which are rated not below investment grade by an authorized credit rating agency;
- (iii) Barring certain exceptions, a scheme shall not invest more than 10% of its NAV in the equity shares or equity related instruments of one company;
- (iv) A scheme shall not invest more than 5% of its NAV in unlisted equity shares or equity related instruments in case of an open ended scheme and 10% of its NAV in case of close ended scheme;
- (v) Mutual funds shall mark all investments to market.

QUESTION NO. 38:- List the key elements of a well – functioning Financial System.

Key elements of a well-functioning financial system are:

- (i) A strong legal and regulatory environment;
- (ii) Stable money;
- (iii) Sound public finances and public debt management;
- (iv) a central bank;
- (v) a sound banking system;
- (vi) an information system; and
- (vii) well functioning securities market.

QUESTION NO. 39:- State the Banking Financial Institutions.

Banking institutions are those institutions, which participate in the economy's payment system, i.e., they provide transaction services. Their deposits liabilities constitute a major part of the national money supply and they can, as a whole, create deposits or credit, which is money.

QUESTION NO. 40:- Distinguish between Merchant Banks and Development Banks.

Banks and Development Banks Development Banks are specialised financial institutions that act as financial intermediaries when credit is not available through normal channels. The funding offered is essentially for industrial and agricultural development in the nature of medium or long term loans.

They seek to mobilize scarce resources such as capital, technology, entrepreneurial and managerial talents and channelise them into industrial activities in accordance with plan priorities. Its objectives are to develop the specific sectors and to improve the economy in general.

The services offered by development banks and their objectives are different from those of merchant banks. In India, development banks are usually statutory corporations while merchant banks are essentially corporate form of organisation.

QUESTION NO. 41:- State the non-banking financial institution.

Non-banking financial institution: Non-banking financial institutions are those institutions which act as mere purveyors of credit and they will not create credit, e.g., LIC, UTI, IDBI.

QUESTION NO. 42:- List the any eight functions of a Financial System.

The following are the functions of a Financial System:

- (i) Mobilise and allocate savings** – linking the savers and investors to mobilize and allocate the savings efficiently and effectively.
- (ii) Monitor corporate performance** – apart from selection of projects to be funded, through an efficient financial system, the operators are motivated to monitor the performance of the investment.
- (iii) Provide payment and settlement systems** – for exchange of goods and services and transfer of economic resources through time and across geographic regions and industries. The clearing and settlement mechanism of the stock markets is done through depositories and clearing operations.
- (iv) Optimum allocation of risk-bearing and reduction** – by framing rules to reduce risk by laying down the rules governing the operation of the system. This is also achieved through holding of diversified portfolios.
- (v) Disseminate price-related information** – which acts as an important tool for taking economic and financial decisions and take an informed opinion about investment, disinvestment, reinvestment or holding of any particular asset.
- (vi) Offer portfolio adjustment facility** - which includes services of providing quick, cheap and reliable way of buying and selling a wide variety of financial assets.
- (vii) Lower the cost of transactions** – when operations are through and within the financial structure.
- (viii) Promote the process of financial deepening and broadening** – through a wellfunctional financial system. Financial deepening refers to an increase of financial assets as a percentage of GDP. Financial depth is an important measure of financial system development as it measures the size of the financial intermediary sector. Financial broadening refers to building an increasing number of varieties of participants and instruments.

QUESTION NO. 43:- List the different types / categories of NBFCs registered with RBI.

NBFCs are categorized a) in terms of the type of liabilities into Deposit and Non-Deposit accepting NBFCs, b) non deposit taking NBFCs by their size into systemically important and other non-deposit holding companies (NBFC-NDSI and NBFC-ND) and c) by the kind of activity they conduct. Within this broad categorization the different types of NBFCs are as follows:

- (i) Asset Finance Company (AFC)** : An AFC is a company which is a financial institution carrying on as its principal business the financing of physical assets supporting productive / economic activity, such as automobiles, tractors, lathe machines, generator sets, earth moving and material handling equipments, moving on own power and general purpose industrial machines. Principal business for this purpose is defined as aggregate of financing real/physical assets supporting economic activity and income arising therefrom is not less than 60% of its total assets and total income respectively.
- (ii) Investment Company (IC)** : IC means any company which is a financial institution carrying on as its principal business the acquisition of securities,
- (iii) Loan Company (LC)**: LC means any company which is a financial institution carrying on as its principal business the providing of finance whether by making loans or advances or otherwise for any activity other than its own but does not include an Asset Finance Company.
- (iv) Infrastructure Finance Company (IFC)**: IFC is a non-banking finance company (a) which deploys at least 75 per cent of its total assets in infrastructure loans, (b) has a minimum Net Owned Funds of ' 300 crores, (c) has a minimum credit rating of =A =or equivalent (d) and a CRAR of 15%.
- (v) Systemically Important Core Investment Company (CIC-ND-SI)**: CIC-ND-SI is an NBFC carrying on the business of acquisition of shares and securities which satisfies the following conditions:-
 - (a)** it holds not less than 90% of its Total Assets in the form of investment in equity shares, preference shares, debt or loans in group companies;
 - (b)** its investments in the equity shares (including instruments compulsorily convertible into equity shares within a period not exceeding 10 years from the date of issue) in group companies constitutes not less than 60% of its Total Assets;
 - (c)** it does not trade in its investments in shares, debt or loans in group companies except through block sale for the purpose of dilution or disinvestment;
 - (d)** it does not carry on any other financial activity referred to in Section 45I(c) and 45I(f) of the RBI act, 1934 except investment in bank

deposits, money market instruments, government securities, loans to and investments in debt issuances of group companies or guarantees issued on behalf of group companies. (e) Its asset size is ' 100 crores or above and (f) It accepts public funds

(vi) Infrastructure Debt Fund: Non- Banking Financial Company (IDF-NBFC): IDF-NBFC is a company registered as NBFC to facilitate the flow of long term debt into infrastructure projects. IDF-NBFC raise resources through issue of Rupee or Dollar denominated bonds of minimum 5 year maturity. Only Infrastructure Finance Companies (IFC) can sponsor IDFNBFCS.

(vii) Non-Banking Financial Company - Micro Finance Institution (NBFC-MFI): NBFC-MFI is a nondeposit taking NBFC having not less than 85% of its assets in the nature of qualifying assets **which satisfy the following criteria:**

(a) loan disbursed by an NBFC-MFI to a borrower with a rural household annual income not exceeding '60,000 or urban and semi-urban household income not exceeding '1,20,000; **(b)** loan amount does not exceed '35,000 in the first cycle and '50,000 in subsequent cycles; **(c)** total indebtedness of the borrower does not exceed '50,000; **(d)** tenure of the loan not to be less than 24 months for loan amount in excess of '15,000 with prepayment without penalty; **(e)** loan to be extended without collateral; **(f)** aggregate amount of loans, given for income generation, is not less than 75 per cent of the total loans given by the MFIs; **(g)** loan is repayable on weekly, fortnightly or monthly installments at the choice of the borrower.

(viii) Non-Banking Financial Company – Factors (NBFC-Factors): NBFC-Factor is a non-deposit taking NBFC engaged in the principal business of factoring. The financial assets in the factoring business should constitute at least 75 percent of its total assets and its income derived from factoring business should not be less than 75 percent of its gross income.

QUESTION NO. 44:- State two basic objectives of Financial Management.

Financial Management deals with the procurement of funds and their effective utilization in the business. The first basic function of financial management is procurement of funds and the other is their effective utilization.

(i) Procurement of funds : Funds can be procured from different sources, their procurement is a complex problem for business concerns. Funds procured from different sources have different characteristics in terms of risk, cost and control.

(1) The funds raised by issuing equity share poses no risk to the company. The funds raised are quite expensive. The issue of new shares may dilute the control of existing shareholders.

(2) Debenture is relatively cheaper source of funds, but involves high risk as they are to be repaid in accordance with the terms of agreement. Also interest payment has to be made under any circumstances. Thus there are risk, cost and control considerations, which must be taken into account before raising funds.

(3) Funds can also be procured from banks and financial institutions subject to certain restrictions.

(4) Instruments like commercial paper, deep discount bonds, etc also enable to raise funds.

(5) Foreign direct investment (FDI) and Foreign Institutional Investors (FII) are two major routes for raising funds from international sources, besides ADR's and GDR's.

(ii) Effective utilisation of funds : Since all the funds are procured at a certain cost, therefore it is necessary for the finance manager to take appropriate and timely actions so that the funds do not remain idle. If these funds are not utilised in the manner so that they generate an income higher than the cost of procuring them then there is no point in running the business.

Instruments In Financial Markets

QUESTION NO.1:- Discuss the nature of call money market in India with reference to the duration, borrowers and security.

Nature of call money market with reference to duration, borrowers and security are discussed below:

Duration: These loans are given for a very short duration, between 1 day to 15 days.

Borrowers: These are mainly interbank loans, among commercial banks from each other. Other borrowers are bill market, dealers in stock exchange for purpose of dealings in stock exchange, individuals of high financial status in Mumbai etc for ordinary trade purpose in order to save interest on cash credit and overdrafts.

Security: There are no collateral securities demanded against these loans, i.e., unsecured.

QUESTION NO.2:- Classify the following items under the appropriate category – whether Money Market (MM) or Capital Market (CM) : (You may choose to write only the Roman numeral under the appropriate head. Do not use brackets for the Roman numerals)

(i) Inter Bank Participation Certificate; (ii) Equity Shares; (iii) Swaps; (iv) REPOS; (v) RBI and government are participants; (vi) Commercial paper ; (vii) Global Depository Receipts (GDRs) ; (viii) Deep Discount Bonds (DDBs)

(i) Money Market; (ii) Capital Market ; (iii) Money Market; (iv) Money Market ; (v) Money Market ; (vi) Money Market; (vii) Capital Market; (viii) Capital Market

QUESTION NO.3:- Write short notes on 'repo' and 'reverse repo'.

Repo or ready forward contract is an instrument for borrowing funds by selling securities with an agreement to repurchase the said securities on a mutually agreed future date at an agreed price which includes interest for the funds borrowed. Repo rate is the return earned on a repo transaction expressed as an annual interest rate. The reverse of the repo transaction is called 'reverse repo' which is lending of funds against buying of securities with an agreement to resell the said securities on a mutually agreed future date at an agreed price which includes interest for the funds lent. It can be seen from the definition above that there are two legs to the same transaction in a repo/reverse repo. The duration between the two legs is called the 'repo period'. Predominantly, repos and undertaken on overnight basis, i.e., for one day period. Settlement of repo transactions happens along with the outright trades in government securities.

QUESTION NO. 4:- Identify the following financial instruments: (You may present only the Roman numeral and the name of the instrument in your answers)

(i) X is a negotiable instrument issued in US \$ and issued by a US Depository Bank for the benefit of a non US company that wishes to raise money in the US. X is listed on NYSE and NASDAQ. Issue of X offers access to both institutional and retail markets in the US.

(ii) Y is an instrument issued abroad by authorized overseas corporate bodies against shares or bonds of Indian companies held with nominated domestic custodial banks. An Indian company intending to issue Y will issue the corresponding number of shares to an overseas depository bank. Y is freely transferable outside India and dividend in respect of the shares represented by Y are paid in Indian rupees. Y is traded on OTC basis (Over the Counter). Y is listed on the London Stock Exchange.

(iii) Z is a zero - interest bond sold at a discount and redeemed at face value on maturity. Investors in Z are not looking for immediate return. Z is issued by the issuer to meet the long term requirements spanning 20 - 30 years. Z can also be traded in the market.

(iv) W is a negotiable certificate issued by a company or the Government, entitles the holder to repayment of principal and interest. Interest is paid periodically at predetermined intervals and the principal is repaid at a specified maturity date.

(i) ADR or American Depository Receipt (ii) GDR or Global Depository Receipt (iii) Deep Discount Bond (iv) Bond

QUESTION NO. 5:- State the differences between Commercial Papre (CP) and certificate of deposit (CD) on the following aspects: (i) Issuer ; (ii) Conditions to be satisfied by an issuer to be eligible for an issue.

	<u>CP</u>	<u>CD</u>
Issuer	Corporates, Primary Dealers	Scheduled Commercial Banks other than RRBs, Local Area Banks
Eligibility	Tangible net worth not less than '4 cr. Working capital limit not to be less than ' 4 cr. Credit rating to be at least P-2 of CRISL or PP2/ P2 of D2 of other rating agencies	Banks have to maintain CLR and SLR on the issue price of CDs

QUESTION NO. 6:-State the differences between Indian Treasury Bills and Central Government securities on the following aspects: (i) Purpose of issue ; (ii) Tenor

	<u>T Bill</u>	<u>G Sec</u>
Purpose	To tide over short term liquidity shortfalls	To meet Govt, expenditure commitments
Tenor	91 days, 182 days, 364 days.	More than 1 year, up to 30 years.

QUESTION NO. 7:- Write short notes on Commercial Bills.

Commercial bill is a short term, negotiable, and self-liquidating instrument with low risk. It enhances the liability to make payment in a fixed date when goods are bought on credit. The bill of exchange is a written unconditional order signed by the drawer requiring the party to whom it is addressed to pay on demand or at a future time, a definite sum of money to the payee. It is negotiable and self-liquidating money market instrument which evidences the liquidity to make a payment on a fixed date when goods are bought on credit. It is an asset with a high degree of liquidity and a low degree of risk. Such bills of exchange are discounted by the commercial banks to lend credit to the bill holder or to borrow from the Central bank. The bank pays an amount equal to face value of the bill minus collection charges and interest on the amount for the remaining maturity period. The writer of the bill (debtor) is drawer, who accept the bill is drawee and who gets the amount of bill is payee

QUESTION NO. 8:- Write short note on ECB.

External Commercial Borrowings (ECB): These include raising finance from international markets for plant and machinery imports. Funds can be raised subject to the terms and conditions stipulated by the Government of India, which imposes restrictions on the amount raised under automatic route. Funds raised above the stipulated limit would require the prior approval of the Ministry of Finance. Types of ECB: External Commercial Borrowings include Bank Loans, Supplier's and Buyer's credit, fixed and floating rate bonds and Borrowing from private sector windows of Multilateral Financial Institutions such as International Finance Corporation.

QUESTION NO. 9:- Write short note Collateralised borrowing and Lending Obligation (CBLO).

The Clearing Corporation of India Ltd. (CCIL) launched a new product- CBLO- on January 20, 2003 to provide liquidity to non-bank entities hit by restrictions on access to the call money market. CBLO is a discounted instrument available in electronic book entry for the maturity period ranging from 1 day to 19 days. The maturity period can range up to one year as per the RBI guidelines. The CBLO is an obligation by the borrower to return the borrowed money, at a specified future date, and an authority to the lender to receive money lent, at a specified future date with an option/privilege to transfer the authority to another person for value received. The eligible securities are central government securities including treasury bills with a residual maturity period of more than six months. There are no restrictions on the minimum denomination as well as lock-in period for its secondary market transactions.

Banks, Cooperative Banks, Financial Institutions, Insurance Companies, Mutual funds, and Primary Dealers who are members of negotiated dealing system (NDS) are allowed to participate in CBLO transactions. Non-members

like corporate, NBFCs, pension/provident funds, and trusts are allowed to participate by obtaining associate membership to CBLO segment.

There are two types of markets available for trading in CBLO: the normal market and the auction market. Under normal market, there are two settlement cycles available to members, viz, T+0 and T+1. Normal market is available for all members including associate members. Auction market is available only to NDS members for overnight borrowing and settlement on T+0 basis. Associate members are not allowed to borrow and lend funds in auction market. Currently, the minimum order lot for auction market is fixed at '50 lakh and in multiples of '5 lakh thereof. The minimum order lot for normal market is fixed at '5 lakh and in multiples of '5 lakh thereof. Order lot refers to the minimum amount that is required to constitute a successful trade in the auction and normal market.

As the repayment of borrowing under CBLO segment is guaranteed by CCIL, all CBLO members have to maintain collateral or cash margin with the CCIL as cover. CCIL sets up borrowing limits for the members against their deposits of government securities as collaterals.

In order to increase the depth and liquidity in the CBLO market, CCIL is planning to introduce an internet- based trading platform for its CBLO product which would provide access to corporate and other non- banking entities to the institutional lending and borrowing segment of money markets.

QUESTION NO.10:- Explain the salient features and advantages of commercial paper.

Commercial Paper- Salient Features

- (1) Commercial Papers are issued by companies in the form of usance promissory note, redeemable at par to the holder on maturity.
- (2) The tangible net worth of the issuing company should be not less than '4 crores.
- (3) Working capital (fund based) limit of the company should not be less than '4 crores.
- (4) Credit rating should be at least equivalent of P-2 of CRISIL/P2/PP2/D2 or higher from any approved rating agencies and should be more than 2 months old on the date of issue of CP.
- (5) Corporates are allowed to issue CP up to 100% of their fund based working capital limits.
- (6) It is issued at a discount to face value.
- (7) CP attracts stamp duty.
- (8) CP can be issued for maturities between 15 days and less than one year from the date of issue.
- (9) CP may be issued in the multiples of '5 lakh.
- (10) No prior approval of RBI is needed to issue CP and underwriting the issue is not mandatory.
- (11) All expenses (such as dealers' fees, rating agency fee and charges for provision of stand-by facilities) for issue of CP are to be borne by the issuing company.

Commercial Paper- Advantages

- (i) **Simplicity:** Documentation involved in issue of Commercial Paper is simple and minimum.
- (ii) **Cash Flow Management:** The Issuer Company can issue Commercial Paper with suitable maturity periods (not exceeding one year), tailored to match the cash flows of the Company.
- (iii) **Alternative for bank finance:** A well-rated Company can diversify its sources of finance from Banks, to short-term money markets, at relatively cheaper cost.
- (iv) **Returns to Investors:** CP's provide investors with higher returns than the banking system.
- (v) **Incentive for financial strength:** Companies which raise funds through CP become well-known in the financial world for their strengths. They are placed in a more favourable position for raising long-term capital also. So, there is an inbuilt incentive for Companies to remain financially strong.

QUESTION NO.11:- Write down the objectives of interbank participation certificate?

Inter Bank Participation Certificates (IBPC) are short-term instruments to even out the short term liquidity within the Banking system particularly when there are imbalances affecting the maturity mix of assets in Banking Book.

It provides a degree of flexibility in the credit-portfolio of Banks. It can be issued by Scheduled Commercial Bank and can be subscribed by any Commercial Bank.

QUESTION NO.12:- What types of risk is involved in Investment in Government Securities?

Government Securities are usually referred to as risk free securities. However, these securities are subject to only one type of risk, i.e. interest rate risk. Subject to changes in the overall interest rate scenario, the price of these securities may appreciate or depreciate.

QUESTION NO.13:- Write Short Note on Hedge Funds

Hedge funds refer to funds that can use one or more alternative investment strategies, including hedging against market downturns, investing in asset classes such as currencies or distressed securities, and utilizing return-enhancing tools such as leverage, derivatives, and arbitrage. It can take both long and short positions, use arbitrage, buy and sell undervalued securities, trade options or bonds, and invest in almost any opportunity in any market where it foresees impressive gains at reduced risk.

Key Characteristics of Hedge Funds

- (1) Hedge funds utilize a variety of financial instruments to reduce risk, enhance returns and minimize the correlation with equity and bond markets. Many hedge funds are flexible in their investment options (can use short selling, leverage, derivatives such as puts, calls, options, futures, etc.).
- (2) Hedge funds vary enormously in terms of investment returns, volatility and risk. Many, but not all, hedge fund strategies tend to hedge against downturns in the markets being traded.
- (3) Many hedge funds have the ability to deliver non-market correlated returns.
- (4) Many hedge funds have as an objective consistency of returns and capital preservation rather than magnitude of returns.
- (5) Most hedge funds are managed by experienced investment professionals who are generally disciplined and diligent.
- (6) Pension funds, endowments, insurance companies, private banks and high net worth individuals and families invest in hedge funds to minimize overall portfolio volatility and enhance returns.
- (7) Most hedge fund managers are highly specialized and trade only within their area of expertise and competitive advantage.
- (8) Hedge funds benefit by heavily weighting hedge fund managers' remuneration towards performance incentives, thus attracting the best brains in the investment business. In addition, hedge fund managers usually have their own money invested in their fund.
- (9) Performance of many hedge fund strategies, particularly relative value strategies, is not dependent on the direction of the bond or equity markets — unlike conventional equity or mutual funds (unit trusts), which are generally 100% exposed to market risk .

The popular misconception is that all hedge funds are volatile — that they all use global macro strategies and place large directional bets on stocks, currencies, bonds, commodities, and gold, while using lots of leverage. In reality, less than 5% of hedge funds are global macro funds. Most hedge funds use derivatives only for hedging or don't use derivatives at all, and many use no leverage.

QUESTION NO.14:- Write a short note on Money Market Mutual Funds

Object: Provide easy liquidity, preservation of capital and moderate income.

Investment Pattern: Safer Short-Term Instruments such as Treasury Bills, Certificates of Deposit, Commercial Paper and Inter-Bank Call Money. Returns on these schemes may fluctuate depending upon the interest rates prevailing in the market.

For Whom: For corporate and individual investors, who wish to invest their surplus funds for short period.

QUESTION NO. 15:- Write down the features of a well developed money market?

Features of a well developed Money Market:

- (i) Uses a broad range of financial instruments (treasury bills, bills of exchange etc).
- (ii) Channelizes savings into productive investments.
- (iii) Promote financial mobility in the form of inter sectoral flows of funds.
- (iv) Facilitate the implementation of monetary policy by way of open market operations.

QUESTION NO. 16:- Explain Re-investment Risk. involved in investment in Government Securities.

- (i) Re—investment risk is the risk that the rate at which the interim cash flows are reinvested may fall thereby affecting the returns.
- (ii) The most prevalent tool deployed to measure returns over a period of time is the yield-to-maturity (YTM) method which assumes that the cash flows generated during the life of a security is reinvested at the rate of YTM

QUESTION NO. 17:- What is a Zero Coupon Bond? What is the return to the holder of such a bond?

A zero coupon bond is issued at a discount and repaid at face value. The difference between these two values is the return to the holder. No periodic interest is paid.

QUESTION NO. 18:- What are the features of a repo?

Features of a Repo:

Banks and primary dealers are allowed to undertake both repo and reverse repo transactions. It is a collateralized short term lending and borrowing agreement. It serves as an outlet for deploying funds on a short term basis. The interest rates depend on the demand and supply of the short term surplus / deficit amongst the inter bank players. In addition to T bills, all Central and State Government securities are eligible for repo. For sale of securities, the seller has to actually hold them in his own investment portfolio.

Immediately upon sale, the corresponding amount should be reduced from the investment of the seller. The securities under repo should be marked to market on the Balance Sheet. The buyer of a repo is usually a bank to meet its Statutory Liquidity Ratio.

QUESTION NO. 19:- Differentiate between open ended and close ended mutual funds.

Aspects

Open ended Funds

Close ended Funds

Initial subscription

Open-End Fund is one which is available for subscription all through the year.

Fund is open for subscription only during a specified period.

Maturity

Do not have a fixed maturity.

Stipulated maturity period (3 to 15 years)

Subsequent transactions

Investors can buy and sell units at net asset value related prices.

Investors can invest at the time of the initial public issue and thereafter they can buy or sell the units of the scheme on the stock exchanges where they are listed.

Repurchase

Any time

Based on terms of the fund. Periodic repurchase at NAV related price.

QUESTION NO. 20:- How would you determine the cost of irredeemable preference shares?

Cost of Irredeemable Preference Shares : =

Gross Proceeds = Issue Price (whether discount or par or premium) × No. of shares

Less : Cost of Issue = Net Proceeds Preference Dividend / Net Proceeds = Cost of Preference Share.

QUESTION NO. 21:- State the features of Treasury bills.

Features of T-bills:

- (1) They are negotiable securities.
- (2) They are highly liquid as they are of shorter tenure and there is a possibility of interbank repos in them. There is an absence of default risk.
- (3) They have an assured yield, low transaction cost, and are eligible for inclusion in the securities for SLR purposes.
- (4) They are not issued in scrip form. The purchases and sales are effected through the Subsidiary General Ledger (SGL) account.
- (5) At present, there are 91-day, 182-day, and 364-day T-bills in vogue. The 91-day T-bills are auctioned by the RBI every Friday and the 364-day T-bills every alternate Wednesday, i.e., the Wednesday preceding the reporting Friday.
- (6) Treasury bills are available for a minimum amount of ₹25,000 and in multiples thereof.

QUESTION NO. 22:- List two direct instruments and two indirect instruments used by RBI in the implementation of its monetary policy.

Direct Instruments

Cash Reserve Ratio (CRR)
Statutory Liquidity Ratio (SLR)
Refinance Facilities

Bank Rate

Indirect Instruments

Liquidity Adjustment Facility (LAF)
Repo/Reverse Repo Rate
Open Market Operation
Marginal Standing Facility (MSF)
Market Stabilisation Scheme (MSS)

QUESTION NO. 23:- State 4 features of Government Securities.

The students may write any four features from following:

- (1) Government Securities are mostly interest bearing dated securities issued by RBI on behalf of the Government of India.
- (2) These securities are generally fixed maturity and fixed coupon securities carrying semi-annual coupon.
- (3) Issued at face value.
- (4) No default risk as the securities carry sovereign guarantee.
- (5) Ample liquidity as the investor can sell the security in the secondary market.
- (6) Interest payment on a half yearly basis on face value.
- (7) No tax deducted at source.
- (8) Can be held in demat form.
- (9) Rate of interest and tenor of the security is fixed at the time of issuance and is not subject to change (unless intrinsic to the security like FRBs - Floating Rate Bonds).
- (10) Redeemed at face value on maturity.
- (11) Maturity ranges from 91 days-30 years.
- (12) Government Securities qualify as SLR (Statutory Liquidity Ratio) investments, unless otherwise stated.

QUESTION NO. 24:- Describe the marketable securities, which are available in India to invest surplus cash.

Types of marketable securities available in India to invest surplus cash:

	<u>Issued by</u>	<u>Safety</u>	<u>Maturity</u>	<u>Marketability</u>
TB (Treasury Bill)	Government	No Default risk	Short term	Highly marketable
CPs (Commercial Papers)	Creditworthy large			

Papers	companies	Low Default risk	Short term	Highly marketable
CDs (Certificate of Deposits)	Banks	Low Default risk	Short term	Highly marketable
ICD (Inter Corporate Deposits)	Companies	High Default risk	Short term	Less marketable
MMMF Mutual Funds	Low Default risk	Short term	High marketable	

QUESTION NO. 25:- Describe Commercial Paper as a source of financing.

Commercial Paper (CP) is an unsecured promissory note issued by a firm to raise funds for a short period, generally, varying from a few days to a few months. It is a money market instrument and generally purchased by commercial banks, money market mutual funds and other financial institutions desirous to invest their funds for a short period. As the CP is unsecured, the firms having good credit rating can only issue the CP. The firm or the dealers in CP sell these to the short-term lenders who use it as interest earning investment of temporary surplus of operating funds. The nature of these surpluses and motives for buying the CP suggest that all the holders of the CP expect to be paid in full at maturity. The maturity term of CP is not generally extended.

This expectation on the part of short term tenders requires that the borrowing firm must be

- (i)** an established and profitable firm, and
- (ii)** consistently maintaining a credit goodwill in the market and having good credit rating. The interest cost of the CP depends upon the amount involved, maturity period and the prime lending rates of commercial banks. The main advantage of CP is that the cost involved is lower than the prime lending rates. In addition to this cost, the borrowing firm has to bear another cost in the form of placement fees payable to the dealer of CP who arranges the sale. OR

C.P as source of Financing: From the point of the issuing company, CP provides the following benefits:

- (i)** CP is sold on an unsecured basis and does not contain any restrictive conditions.
- (ii)** Maturing CP can be repaid by selling new CP and thus can provide a continuous source of funds.
- (iii)** Maturity of CP can be tailored to suit the requirement of the issuing firm.
- (iv)** CP can be issued as a source of fund even when money market is tight.
- (v)** Generally the cost of CP to the issuing firm is lower than the cost of commercial bank loans.

However, CP as a source of financing has its own limitations:

- (a)** Only highly credit rated firms can issue it. New and moderately rated firms generally are not in a position to issue CP.
- (b)** CP can neither be redeemed before maturity nor can be extended beyond maturity. So, CP is advantageous both to the issuer as well as to the investor. The issuer can raise short-term funds at lower costs and the investors as a short term outlet of funds. CP provides liquidity as they can be transferred. However, the issuer must adhere to the RBI guidelines.

QUESTION NO. 26:- Write a short note on Certificate of Deposits

Certificates of Deposit (CDs) - introduced since June 1989 - are unsecured, negotiable, shortterm instruments in bearer form, issued by a commercial bank(s) / Financial Institution(s) at discount to face value at market rates, with maturity ranging from 15 days to one year.

Being securities in the form of promissory notes, transfer of title is easy, by endorsement and delivery. Further, they are governed by the Negotiable Instruments Act. As these certificates are the liabilities of commercial banks/financial institutions, they make sound investments.

DFHI trades in these instruments in the secondary market. The market for these instruments is not very deep, but quite often CDs are available in the secondary market. DFHI is always willing to buy these instruments thereby lending liquidity to the market.

CD is a negotiable money market instrument and issued in dematerialized form or as a Usance Promissory Note, for funds deposited at a Bank or other eligible Financial Institution for a specified time period.

QUESTION NO. 27:- What do you mean by Commercial Paper? What are the reasons for under developed bill market in India?

Commercial paper (CP) is an unsecured short-term promissory note, negotiable and transferable by endorsement and delivery with a fixed maturity period. It is issued only by large, well known, creditworthy companies and is typically unsecured, issued at a discount on face value, and redeemable at its face value. The aim of its issuance is to provide liquidity or finance company's investments, e.g. in inventory and accounts receivable.

The major issuers of commercial papers are financial institutions, such as finance companies, bank holding companies, and insurance companies. Financial companies tend to use CPs as a regular source of finance. Non-financial companies tend to issue CPs on an irregular basis to meet special financing needs.

Commercial paper was introduced in 1990 to enable highly rated investors to diversify their sources, of their short-term borrowings and also to produce an additional instrument in the market. Guidelines issued by RBI are applicable to issuers if CP likes Non-banking finance companies and non-financial companies. Primary dealers are also permitted to issue commercial paper. CP should be issued for a minimum period of 7 days to a maximum period of one year. No grace period is allowed for payment and if the maturity date falls on a holiday it should be paid on the previous working day. Commercial paper can be permitted to be issued by the companies whose net worth is not less than '5 crore. And fund based working capital limits are not less than '4 crore. It must be a listed company on a stock exchange and should have given credit rating by CRISIL.

The difference between the initial investment and the maturity value constitutes the income of the investor. e.g. A Company issues a Commercial Paper each having maturity value of '5,00,000. The Investor pays (say) '4,82,850 at the time of his investment. On maturity, the Company pays '5,00,000 (maturity value or redemption value) to the Investor. The Commercial Paper is said to be issued at a discount of '5,00,000 - '4,82,850 = '17,150. This constitutes the interest income of the investor.

QUESTION NO. 28:- Who can invest in P-Notes?

(i) Any entity incorporated in a jurisdiction that requires filing of constitutional and/or other documents with a registrar of companies or comparable regulatory agency or body under the applicable companies legislation in that jurisdiction;

(ii) Any entity that is regulated, authorised or supervised by a central bank, such as the Bank of England, the Federal Reserve, the Hong Kong Monetary Authority, the Monetary Authority of Singapore or any other similar body provided that the entity must not only be authorised but also be regulated by the aforesaid regulatory bodies;

(iii) Any entity that is regulated, authorised or supervised by a securities or futures commission, such as the Financial Services Authority (UK), the Securities and Exchange Commission, the Commodities Futures Trading Commission, the Securities and Futures Commission (Hong Kong or Taiwan), Australia Securities and Investments Commission (Australia) or other securities or futures authority or commission in any country, state or territory;

(iv) Any entity that is a member of securities or futures exchanges such as the New York Stock Exchange (Sub-account), London Stock Exchange (UK), Tokyo Stock Exchange (Japan), NASD (Sub-account) or other similar self-regulatory securities or futures authority or commission within any country, state or territory provided that the aforesaid organizations which are in the nature of self regulatory organizations are ultimately accountable to the respective securities / financial market regulators.

(v) Any individual or entity (such as fund, trust, collective investment scheme, Investment Company or limited partnership) whose investment advisory function is managed by an entity satisfying the criteria of (a), (b), (c) or (d) above.

QUESTION NO. 29:- Explain the term 'inter corporate Deposits' & 'Public Deposits'.

Inter Corporate Deposits: (ICD's)

- (i) Companies can borrow funds for a short period, for example 6 months or less, from other companies which have surplus liquidity.
- (ii) Such deposits made by one Company in another are called Inter-Corporate Deposits (ICD's) and are subject to the provisions of the Companies Act, 1956.
- (iii) The rate of interest on ICD's varies depending upon the amount involved and time period.
- (vi) RBI permits Primary Dealers to accept Inter Corporate Deposits up to fifty per cent of their Net Worth and that also for a period of not less than 7 days. Primary Dealers cannot lend in the Inter Corporate Deposits market.
- (v) The risk on ICDs is very high.

Public Deposits:

- (i) Public Deposits are a very important source for short-term and medium term finance.
- (ii) A Company can accept public deposits from members of the public and shareholders, subject to the stipulations laid down by RBI from time to time.
- (iii) The maximum amounts that can be raised by way of Public Deposits, maturity period, procedural compliance, etc. are laid down by RBI, from time to time.
- (iv) These deposits are unsecured loans and are used for working capital requirements. They should not be used for acquiring fixed assets since they are to be repaid within a period of 3 years.

QUESTION NO. 30:- Define security receipts.

Security Receipts: Security receipt means a receipt or other security, issued by a securitisation company or reconstruction company to any qualified institutional buyer pursuant to a scheme, evidencing the purchase or acquisition by the holder thereof, of an undivided right, title or interest in the financial asset involved in securitisation.

QUESTION NO. 31:- Write Short Notes on Euro Convertible Bonds

A convertible bond is a bond that can be converted into a predetermined amount of the company's equity at certain times during its life, usually at the discretion of the bondholder. 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. An Euro convertible bond is a bond issued by a company in a market other than its country of operation. Thus a bond issued by an Indian Company in the foreign market with an option to convert them into pre-determined number of equity shares is a Euro Convertible Bond.

These bonds have two types of options. A call option that would provide the issuer to call back the bonds when the underlying stock price has risen substantially, literally forcing the investors to opt for conversion. The bonds can also give investors an option to opt for conversion by selling the bond, if the bond has a put option. Certain countries do not permit issue of ECBs by its companies since it will add to the external debt of the country.

QUESTION NO. 32:- Distinguish between GDR and ADR.

Global Depository Receipt (GDR)

GDRs are negotiable certificates (receipts) issued to non-resident investors against the shares of the issuing companies held with nominated domestic custodian bank. The issuing company appoints an overseas depository banks which, in turn, issues GDRs. Each GDR represents a fixed number of shares of the issuing company and is denominated in US dollars. GDRs may trade like any other security in an exchange or over the counter. GDRs are fungible in the sense that the investors can convert them into underlying shares. Similarly, the issuing company can reissue the converted shares as GDRs. GDRs may be treated as direct investment in the issuing company.

American Depository Receipt (ADR)

ADRs are similar to GDRs except for the fact that they are listed in the US stock exchanges. There are three types of ADRs Level 1 ADRs are traded over-the-counter market. The issuing company is not allowed to offer them to

the public. Disclosure to SEC is minimal and the issuing company is not required to comply with US GAAP. Level 2 ADRs are allowed to trade in the stock exchange, and the issuing company is required to comply with US GAAP and make significant disclosure to SEC. Level 3 ADRs represent public offerings. These ADRs are registered with SEC and the issuing company must comply with listing requirements and US GAAP. ADR is designed as of investment vehicle to trade foreign equity issues in United States.

QUESTION NO. 33:- Write a short note on Foreign currency exchangeable bonds

The foreign currency exchangeable bonds (FCEBs) are financial instruments similar to foreign currency convertible bonds (FCCBs) in nature. FCEBs will allow corporate to raise money from overseas by issuing bonds. In case of FCCBs, bonds can be converted into equity shares of the issuing company. But in case of FCEBs, the bonds can be converted into shares of a group company of the issuer. The issue of FCEBs in India is procedurally governed by the Companies Act, 1956; FEMA, 1999; SEBI (Disclosure and Investor Protection) Guidelines, 2000; Issue of Foreign Currency Exchangeable Bonds scheme, 2008. The issuing company shall be part of the promoter group of the offered company. The offered company means an Indian company whose equity shares shall be offered in exchange of FCCB. The offered company shall be a listed company which is engaged in a sector eligible to receive Foreign Direct Investment (FDI) and eligible to issue or avail of FCCB or External Commercial Borrowing (ECBs). Wherever needed prior approval of Foreign Investment Promotion Board (FIPB) shall be obtained under Foreign Direct Investment Policy.

Capital Markets

QUESTION NO.1:- State the differences between the commodity market and equity market futures in the following aspects: (i) Initial Margin ; (ii) Basis of price movements

Futures

Initial Margin

Basis of Price Movements

Commodity Market

Lower in the range of 4-5-6%

Purely based on Demand and supply of commodities

Equity Market

Higher in the range of 25-40%

Based on expectation of future performance

QUESTION NO.2:- Write Short Note on Reverse Book Building.

Reverse Book Building is method of buy-back of securities. It is an efficient price discovery mechanism adopted when the company aims to buy the shares from the public and other shareholders. This is generally done when the company wishes to delist itself from the trading exchanges. The reverse book building route is a difficult and costly process. Price discovery is a problem in case of small companies as their shares are thinly traded, making it difficult to delist through the reverse book building route. Unless the shares are delisted, the small companies have to pay all listing charges.

QUESTION NO.3:- Write Short Note on Limitation of credit rating.

Credit rating is a very important indicator for prudence but it suffers from certain limitations.

Some of the limitations are:

(i) Conflict of Interest – The rating agency collects fees from the entity it rates leading to a conflict of interest. Since the rating market is very competitive, there is a distant possibility of such conflict entering into the rating system.

(ii) Industry Specific rather than Company Specific –Downgrades are linked to industry rather than company performance. Agencies give importance to macro aspects and not to micro ones; overreact to existing conditions which come from optimistic / pessimistic views arising out of up / down turns. At times, value judgments are not

ruled out.

(iii) Rating Changes – Ratings given to instruments can change over a period of time. They have to be kept under constant watch. Downgrading of an instrument may not be timely enough to keep investors educated over such matters.

(iv) Corporate Governance Issues – Special attention is paid to: • Rating agencies getting more of their revenues from a single service or group. • Rating agencies enjoying a dominant market position. They may engage in aggressive competitive practices by refusing to rate a collateralized / securitized instrument or compel an issuer to pay for services rendered. • Greater transparency in the rating process viz. in the disclosure of assumptions leading to a specific public rating.

(v) Basis of Rating – Ratings are based on 'point of time' concept rather than on 'period of time' concept and thus do not provide a dynamic assessment.

(vi) Cost Benefit Analysis – Since rating is mandatory, it becomes essential for entities to get themselves rated without carrying out cost benefit analysis.

QUESTION NO.4:- What is Rolling settlement? Write down the benefits of Rolling Settlement.

Rolling settlement is the settlement cycle of the stock exchange', where all trades outstanding at the end of the day have to be settled, i.e. the buyer has to make payments for securities purchased and the seller has to deliver the securities sold. Here, settlement refers to the process in which traders who have made purchases make payments while those who have sold shares, deliver them.

(1) In rolling settlements, payments are quicker than in weekly settlements. Thus, investors benefit from increased liquidity,

(2) It keeps cash and forward markets separate,

(3) Rolling settlements provide for a higher degree of safety,

(4) From an investor's perspective, rolling settlement reduces delays. This also reduces the tendency for price trends to get exaggerated. Hence, investors not only get a better price but can also act at their leisure.

QUESTION NO. 5:- What are the principle weaknesses of Indian Stock Market?

The principle weaknesses of Indian Stock Market are enumerated below:

(1) Scarcity of floating stock: Financial Institutions, banks and insurance companies own 80% of the equity capital of the private sector.

(2) Speculation: 80% of the transactions on the NSE and BSE are speculative in nature.

(3) Price rigging: Evident in relatively unknown and low quality scripts-causes short-term functions in the price.

(4) Insider trading: obtaining market sensitive information to make money in the markets.

QUESTION NO.6:- What do you understand by credit rating? What aspects credit rating do not measure?

Credit rating is the assessment of a borrower's credit quality. it is the assessment carried out from the viewpoint of credit-risk evaluation on a specific date, on the quality of a-

(1) Specific debt-security issued, or

(2) Obligation undertaken by an enterprise (Term Loans, etc.)

Credit Rating do not measure the following-

(1) Investment Recommendation: credit rating does not make any recommendation on whether to invest or not.

(2) Investment Decision: They do not take into account the aspects that influence an investment decision.

(3) Issue Price: credit rating does not evaluate the reasonableness of the issue price, possibilities for capital gains or liquidity in the secondary market.

(4) Risk of Prepayment: ratings do not take into account the risk of prepayment by issuer, or interest or exchange risks.

(5) Statutory Compliance: credit rating does not imply that there is absolute compliance of statutory requirements in relation to audit, taxation, etc. by-the issuing company

QUESTION NO.7:- Write short note on constituents of Capital Market.

The following are the constituents of capital market:

(1) Investment Trust- Financial Institutions which collects savings from public and invest that amount in industrial securities. Example- Tata Investment Trust Pvt. Ltd.

(2) Specialised Financial Institutions- These type of financial institutions provides long term finance to industries. Example- Industrial Financial Corporation Of India (IFCI) Ltd.

(3) Insurance Company- Insurance Companies collect premium from policy holders and invest the amount in different industrial securities. Example- Life Insurance Corporation of India (LICI).

(4s) Securities Market- Securities is a broader term which encompasses shares, debentures, bonds etc. the market where securities transactions are held is known as securities market. Securities market can be further classified into primary or new issue market and secondary or share market.

QUESTION NO.8:- What are the advantages of OCDs (Optionally Convertible Debentures) to investor?

Assured Interest: Investor gets assured interest during gestation periods of the project, and starts receiving dividends once the project is functional and they choose to convert their debentures. thereby, it brings down the effective gestation period at the investor's end to zero.

Secured Investment: The investment is secured against the assets of the company, as against company deposits which are unsecured.

Capital Gains: There is a possibility of capital gains associated with conversion, which compensates for the lower interest rate on debentures.

QUESTION NO.9:- Discuss clearing mechanism.

Only clearing members including professional clearing members (PCMs) are entitled to clear and settle contracts through the clearing house. The clearing mechanism essentially involves working out open positions and obligations of clearing members. This position is considered for exposure and daily margin purposes. The open positions of PCMs are arrived at by aggregating the open positions of all the TCMs clearing through him, in contracts in which they have traded. A TCM's open position is arrived at by the summation of his clients' open positions, in the contracts in which they have traded. Client positions are netted at the level of individual client and grossed across all clients, at the member level without any set-offs between clients. Proprietary positions are netted at member level without any set-offs between client and proprietary positions.

QUESTION NO.10:- What are the Difference between trading of securities in physical vs dematerialized form.

Trading of securities held in Physical and Dematerialised form- Difference

<u>Aspect</u>	<u>Trading of Physical Shares</u>	<u>Trading of Dematerialised Shares</u>
Actual Delivery	Actual deliver of share to be exchanged	No actual deliver of shares needed
Open Delivery	Open delivery can be kept	Not possible to keep delivery open
Time	Processing time long	Processing time less
Stamp charges	Stamp charges required for transfer	No stamp charges on transfer
Sales transactions	No charges other than brokerage levied	Sales transactions also charged
Registration	For buy transaction, document is to be sent to company for registration	No need to send documents to company for registration.

QUESTION NO.11:- What do you understand by BID-Ask rate?

The bid price is the highest price that someone is willing to pay for buying an asset at that moment. The foreign exchange market is nothing more than an ongoing auction to buy and sell. Just as with any auction, buyers place bids.

The asking price is the lowest price at which someone is willing to sell at that moment. Think of it as when you sell a house or other item, you are "asking" a certain price for it. Sellers place asking prices.

Therefore, if you are interested in buying dollars, you should look at the asking price of a seller. You would have a buyer matched with a seller and the trade could be executed. Likewise, if you are interested in selling dollars, you should look at the bid price since of a buyer. Again, you'd have a buyer matched with a seller and the trade could get executed.

The bids and offers come from "limit" orders placed by buyers and sellers. For instance, assume that a rupee has a bid of \$50 and an asking price of \$50.30. If you place a limit order to buy 100 rupees at \$50.10 that means your order could only get executed if you pay \$50.10 or less. The bid would be raised to \$50.10. The new quote would be bidding \$50.10 and asking \$50.30. You are now the highest bidder and get posted to the board. Likewise, if someone placed a limit order to sell at \$50.20 that means they will only sell their rupees if they can get that price or higher. The new quote would be bid \$50.10 and asking \$50.20. They are now the lowest offer so get posted to the board.

QUESTION NO.12:- What are the Advantages of Depository System.

(1) Immediate Transfer and Registration: In the depository environment, once the securities are credited to the investors account on payout, he becomes the legal owner of the securities, without any requirement to register with the Company's Registrar. Securities are held in a safe and convenient manner.

(2) Short Settlement cycle: The exclusive demat segments follow rolling settlement cycle of T + 2, i.e. the settlement of trades will be on the 2nd working day from the trade day. This will enable faster turnover of stock, faster disbursement of non-cash corporate benefits like rights, bonus, etc. and also more liquidity with the investor.

(3) Low Transaction Cost:

(a) No Stamp Duty: No stamp duty attached to any kind of securities in the depository. This waiver extends to Equity Shares, Debt Instruments and Units of Mutual Funds, thereby lowering the transaction cost / charges.

(b) Lower Operating Cost: Depository System provides the benefit of dealing in dematerialized securities and hence reduces the cost of back office cost of handling paper and also eliminates the risk of introducing the Broker.

(4) Reporting: Depository System facilitates obtaining periodic status reports to investors on their holdings and transactions, leading to better controls.

(5) Elimination of bad deliveries: In a depository environment, once holdings of an investor are dematerialized, the question of bad delivery does not arise, i.e. they cannot be held "under objection".

(6) Elimination of Risks: The risk of theft of stocks, mutilation of certificates, loss of certificates during movements, etc. does not arise in case of dealing in Securities through Depository System.

(7) Single Point Interface:

(a) Depository System eliminates the cumbersome procedure in connection with change of address or transmission of demat shares. Investors have to only inform their Depository Participant (DP) with all relevant documents and the required changes are effected in the database of all the companies, where the investor is a registered holder of securities.

(b) There is automatic credit into the demat account of shares, arising out of bonus / split / consolidation/ merger etc.

(c) There is ease in portfolio monitoring, since statement of account gives a consolidated position of investments in all instruments.

QUESTION NO.13:- Write any three differences between the primary market and the secondary market.

Difference between the primary market and the secondary market In the primary market, securities are offered to public for subscription for the purpose of raising capital or fund. Secondary market is an equity trading avenue in which already existing/pre- issued securities are traded amongst investors. Secondary market could be either auction or dealer market. While stock exchange is the part of an auction market, Over-the-Counter (OTC) is a part of the dealer market.

QUESTION NO.14:- What are the differences between Capital Market and Money Market?

<u>Aspect</u>	<u>Capital Market</u>	<u>Money Market</u>
Type of	Debt and Equity Instruments.	Debt Instruments only.
Tenor of	Medium and Long Term Instruments.	Short Term usually less than one
Examples	Equity Shares, Preference Stock, Debenture Stock, Zero Coupon Bonds, etc.	Treasury Bills, Certificates of Deposits, Commercial Papers, Banker's Acceptance.
Classification	Capital Market is further classified into Primary Market and Secondary	There is no such further classification.
Participants	Retail Investors, Institutional Investors (Mutual Funds), Financial Institutions, etc.	Banks, Financial Institutions, Reserve Bank of India, Government. Risk Low credit and market risk involved. High credit and market risk.
Regulator	SEBI	RBI

QUESTION NO.15:- Explain the advantages & disadvantages of Book Building process.

Advantages of Book Building:

- (1) The book building process helps in discovery of price & demand.
- (2) The costs of the public issue are much reduced.
- (3) The time taken for the completion of the entire process is much less than that in the normal public issue.
- (4) In book building, the demand for the share is known before the issue closes. In fact, if there is not much demand, the issue may be deferred.
- (5) It inspires investor's confidence leading to a large investor universe.
- (6) Issuers can choose investors by quality.
- (7) The issue price is market determined.

Disadvantages of Book Building:

- (1) There is a possibility of price rigging on listing as promoters may try to bail out syndicate members.
- (2) The book building system works very efficiently in matured market conditions. But, such conditions are not commonly found in practice.
- (3) It is appropriate for the mega issues only.
- (4) The company should be fundamentally strong & well known to the investors without it book building process will be unsuccessful.

QUESTION NO.16:- Clearing of trades that take place on an exchange happens through the exchange clearing house.'- Justify.

Clearing of trades that take place on an exchange happens through the exchange clearing house. A clearing house is a system by which exchanges guarantee the faithful compliance of all trade commitments undertaken on the trading floor or electronically over the electronic trading systems. The main task of the clearing house is to keep track of all the transactions that take place during a day so that the net position of each of its members can be calculated. It guarantees the performance of the parties to each transaction.

Typically it is responsible for the following:

- (1) Effecting timely settlement.

- (2) Trade registration and follow up.
- (3) Control of the evolution of open interest.
- (4) Financial clearing of the payment flow.
- (5) Physical settlement (by delivery) or financial settlement (by price difference) of contracts.
- (6) Administration of financial guarantees demanded by the participants.

The clearing house has a number of members, who are mostly financial institutions responsible for the clearing and settlement of commodities traded on the exchange. The margin accounts for the clearing house members are adjusted for gains and losses at the end of each day (in the same way as the individual traders keep margin accounts with the broker).

QUESTION NO.17:- Write a note on the process of Dematerialisation.

In order to dematerialise physical securities one has to fill in a DRF (Demat Request Form) which is available with the DP and submit the same along with physical certificates that are to be dematerialised. Separate DRF has to be filled for each ISIN. The complete process of dematerialisation is outlined below:

- (1) Surrender certificates for dematerialisation to your DP.
- (2) DP intimates to the Depository regarding the request through the system.
- (3) DP submits the certificates to the registrar of the Issuer Company.
- (4) Registrar confirms the dematerialisation request from depository.
- (5) After dematerialising the certificates, Registrar updates accounts and informs depository regarding completion of dematerialisation.
- (6) Depository updates its accounts and informs the DP.
- (7) DP updates the demat account of the investor.

QUESTION NO.18:- How credit rating provides guidance to investors/creditors in determining a credit risk associated with a debt instrument?

To provide guidance to investors/ creditors in determining a credit risk associated with a debt instrument/ credit obligation.

- (1) **Current Opinion on Credit Risk:** Credit Rating is based on the relative capability and willingness of the issuer of the instrument to service the debt obligations (both principal and interest) as per the terms of the contract. Thus, it acts as an indicator of the current opinion of the credit risk and can be changed from time to time.
- (2) **Relative Ranking:** Credit Rating ranks the fixed income investment based on the probability of it (Investment / instrument) defaulting, in comparison with other rated instruments.

QUESTION NO.19:- Distinguish between mutual funds and hedge funds.

- (I) Mutual Funds seek Relative Returns whereas Hedge Funds actively seek Absolute Returns.
- (II) In a bull market, hedge funds may not perform as well as mutual funds, but in a bear market - taken as a group or asset class – they do better than mutual funds because they hold short positions and hedges.

QUESTION NO.20:- What are the differences between Merchant Banks and Commercial Banks?

The differences between merchant banks and commercial banks are:-

- (i) Commercial banks do banking business i.e. accept deposits and use deposits for giving loan but merchant bank works as consultancy type business i.e. helps in issue of management, issue of shares etc.
- (ii) The nature of loan given by commercial bank is debt related but loan given by merchant bank is equity related.
- (iii) Commercial bank does not take any risk of client but merchant bank takes risk of client.
- (iv) Commercial bank acts as a financier but merchant bank acts as a financial advisor.

(v) Commercial Banks are regulated by the Banking Regulation Act, 1949 and is under the control of RBI whereas merchant bankers are governed by rules and regulations framed by SEBI.

(vi) Commercial banks do mass banking with general public but merchant bank deals with a class of selected clients.

QUESTION NO.21:- Explain the need for setting-up a Depository in India.

The need was realized in the 1990s due to various reasons as under:

(1) A lot of time was consumed in the process of allotment and transfer of shares

(2) Increase in volume of transactions

(3) Large scale irregularities in the securities scam of 1992 exposed the limitations of the prevailing settlement system

(4) Problems associated with dealing in physical shares, such as

(5) problems of theft, fake and/or forged transfers,

(6) share transfer delays particularly due to signature mismatches; and

(7) paper work involved in buying, selling, and transfer leading to costs of handling, storage, transportation, and other back office costs. To overcome these problems, the Government of India, in 1996, enacted the Depositories Act, 1996 to start depository services in India.

QUESTION NO.22:- Write short note on Green Shoe Option.

The name Green Shoe Option comes from the name of a company. A company named Green Shoe Company first granted a right to its underwrites that they can be allotted 10% - 15% more shares if the issue is over subscribed. Company's Act 1956 provides that the public issue should be treated as cancelled if the subscription for it is below 90% of issue size. To avoid this contingency the issuer company generally enters into an agreement with underwriters for the purchase of the required number of shares to reach the dead line of 90% subscription, in case the issue is under - subscribed.

However, in case the issue is oversubscribed, it is natural to think that underwriters should be suitably awarded. When the public issue opens it remains open for certain period. During this period when the floatation is on, the issuer company can observe the demand of shares. If the demand is high for the shares and the issue is still open, SEBI guide lines allow the issuer company to accept oversubscription to a certain limit say 15%. This is green shoe option which denotes an option of allocating shares in excess of the shares include in public issue. It can be understood as an option that allows the underwriters to buy and resell additional shares up to a certain pre-determined quantity. Thus under this option the issuer company can issue additional shares on the public issue. This option is extensively used in international IPOs to stabilize the share price immediately after listing. This option is getting popularity in India recently.

QUESTION NO.23:- Explain 'Final Settlement' and 'Pay-out mechanism of final settlement' in a clearing house.

On the date of expiry of future contract, the final settlement price is the spot price on the expiry day. The spot prices are collected from members across the country through polling. The polled bid/ask prices are bootstrapped and the mid of the two bootstrapped prices is taken as the final settlement price. The responsibility of 'Final settlement' in a clearing house is on a trading-cum-clearing member for all trades done on his own account and his client's trades. A professional clearing member is responsible for settling all the participants' trade which he has confirmed to the exchange.

Pay-out mechanism: Commodity -

(1) Credit given to the buyer member Clearing Member Pool A/C;

(2) Instruction by member to transfer from CM Pool to buyer client's Demat Account;

(3) Subsequent Remat of commodities and physical movement handled by buyer.

Funds - Funds pay-out is done into the designated bank account of the member with the clearing house.

QUESTION NO.24:- Describe any one risk management procedure of clearing house.

- (1) Imposition of membership requirements, including capital requirements and an ongoing monitoring of compliance with such requirements in order to limit the likelihood of defaults.
- (2) Imposition of security deposits, collateral requirements and exposure ceilings to limit loss by using more than one settlement bank. Another technique to minimize the risk of settlement of bank failure is to convert customer cash held in deposits at the settlement bank into securities, e.g. treasury bonds held by the settlement bank. While a cash deposit account creates a debtor/ creditor relationship between the bank and its customer for the amount on deposit and a customer claim against the assets of the bank in the event of its insolvency, customer securities held by a settlement bank are segregated for the benefit of customer on its books, are not included in the assets upon its insolvency and can be recovered by the customer, free of any claim against the bank.

QUESTION NO.25:- What are the pre-requisites for an efficient money market? What are its benefits?

Pre-requisites for an efficient money market are:

- (i) **Economic system:** Institutional development, relative political stability and a reasonably well developed banking and financial system.
- (ii) **Integrity:** Transactions in money market are concluded over telephone followed by written confirmation from the contracting parties. Hence, integrity is a basic necessity. Thus, banks and other players in the market may have to be licensed and effectively supervised by the regulators.
- (iii) **Short-term funds:** The market should be able to provide an investment outlet for any temporarily surplus funds that may be available. Thus, there must be effective demand and supply of short-term monies the demand for which arises from shortterm liquidity requirements and supply of which arises from idle cash available for temporary investment.
- (iv) **Clearing mechanism:** Efficient clearing and settlement systems. Electronic Fund Transfer (EFT), Depository System, Delivery versus payment, High value inter-bank payment system etc. are essential pre-requisites for ensuring a risk-free and transparent payment and settlement system.
- (v) **Regulation:** Government and Central Bank intervention to moderate liquidity profile.
- (vi) **Apex body:** An empowered Central Bank to ensure credibility in the system and to supervise the players in the market.
- (vii) **Instruments:** The market should have varied instruments with distinctive maturity and risk profiles to serve the needs of the players in the market. Multiple instruments add strength and depth to the market.
- (viii) **Integration:** Market should be integrated with the rest of the markets in the financial system to ensure perfect equilibrium. The funds should move from one segment of the market to another for exploiting arbitrage opportunities.

Benefits of an efficient money market may be as follows:

- (i) Provides a stable source of funds to Banks.
- (ii) Encourages development of non-bank entities.
- (iii) Facilitates Government market borrowing.
- (iv) Makes effective monetary policy actions.
- (v) Helps in pricing different floating interest products.

QUESTION NO.26:- What is 'Follow-on Public Offer (FPO)' with reference to Capital market?

Follow-on Public Offer (often but incorrectly called 'Secondary offering') is an offer of sale of securities by a listed company. Follow-on offering can be either of two types (or a mixture of both): Dilutive and Nondilutive. A secondary offering is an offering of securities by a shareholder of the company (as opposed to the company itself,

which is a primary offering). Follow-on offering is preceded by release of prospectus similar to IPO.

In the case of Dilutive Offering, the company's Board of Directors agrees to increase the share float for the purpose of selling more equity in the company. This new inflow of cash might be used to pay off some debt or used for needed company expansion. When new shares are created and then sold by the company, the number of shares outstanding increases and this causes dilution of earnings on a per share basis. Usually the gain of cash inflow from the sale is strategic and is considered positive for the longer-term goals of the company and its shareholders. Some owners of the stock however may not view the event as favorably over a more short-term valuation horizon.

The Non-dilutive type of follow-on offering is when privately held shares are offered for sale by company directors or other insiders (such as Venture Capitalists) who may be looking to diversify their holdings. Because no new shares are created, the offer is not dilutive to existing shareholders, but the proceeds from the sale do not benefit the company in any way. Usually however, the increase in available shares allows more institutions to take non-trivial positions in the company. A non-dilutive offering is also called a secondary offering. Follow-on Public offering is different from Initial Public Offering.

QUESTION NO.27:-What are the sources of credit rating information? Explain the process of credit rating?

The following are the important sources of credit rating information-

1) Trade References: Prospective customer may be required to give 2 or 3 trade references. Thus, the customers may give a list of personal acquaintances or some other existing credit-worthy customers. The Credit Manager can send a short questionnaire, seeking relevant information, to the referees.

2) Bank references: Customer requests his banker to provide the required information to the rating agencies.

3) Credit Bureau Reports: Associations for specific industries may maintain a credit bureau which provides useful and authentic credit information for their members.

4) Past experience: Past experience of dealings with an existing customer also provides requisite information. The transactions should be carefully scrutinised and interpreted in light of changes in the ensuing period for finding out the credit risk involved.

5) Published Financial Statements: Published Financial Statements of a customer, read along with its Audit Report and Observations, (in case of limited Companies) can be examined to determine the creditworthiness.

6) Reports from Point of Sale: Credit-worthiness can be evaluated by the reports provided by consulting salesmen or persons engaged at the point of sale. Such reports provide first hand information to the Company for proper determination of the credit limit.

7) Reports from other agencies: Non-Banking Financial Companies (Leasing Companies, etc.) may maintain a list of defaulting customers / suit-filed cases, etc. Sometimes, this information may also be obtained by other Companies on request basis. Credit Information Bureau of India Limited (CIBIL) is one entity which maintains a detailed list of defaulters.

Process of Credit Rating: The steps involved in the Credit Rating are:

1) Rating Request: The Customer (prospective issuer of Debt Instrument) makes a formal request to the Rating Agency. The request spells out the terms of the rating assignment and contains analysis of the issues viz. historical performance, competitive position, business risk profile, business strategies, financial policies and evaluation of outlook for performance. Information requirements are met through various sources like references, reviews, experience, etc.

2) Formation of Rating Team: The Credit Rating Agency forms a team, whose composition is based on the expertise and skills required for evaluating the business of the Issuer.

3) Initial Analysis: On the basis of the information gathered, the analysts submit the report to the Rating team. The authenticity and validity of the information submitted influences the credit rating activity.

4) Evaluation by Rating Committee: Rating Committee is the final authority for assigning ratings. The rating team makes a brief presentation about the issuers' business and the management. All the issues identified during discussions stage are analysed.

- 5) Actual Rating:** Rating is assigned and all the issues, which influence the rating, are clearly spelt out.
- 6) Communication to Issuer:** Assigned rating together with the key issues is communicated to the issuer's top management for acceptance. The ratings, which are not accepted, are either rejected or reviewed. The rejected ratings are not disclosed and complete confidentiality is maintained.
- 7) Review of Rating:** If the rating is not acceptable to the issuer, he has a right to appeal for a review of the rating. These reviews are usually taken up, only if the issuer provides fresh inputs on the issues that were considered for assigning the rating. Issuer's response is presented to the Rating Committee. If the inputs are convincing, the Committee can revise the initial rating decision.
- 8) Surveillance / Monitoring:** Credit Rating Agency monitors the accepted ratings over the tenure of the rated instrument. Ratings are reviewed every year, unless warranted earlier. During this course, the initial rating could be retained, upgraded or downgraded.

QUESTION NO.28:-Describe the five credit rating agencies registered with the SEBI.

There are five credit rating agencies registered with the SEBI. They are outlined as follows:

- 1. CRISIL Limited (Formerly the Credit Rating Information Services of India Limited) :-** a) CRISIL is the oldest rating agency originally promoted by ICICI. b) Services Offered: CRISIL offers a comprehensive range of integrated product and service offerings - real time news, analyzed data, opinion and expert advice - to enable investors, issuers, policy makers de-risk their business and financial decision making, take informed investment decisions and develop workable solutions. c) Risk Standardisation: CRISIL helps to understand, measure and standardise risks - financial and credit risks, price and market risks, exchange and liquidity risks, operational, strategic and regulatory risks.
- 2. ICRA Limited (Formerly Investment Information and Credit Rating Agency of India) –** a) ICRA is an independent and professional Company, providing investment information and credit rating services. b) Activities: ICRA executes assignments in credit ratings, equity grading, and mandated studies spanning diverse, industrial sectors. ICRA has broad based its services to the corporate and financial sectors, both in India and overseas and offers its services under three banners namely- Rating Services, Information Services, Advisory Services.
- 3. CARE (Credit Analysis and Research Limited) –** a) CARE is equipped to rate all types of debt instruments like Commercial Paper, Fixed Deposit, Bonds, Debentures and Structured Obligations. b) Services: CARE's Information and Advisory services group prepares credit reports on specific requests from banks or business partners, conducts sector studies and provides advisory services in the areas of financial restructuring, valuation and credit appraisal systems.
- 4. Fitch Ratings India Private Limited:** Fitch Rating India was formerly known as DCR India- Duff and Phelps Credit Rating Co. Fitch Ratings, USA and DCR India merged to form a new entity called Fitch India. Fitch India is a 100% subsidiary of Fitch Ratings, USA and is the wholly owned foreign operator in India. Fitch is the only international rating agency with a presence on the ground in India. Fitch Rating India rates corporates, banks, financial institutions, structured deals, securitized paper, global infrastructure and project finance, public finance, SMEs, asset management companies, and insurance companies.
- 5. Brickwork Ratings:** It is the fifth agency in the ratings business which commenced its activities from September 24, 2008. It rates IPOs, perpetual bonds of banks, non-convertible debenture issues, and certificate of deposits.

QUESTION NO.29:- Write down the various auction methods in securities market.

The various auction methods in securities market are:

- 1. Yield Based Auction:** A yield based auction is generally conducted when a new Government security is issued. Investors bid in yield terms up to two decimal places (for example, 8.19 per cent, 8.20 per cent, etc.). Bids are arranged in ascending order and the cut-off yield is arrived at the yield corresponding to the notified amount of the auction. The cut-off yield is taken as the coupon rate for the security. Successful bidders are those who have bid at or below the cut-off yield. Bids which are higher than the cut-off yield are rejected.
- 2. Price Based Auction:** A price based auction is conducted when Government of India reissues securities issued

earlier. Bidders quote in terms of price per `100 of face value of the security (e.g., `102, `101, `100, `99, etc., per `100). Bids are arranged in descending order and the successful bidders are those who have bid at or above the cut-off price. Bids which are below the cut-off price are rejected. Depending upon the method of allocation to successful bidders, auction could be classified as Uniform Price based and Multiple Price based.

i) Uniform Price Based or Dutch Auction: All the successful bidders are required to pay for the allotted quantity of securities at the same rate, i.e., at the auction cut-off rate, irrespective of the rate quoted by them. This method is followed in the case of 91 days treasury bills only.

ii) Multiple Price Based or French Auction: All bids equal to or above the cut-off price are accepted. However, the successful bidders are required to pay for the allotted quantity of securities at the respective price/yield at which they have bid. This method is followed in the case of 364 days treasury bills and is valid only for competitive bidders. An investor may bid in an auction under either of the following categories:

(a) Competitive Bidding: In a competitive bidding, an investor bids at a specific price / yield and is allotted securities if the price / yield quoted is within the cut-off price / yield. Competitive bids are made by well informed investors such as banks, financial institutions, primary dealers, mutual funds, and insurance companies. The minimum bid amount is `10,000 and in multiples of `10,000 thereafter. Multiple bidding is also allowed, i.e., an investor may put in several bids at various price/ yield levels.

(b) Non-Competitive Bidding: With a view to providing retail investors, who may lack skill and knowledge to participate in the auction directly, an opportunity to participate in the auction process, the scheme of non-competitive bidding in dated securities was introduced in January 2002. Non-competitive bidding is open to individuals, HUFs, RRBs, co-operative banks, firms, companies, corporate bodies, institutions, provident funds, and trusts. Under the scheme, eligible investors apply for a certain amount of securities in an auction without mentioning a specific price / yield. Such bidders are allotted securities at the weighted average price / yield of the auction. The participants in noncompetitive bidding are, however, required to hold a gilt account with a bank or PD. Regional Rural Banks and co-operative banks which hold SGL and Current Account with the RBI can also participate under the scheme of non-competitive bidding without holding a gilt account. The minimum amount and the maximum amount for a single bid is `10,000 and `2 crore respectively in the case of an auction of dated securities.

QUESTION NO.30:- Explain briefly the advantages of holding securities in 'Demat' form rather than in physical form.

The Depositories Act, 1996 provides the framework for the establishment and working of depositories enabling transactions in securities in scripts or (demat) form with the arrival of depositories on the scene; many of the problems previously encountered in the market due to physical handling of securities have been to a great extent minimized.

In a broad sense, therefore, it can be said that "dematting" has helped to broaden the market and make it smoother and more efficient.

From an Individual Investor point of view, the following are important advantages of holding securities in demat form.

- (a) It is faster and avoids delay in transfers
- (b) It avoids lot of paper work
- (c) It saves on stamp duty.

From the Issuer Company of view also, there are significant advantages due to dematting some of which are:

- (a) Saving in printing certificate, postage expenses
- (b) Stamp duty waiver
- (c) Easy monitoring of buying /selling patters in securities increasing ability to spot takeover attempts at price rigging.

QUESTION NO.31:- What is the settlement schedule for the interest Rate Futures contracts for : (i) Daily mark to Market settlement (ii) Final settlement

Settlement schedule for interest Rate Future Contracts

	<u>Pay-in</u>	<u>Pay-out</u>
Daily Mark to Market Settlement	T+1 working day, on or after 11.30 a.m	T+1 working day on or after 12.00 p.m (For above, T is the trading day)
Final Settlement	T+1 working day, or after 11.30 a. m	T+1 working day, on or after 12.00 p.m For above, T is the expiration day

QUESTION NO.32:- Explain Dow-Jones theory regarding the behaviour of stock market prices.

The Dow theory is one of the oldest and most famous technical tools. It was originated by Charles Dow, who founded the Dow Jones Company and was the editor of The Wall Street Journal, Mr. Dow died in 1902. The Dow theory was developed by W.P. Hamilton and Robert Rhea from the editorial written by Dow during 1900-1929 years, numerous writers have altered, extended and in some cases abridged the original Dow theory. It is the basis for many other techniques used by technical analysts.

The Dow theory is credited with having forecast the Great Crash of 1929. According to Dow, "The market is always considered as having three movement, all going at the same time. The first is the narrow movement from day to day. The second is the short swing running from two weeks to a month or more, the third is the main movement covering at least four years in duration."

(A) Movements in Share Prices: Movements in the share prices on the share market can be classified into the following three major categories —

(i) Primary Trends: The primary trend is the long range cycle that carries the entire market up or down (bull or bear markets).

Feature: Primary movements indicate the basic trend in the market. However, in the short-run, some reverse trend may also be observed, but in the long-run they will end up either with a rise or fall in prices.

Period: Primary movements reflect the trend of the share market, and may continue from one to three years or even more.

Example: Bull Phase is one in which the succeeding highs exceed the preceding highs, and the successive lows are higher than the preceding lows. The reverse is the case in bear phase. Correct determination of such movements is the major objective of Dow-Jones theorists.

(ii) Secondary Movements (trends): The secondary trend acts as a restraining force on the primary trend. It ends to correct deviations from its general boundaries.

Feature: Intervening movements in prices which last for a short period running counter to the primary trend, i.e. in case of Bull Phase in Primary Movement, after a rise in prices, there will be a fall in the prices. This fall in prices is referred to as Secondary Movement.

Time: Secondary Movements are shorter in duration, ranging in a few weeks, and the extent of secondary movement (upward or downward) ranges from 33% to 66% of the primary movement.

Example: In a Bull Run (Primary Movement), for a rise of 30% in the market capitalization, there will be a fall of 20% (Maximum) in Market Capitalisation.

(iii) Daily Fluctuations (minor trends): The minor trends have little analytical value, because of their short durations and variations in amplitude. **Feature:** These are everyday's irregular fluctuations in share prices in either direction, as a result of activities of speculators. **Importance:** Such fluctuations have no bearing for an investor, and hence his investment or divestment decisions, should not be guided by such fluctuations.

(B) Dow-Jones Averages: The Dow-Jones Theory is based upon the movement of two indices constructed by Charles Dow, Dow Jones Industrial Average and Dow Jones Transportation Average. These averages reflect the aggregate impact of all kinds of information on the market.

(C) Benefits of Dow-Jones theory: (a) **Timing of Investment:** Investor can choose the appropriate time for his

investment / divestment. Investment should be made in shares when their prices have reached the lowest level, and sell them at a time when they reached the highest peak. **(b)** Identification of Trend: Using Dow-Jones theory, the correct and appropriate movement in the Market Prices can be identified, and depending on the investors' preference, decisions can be taken.

(D) Criticism of the Theory: **(a)** It is not a theory but an interpretation of known data. A theory should be able to explain why a phenomenon occurs. No attempt was made by Dow or his followers to explain why the two averages should be able to forecast future stock prices. **(b)** It is not acceptable in its forecast. There was considerable lag between the actual turning points and those indicated by the forecast. **(c)** It has poor predictive power. According to Rosenberg, the Dow Theory could not forecast the bull market which had preceded the 1929 crash. It gave bearish indication in early 1926. The 31/2 years which followed the forecast of Hamilton's editorials for the 26-years period, from 1904 to 1929. Of the 90 recommendations Hamilton made for a change in attitude towards the market (55% were bullish, 18% bearish and 29% doubtful) only 45 were correct. Such a result an investor may get by flipping a coin)

QUESTION NO.33:- Write short note on Various types of Margins

Margins (normally in form of cash or T-Bills) are amounts to be maintained by the Members of the Stock Exchange with the Clearing House. Margins can be categorized into the following types-

(1) Initial Margins on Securities: It is paid by purchasers and short sellers, and generally functions as a security for loan. It is similar to a down payment required for the purchase of a security.

(2) Initial Margins on Derivatives: It refers to funds paid as guarantee to ensure that the party to the transaction will perform its obligation under the contract. Initial Margin on Derivatives is aimed to cover future changes that may occur in the value.

(3) Maintenance Margins: It refers to the value over and above the Initial Margin, which must be maintained in a margin account at all times after the initial margin requirement, if any, is satisfied.

(4) Variation Margin: It refers to funds that are required to be deposited in, or paid out of, a margin account that reflects changes in the value of the relevant instrument.

QUESTION NO.34:- Define Breadth Index.

Breadth Index covers all securities traded and also the volume of transactions to give a view of the direction of the stock market movements. It is an addition to the Dow Theory and 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.

QUESTION NO.35:- Distinguish between mutual funds and hedge funds.

(I) Mutual Funds seek Relative Returns whereas Hedge Funds actively seek Absolute Returns.

(II) In a bull market, hedge funds may not perform as well as mutual funds, but in a bear market - taken as a group or asset class – they do better than mutual funds because they hold short positions and hedges.

QUESTION NO.36:- State the limitations of taking the mutual fund route for investment?

Limitations of taking the Mutual Fund route for investment:

(i) No Choice of Securities: Investors cannot choose the securities which they want to invest in.

(ii) Relying on Other's Performance: **(a)** Investors face the risk of Fund Manager not performing well. Investors in Mutual Fund have to rely on the Fund Manager for receiving any earning made by the fund, i.e. they are not automatic. **(b)** If Fund Manager's pay is linked to performance of the fund, he may be tempted to perform only on

short-term and neglect long-term performance of the fund.

(iii) High Management Fee: The Management Fees charged by the fund reduces the return available to the investors.

(iv) Diversification: Diversification minimizes risk but does not guarantee higher return.

(v) Diversion of Funds: There may be unethical practices e.g. diversion of Mutual Fund amounts by Mutual Fund /s to their sister concerns for making gains for them.

(vi) Lock-In Period: Many MF schemes are subject to lock in period and therefore, deny the investors market drawn benefits.

QUESTION NO.37:- Write down the other risks to which the derivatives clearing houses may be exposed.

Other Risks to which the Derivatives Clearing Houses may be exposed:

(i) Market Risk: A clearing house may be subject to market risk if it accepts securities as margin. Clearing houses usually address this market risk by discounting the value of non-domestic currencies and securities posted as margin (i.e. by subjecting them to ?haircuts?) and by marking them to market daily.

(ii) Currency Exchange Risk: If the clearing house accepts non-domestic currency as margin or if it clears contracts that are denominated and settled in a non-domestic currency, but that are collateralized with domestic currency or assets denominated in domestic currency. Clearing houses usually address this risk by subjecting non-domestic currency and assets denominated in non-domestic currency to haircuts and by marking all

(iii) Operational risk: Any operational problem that delays settlement or prevents the clearing house from resolving a default could increase counterparty exposures. In addition, an operational breakdown might prevent a clearing house from monitoring its exposures.

(iv) Legal risks: The enforceability of netting arrangements, the ability to realize a defaulting member's assets, the finality of payments and securities transfers, the enforceability of the clearing house's internal rules and the general legal framework applicable in the jurisdiction in which the clearing house operates must be subject to a high degree of legal certainty.

QUESTION NO.38:- What are the benefits of hedge funds?

(a) Seek higher returns: Hedge funds strategies generate positive returns in both rising and falling equity and bond markets.

(b) Investment styles: Huge variety of hedge fund investment styles – may uncorrelated with each other – provides investors with a wide choice of hedge funds strategies to meet their investment objectives.

(c) Long term Solution: Hedge funds provide an ideal long-term investment solution, eliminating the need to correctly time entry and exit from markets.

(d) (i) Inclusion of hedge funds in a balanced portfolio reduces overall portfolio risk and volatility and increases returns. **(ii)** Adding hedge funds to an investment portfolio diversification not otherwise available in traditional investing.

QUESTION NO.39:- Write Short Notes on Stock Splits

A stock split is a change in the number of outstanding shares of stock achieved through a proportional reduction of increase in the par value of the stock. The management employs this device to make a major adjustment in the market price of the firm's stock and consequently in its earnings and dividends per share. In stock split only the par value and number of outstanding shares are affected. The amounts in the common stock, premium and retained earnings remain unchanged.

Reasons for stock splits: A number of reasons may be offered for splitting of the firm's common stock. These are:

i) Broader Marketability of the stock: The basic reason of stock split is to provide broader and more stable market for the stock. It is agreed that when stock prices of a company tend to rise sharply due to economic prosperity of the company and its improved profitability and it is believed that the price of the sock has moved out

of the price range of any investors narrowing the market of stock, the management may, in a bid to promote wider distribution of shares, resort to stock split.

ii) Need for Garnering External Resources: A company contemplating to garner funds from the market may use stock split to prepare ground for new issues.

iii) Merger or Acquisition of Companies: A firm contemplating merger or acquisition through exchange of stock will often split its stock to make the transactions more attractive to stockholders of the firm it is taking over.

QUESTION NO.40:- Write short notes on Bought-out deals

In bought out deal, a company allots shares in full or in lots to a single investor or a group of investors at a negotiated price between the company and the investor(s). After a particular period as agreed between the two parties, the shares market. The holding cost of the sponsor may be either paid by the company or the sponsor may retain the profit on issue as per terms and conditions of agreement. After the public offering the shares may be got listed in stock exchange.

BOD are used to takeover a running company. It is a process of investment by a sponsor directly in a company.

Advantages:

(1) The company can use the fund immediately and is able to focus its attention to execution of project.

(2) It is very suitable in situation when money needs to be arranged fast without which the project may suffer.

(3) Preliminary expenses are nil or very little.

(4) It is easier to convince an investor for an investment in a company rather than the general public.

(5) When the conditions are not favorable for bringing out a public issue, the bought out deals offer an immediate and an amicable solution. 6. When the shares are offered to public, the general public becomes more confident about the issue because a professional banker has already invested in it. The public expects high rewards in their investment and they are generally not disappointed.

QUESTION NO.41:- Write Short Note on Merchant Banker.

The term merchant banking has been used differently in different parts of the world and is so widely used that sometimes, it is applied to banks who are not merchants, sometimes to merchants who are not bank and sometimes to those agencies who are neither merchants not banks.

Merchant banking can be defined as a non-banking financial activity resembling banking being performed all over the world by both banking and non-banking institutions.

Merchant bank can be defined as an institution or an organization which provides a number of services including management of share (and debenture) issues, portfolio management services, underwriting of shares, credit management and other financial services. The merchant banks offer services for a fee while commercial banks accept deposits and give loans on interests. Merchant banks do not act as retail banks for general public and don't accept deposits generally. The merchant banks are also different from the dealers, traders and brokers of shares and debentures. The merchant banks mainly deal in new issues while the dealers, traders and brokers mainly deal in secondary market.

QUESTION NO.42:- Write short notes on Strategic roll up,

Strategic roll up is multi merger strategy. A company acquires many private companies doing the same business. The new company goes public with a new IPO. The proceeds of the issue are used to pay the shareholders of the acquired (target) companies. Usually the payment is in the form of shares and cash both. This is also used for synergy effects e.g. many small companies are merged into one big company and the sum total is more than the aggregate of individuals. This allows the small companies to grow into big one. Family businesses that are going on for years are common targets of strategic roll ups.

QUESTION NO.43:- Write Short Note on Systematic Withdrawal Plan (SWP).

(i) **Nature:** SWP permits the investor to make an investment at one go and systematically withdraw at periodic intervals, at the same time permitting the balance funds to be re-invested.

(ii) **Features:**

(a) Investors can receive regular income while still maintaining their investment's growth potential.

(b) SWP includes convenient payout options and has several tax advantages.

(c) Withdrawal can be done either on a monthly basis or on a quarterly basis, based on needs and investment goals of an investor.

(d) Tax is not deducted, & dividend distribution tax is not applicable. There are no entry or exit loads.

QUESTION NO.44:- Write Short Note on Systematic Investment Plan (SIP).

(i) **Nature:** Under a SIP, an investor can invest in the units of Mutual Funds at periodic intervals (monthly or quarterly) prevailing unit price of that time. This fund is for those investors who do not want to accumulate their savings and invest in one go. This fund permits them to accumulate their savings by directly investing in the mutual fund.

(ii) **Feature:** Investors can save a fixed amount of rupees every month or quarter, for the purchase of additional units.

QUESTION NO.45:- 'Clearing of trades that take place on an exchange happens through the exchange clearing house.'- Justify.

Clearing of trades that take place on an exchange happens through the exchange clearing house.

A clearing house is a system by which exchanges guarantee the faithful compliance of all trade commitments undertaken on the trading floor or electronically over the electronic trading systems. The main task of the clearing house is to keep track of all the transactions that take place during a day so that the net position of each of its members can be calculated. It guarantees the performance of the parties to each transaction.

Typically it is responsible for the following:

(a) Effecting timely settlement.

(b) Trade registration and follow up.

(c) Control of the evolution of open interest.

(d) Financial clearing of the payment flow.

(e) Physical settlement (by delivery) or financial settlement (by price difference) of contracts.

(f) Administration of financial guarantees demanded by the participants.

The clearing house has a number of members, who are mostly financial institutions responsible for the clearing and settlement of commodities traded on the exchange. The margin accounts for the clearing house members are adjusted for gains and losses at the end of each day (in the same way as the individual traders keep margin accounts with the broker).

QUESTION NO.46:- Describe the concept Insider Trading.

Insider Trading is the use of confidential information about a business gained through employment in a company or a stock brokerage, to buy and/or sell stocks and bonds based on the private knowledge that the value will go up or down.

It is buying or selling or dealing in securities of a Listed company by Director, Member of Management, an Employee or any other person such as Internal or Statutory Auditor, Agent, Advisor, Analyst Consultant etc. who have knowledge of material, 'inside' information not available to general public.

Illegal: Dealing in securities by an insider is illegal when it is predicated upon utilization of inside information to profit at the expense of other investors who do not have access to such investment information. It is prohibited and is considered as an offence as per SEBI (Insider Trading) Regulations, 1992.

Punishable: Insider trading is an unethical practice resorted to by those in power, causing huge losses to common investors thus driving them away from capital market, and hence punishable.

Two decades have passed since the SEBI (Prohibition of Insider Trading) Regulations, 1992 were notified which was framed to deter the practice of insider trading in the securities of listed companies. Since then there have been several amendments to the Regulations and judicial paradigm through case laws have also evolved in India. In fact, world over, the regulatory focus is shifting towards containing the rising menace of insider trading effectively. To ensure that the regulatory framework dealing with insider trading in India is further strengthened, SEBI seeks review of the extant Insider Trading Regulatory regime in India.

QUESTION NO.47:- The functions of a market are performed by its diverse participants? – Justify.

The functions of a market are performed by its diverse participants. The participants in financial markets can be also classified into various groups, according to their motive for trading:

(a) Public investors, who ultimately own the securities and who are motivated by the returns from holding the securities. Public investors include private individuals and institutional investors, such as pension funds and mutual funds.

(b) Brokers, who act as agents for public investors and who are motivated by the remuneration received (typically in the form of commission fees) for the services they provide. Brokers thus trade for others and not on their own account.

(c) Dealers, who do trade on their own account but whose primary motive is to profit from trading rather than from holding securities. Typically, dealers obtain their return from the differences between the prices at which they buy and sell the security over short intervals of time.

(d) Credit rating agencies (CRAs) that assess the credit risk of borrowers.

In reality three groups are not mutually exclusive. Some public investors may occasionally act on behalf of others; brokers may act as dealers and hold securities on their own, while dealers often hold securities in excess of the inventories needed to facilitate their trading activities. The role of these three groups differs according to the trading mechanism adopted by a financial market.

QUESTION NO.48:- State Secondary Market. List the function of secondary Market.

Secondary Market: The secondary market is a market in which existing securities are resold or traded. This market is also known as the stock market. In India, the secondary market consists of recognized stock exchanges operating under rules, by-laws and regulations duly approved by the government.

Functions of the Secondary Market:

(a) To contribute to economic growth through allocation of funds to the most efficient channel through the process of disinvestment to reinvestment.

(b) To facilitate liquidity and marketability of the outstanding equity and debt instruments.

(c) To ensure a measure of safety and fair dealing to protect investors' interests.

(d) To induce companies to improve performance since the market price at the stock exchanges reflects the performance and this market price is readily available to investors.

(e) To provide instant valuation of securities caused by changes in the internal environment.

QUESTION NO.49:- State Credit Rating Symbols in India.

Credit rating agencies generally use symbols to express the creditworthiness rather than give marks or descriptive credit opinion. Rating symbols indicate relative creditworthiness of securities within a defined frame of reference. A simple alphanumeric symbol is normally used to convey a credit rating. **The credit rating agencies of India assign the following ratings to the companies:** (i) AAA- Highest Safety (ii) AA- High Safety (iii) A-Adequate Safety (iv) BBB- Moderate Safety (v) BB- Inadequate Safety (vi) B- High Risk (vii) C- Substantial Risk (viii) D- Default Risk

QUESTION NO.50:- Write short notes on Marking to Market.

Marking to market – Marking to market is a characteristic feature of future contracts. Future contracts are standardized contracts that trade on organized future markets. Under a future contract the seller agrees to deliver to the buyer a specified quantity of security, commodity or foreign exchange at a fixed time in future at a price agreed to at the time of entering into the contract. To ensure that default risk is reduced to minimum, both parties are required to deposit some margin money with the organized clearing house, which is known as the initial margin. Further, with the fluctuation in the price of the underlying asset, the balance in the margin account may fall below specified minimum level or even become negative so that it may not happen like this, at the end of each trading session, all outstanding contracts are appraised at the settlement price of that session. This is known as Marking to Market. This would mean that some participants would make a loss while others would stand to gain. The exchange adjusts this by debiting the margin accounts of those members who made a loss and crediting the accounts of those members who have gained. A member making a loss must make good loss and the counter party will receive his profit. Thus the value of the future contracts is set to zero at the end of each trading day.

QUESTION NO.51:- What do you mean by Offer for sale?

Offer for sale is also known as bought out deal (BOD). It is a new method of offering equity shares, debentures etc, to the public. In this method, instead of dealing directly with the public, a company offers the shares or debentures through a sponsor. The sponsor may be a commercial bank, merchant banker, an institution or an individual. A company allots shares to a sponsor at an agreed price between the company and sponsor. The sponsor then passes the consideration money to the company and in turn gets the shares duly transferred to him. After a specified period as agreed between the company and the sponsor, the shares are issued to the public by the sponsor with a premium. After the public offering, the sponsor gets the shares listed in one or more stock exchanges. The holding cost of such shares by the sponsor may be reimbursed by the company or the sponsor may get the profit by issue of shares to the public at premium.

Thus, it enables the company to raise the funds easily and immediately. As per SEBI guidelines, no listed company can go for BOD. A privately held company or an unlisted company can only go for BOD. A small or medium size company which needs money urgently chooses to BOD. It is a low cost method of raising funds. The cost of public issue is around 8% in India. But this method lacks transparency. There will be scope for misuse also. Besides this, it is expensive like the public issue method. One of the most serious short coming of this method is that the securities are sold to the investing public usually at a premium. The Margin thus between the amount received by the company and the price paid by the public does not become additional funds of the company, but it is pocketed by the issuing houses or the existing shareholders.

Commodity Exchange

QUESTION NO. 1:- Name the participants in commodity futures.

Participants in Commodity Future

(a) Farmers/Producers (b) Merchandisers / Traders (c) Importers (d) Exporters (e) Consumers/ Industry (f) Commodity Financers (g) Agriculture credit providing agencies (h) Corporate having price risk exposure in commodities.

QUESTION NO. 2:- Write short note — Multi-Commodity Exchange of India Limited (MCX).

MCX an independent and de-mutualized multi commodity exchange has permanent recognition from Government of India for facilitating online trading, clearing and settlement operations for commodity futures markets across the country. Key shareholders of MCX are Financial Technologies (India) Ltd., State Bank of India, NABARD, NSE, HDFC Bank, State Bank of Indore, State Bank of Hyderabad, State Bank of Saurashtra, SBI Life Insurance Co. Ltd., Union Bank of India, Bank Of India, Bank Of Baroda, Canara Bank, Corporation Bank.

Headquartered in Mumbai, MCX is led by an expert management team with deep domain knowledge of the commodity futures markets. Through the integration of dedicated resources, robust technology and scalable infrastructure, since inception MCX has recorded many first to its credit.

Inaugurated in November 2003 by Shri Mukesh Ambani, Chairman & Managing Director, Reliance Industries Ltd, MCX offers futures trading in the following commodity categories: Agri Commodities, Bullion, Metals- Ferrous & Non-ferrous, Pulses, Oils & Oilseeds, Energy, Plantations, Spices and other soft commodities.

QUESTION NO. 3:- Write are the Objectives of Commodity Futures.

(1) Hedging with the objective of transferring risk related to the possession of physical assets through any adverse moments in price. Liquidity and Price discovery to ensure base minimum volume in trading of a through market information and demand supply factors that facilitates a regular and authentic price discovery mechanism.

(2) Maintaining buffer stock and better allocation of resources as it augments reduction in inventory requirement and thus the exposure to risks related with price fluctuation declines. Resources can thus be diversified for investments.

(3) Price stabilization along with balancing demand and supply position. Futures trading leads to predictability in assessing the domestic prices, which maintains stability, thus safeguarding against any short term adverse price movements. Liquidity in Contracts of the commodities traded also ensures in maintaining the equilibrium between demand and supply.

(4) Flexibility, certainty and transparency in purchasing commodities facilitate bank financing.

Predictability in prices of commodity would lead to stability, which in turn would eliminate the risks associated with running the business of trading commodities. This would make funding easier and less stringent for banks to commodity market players.

QUESTION NO. 4:- Discuss unique features of National Level Commodity Exchanges.

The unique features of national level commodity exchanges are:

(1) They are demutualized, meaning thereby that they are run professionally and there is separation of management from ownership. the independent management does not have any trading interest in the commodities dealt with on the exchange.

(2) They provide online platforms or screen based trading as distinct from the open-outcry systems (ring trading) seen on conventional exchanges. this ensures transparency in operations as everyone has access to the same information.

(3) They allow trading in a number of commodities and are hence multi-commodity exchanges.

(4) They are national level exchanges which facilitate trading from anywhere in the country. This corollary of being an online exchange.

QUESTION NO. 5:- What are the Benefits of Commodity Trading.

The world is witnessing a new trend wherein developing countries like India, China, Brazil & other emerging markets are driving the global economy with their rising domestic consumption patterns. This sustained increase in consumption has led to investment analysts realizing the growth potential of a new asset class namely Commodities. Commodities have also evolved as an asset class with the development of various commodity future indices. The performance of commodities as an asset class is usually measured by the returns on a

commodity index, such as the Rogers International Commodity Index (RICI), which tracks the return in 36 different commodity products. In the last 9 years, the RICI Index has given compounded annualized returns of 18.31% as compared to 17.22% returns given by BSE SENSEX

(i) Strong Performance Track Record: The table alongside reflects positive performance of RICI Index during falling & rising market phases. In fact, the RICI INDEX has outperformed all other indices since 1999.

(ii) Portfolio Diversification: Adding commodities to your investment portfolio helps you take advantage of the benefit of diversification. In a diversified portfolio, assets do not move in sync with each other, as commodities exhibit low/ negative correlation with respect to equity and bonds. Low/ negative correlation means commodities can play an important role in portfolio diversification by reducing overall portfolio risk. This should improve the consistency of returns over time.

(iii) Inflation Hedge: Commodities tend to react to changing economic fundamentals in ways that are different from traditional financial assets. For example, commodities are one of the few asset classes that tend to benefit from rising inflation. As demand for goods and services increases, the price of those goods and services usually rises as well, so do the prices of the commodities that are used to produce those goods and services. Since commodity prices usually rise when inflation is accelerating, investing in commodities may provide portfolios with a hedge against inflation. As shown in the table overleaf, commodity has a positive sensitivity to inflation as compared to asset classes like stocks and bonds.

(iv) Role of Commodities in Optimizing Portfolio Returns: An exposure to commodities in your portfolio can help you optimize its returns considerably. The graph below indicates how with a prudent mix of commodity and SENSEX stocks in a portfolio, one could enhance portfolio returns while at the same time reducing the volatility of investments.

QUESTION NO.6:- Name the Participants of Commodity Exchange.

Participants who trade in the derivatives market can be classified under the following three broad categories:

(1) Hedgers: A Hedger can be farmers, manufacturers, importers and exporter. A hedger buys or sells in the futures market to secure the future price of a commodity intended to be sold at a later date in the cash market. This helps protect against price risks. The holders of the long position in futures contracts (buyers of the commodity), are trying to secure as low a price as possible. The short holders of the contract (sellers of the commodity) will want to secure as high a price as possible. The commodity contract, however, provides a definite price certainty for both parties, which reduces the risks associated with price volatility. By means of futures contracts, Hedging can also be used as a means to lock in an acceptable price margin between the cost of the raw material and the retail cost of the final product sold. Someone going long in a securities future contract now can hedge against rising equity prices in three months. If at the time of the contract's expiration the equity price has risen, the investor's contract can be closed out at the higher price. The opposite could happen as well: a hedger could go short in a contract today to hedge against declining stock prices in the future.

(2) Speculators: Other commodity market participants, however, do not aim to minimize risk but rather to benefit from the inherently risky nature of the commodity market. These are the speculators, and they aim to profit from the very price change that hedgers are protecting themselves against. A hedger would want to minimize their risk no matter what they're investing in, while speculators want to increase their risk and therefore maximize their profits. In the commodity market, a speculator buying a contract low in order to sell high in the future would most likely be buying that contract from a hedger selling a contract low in anticipation of declining prices in the future. Unlike the hedger, the speculator does not actually seek to own the commodity in question. Rather, he or she will enter the market seeking profits by off-setting rising and declining prices through the buying and selling of contracts.

(3) Arbitrageurs: A central idea in modern economics is the law of one price. This states that in a competitive market, if two assets are equivalent from the point of view of risk and return, they should sell at the same price. If the price of the same asset is different in two markets, there will be operators who will buy in the market where the asset sells cheap and sell in the market where it is costly. This activity termed as arbitrage, involves the simultaneous purchase and sale of the same or essentially similar security in two different markets for

advantageously different prices. The buying cheap and selling expensive continues till prices in the two markets reach equilibrium. Hence, arbitrage helps to equalize prices and restore market efficiency.

QUESTION NO. 7:- State the term "Close" and "Closing Price" in commodity market.

Close: - The period at the end of trading session officially designated by exchange during which all transactions are considered made "at the close".

Closing price: - The price (or price range) recorded during the period designated by the exchange as the official close.

QUESTION NO. 8:- State the term "Buy on Close" and "Buy on Opening" in commodity market.

Buy on Close: - To buy at the end of trading session at the price within the closing range.

Buy on opening: - To buy at the beginning of trading session at a price within the opening range.

QUESTION NO. 9:- What are the regulatory measures taken by Forward Market Commission in order to promote the trading in commodities?

(1) Illegal contracts

Following are the scenarios, in which the contracts are termed as illegal contracts,

(a) Forward Contracts in the permitted commodities, i.e., commodities notified under S.15 of the Forward Contracts (Regulation) Act, 1952, which are entered into other than: **(i)** between the members of the recognized Association or **(ii)** through or **(iii)** with any such members.

(b) Forward contracts in prohibited commodities, which are described under section 17 of forward contract act.

(c) Forward Contracts in the commodities in which such contracts have been prohibited.

(2) Measures against Illegal Forward Trading

(a) The role of Forward Markets Commission is to communicate the information relating to offences under the Act to the police authorities and assist such authorities in their work such as accompanying the police in conducting searches for documents etc.

(b) The offences under the Act are technical in nature and it is difficult to prove the charges in accordance with the rules of evidence contained in the Evidence Act. So, the Forward Markets Commission periodically conducts training programs, Seminars, Workshops etc. for the benefit of Police Officers / Prosecutors and also Judicial Magistrates First Class/Metropolitan Magistrates.

(3) Rules governing illegal Forward Contracts

(a) Owner of a place which is used for performing illegal forward contracts, with the knowledge of such owner. **(b)** A person who, without permission of the Central Government, organizes illegal forward contract. **(c)** Any person who willfully misrepresents or induces any person to believe that he is a member of a recognized association or that forward contract can be performed through him. **(d)** Any person who is not a member of a recognized association canvasses, advertises or touts in any business connected with forward contracts in contravention of the Forward Contracts (Regulation) Act, 1952. **(e)** Any person who joins, gathers, or assists in gathering at any place other than the place of business specified in the bye-laws of the recognized associations for making bids or offers or for entering into illegal forward contracts. **(f)** Any person who makes publishes or circulates any statement or information, which is false and which he knows to be false, affecting or tending to affect the course of business in forward contracts in permitted commodities.

QUESTION NO.10:- Explain the following commonly used terms in Commodity Market: (i) Forward contract (ii) Futures market

(i) Forward contract: It is an agreement between two parties to buy or sell an asset at a future date for price agreed upon while signing agreement. Forward contract is not traded on an exchange. This is oldest form of derivative contract. Size of forward contract is customized as per the terms of agreement. The contract price is not transparent as it is not publicly disclosed. It is generally settled by physical delivery. Delivery is carried out at the delivery centre specified in the customised bilateral agreement.

(ii) Futures market: It is an agreement between two parties to buy or sell a specified and standardized quantity and quality of an asset at certain time in the future at price agreed upon at the time of entering into contract on the future exchange. It is entered on centralized trading platform of exchange. It is standardized in terms of quantity as specified by exchange. Contract price of futures contract is transparent as it is available on centralized trading screen of the exchange. Futures contract is generally cash settled but option of physical settlement is available. Delivery tendered in case of Futures contract should be of standard quantity and quality as specified by the exchange. Future contract is more liquid as it is traded on the exchange.

QUESTION NO.11:- Distinguish between the terms: 'basis' and 'basis grade', as used in commodity market.

'Basis' is the difference between the cash price of an asset and futures price of the underlying asset. Basis can be negative or positive depending on the prices prevailing in the cash and futures.

'Basis grade' is the special grade or grades named in the exchanges futures market. The other grades deliverable are subject to price of underlying futures.

QUESTION NO.12:- How does the Futures Trading accrue benefits in commodity exchange?

The benefits are:

1. Price discovery for commodity players – A farmer can plan his crop by looking at prices prevailing in the futures market.

2. Hedging against price risk –

(i) A farmer can sell in futures to ensure remunerative prices.

(ii) A processor or manufacturing firm can buy in futures to hedge against volatile raw material costs.

(iii) An exporter can commit to a price to his foreign clients.

(iv) A stockist can hedge his carrying risk to ensure smooth prices of the seasonal commodities round the year.

3. Easy availability of finance- Based on hedged positions commodity market players, stated above, may get easy financing from the banks.

QUESTION NO.13:- What makes commodity trading attractive? Write the characteristics of commodity Exchange in India? Mention the powers of Forward market commission?

(i) A good low-risk portfolio diversifier

(ii) A highly liquid asset class, acting as a counterweight to stocks, bonds and real estate.

(iii) Less volatile, compared with, equities and bonds.

(iv) Investors can leverage their investments and multiply potential earnings.

(v) Better risk-adjusted returns.

(vi) A good hedge against any downturn in equities or bonds as there is

(vii) Little correlation with equity and bond markets.

(viii) High co-relation with changes in inflation.

(ix) No securities transaction tax levied.

Characteristics of commodity Exchange in India:

(i) There is no value-adding process performed on commodity items. A unit of one type of commodity is broadly interchangeable with another unit. This allows the units to be traded on exchanges without prior inspection.

(ii) Commodities are produced “naturally” which means that each commodity is subject to unique supply factors. For example, the production of coffee is affected by the weather, while that of copper is affected by availability of ore. The supply of oil is subject to a great deal of disruptions including wars, geopolitical uncertainty, accidents, or transport issues.

(iii) Commodities are subject to cycles in demand from both intermediate players and end users. High prices usually lead to a boost in resource investments causing excess supply in the future which eventually pushes down commodity prices.

(iv) Commodities from different groups can often exhibit negative correlation at any point of time. For example, the prices of wheat and aluminum can move in the opposite direction as they are affected by a different set of factors.

(v) Commodity prices are positively correlated with growth measures, although there may be a significant lag between a pickup in industrial production and commodity prices.

(vi) Commodities generally exhibit positive correlation with inflation indicators. In particular, commodities tend to react to an early stage of inflation as raw material price appreciation generally tends to precede, and quite often exceed consumer price inflation growth. While true over the very long term, the relationship between inflation and commodity prices has been considerably weaker over the last 10 years, which has been characterized by disinflation/low inflation.

The above characteristics may not be true for all commodities taken individually; however they are true for diversified indices of industrial commodities and agricultural commodities.

Mention the powers of Forward market commission

(1) The Commission shall, in the performance of its functions, have all the powers of a civil court under the Code of Civil Procedure, 1908 (5 of 1908), while trying a suit in respect of the following matters, namely:

(a) Summoning and enforcing the attendance of any person and examining him on oath.

(b) Requiring the discovery and production of any document.

(c) Receiving evidence on affidavits.

(d) Requisitioning any public record or copy thereof from any office.

(e) Any other matters which may be prescribed.

(2) The Commission shall have the power to require any person, subject to any privilege which may be claimed by that person under any law for the time being in force, to furnish information on such points or matters as in the opinion of the Commission may be useful for, or relevant to any matter under the consideration of the Commission and any person so required shall be deemed to be legally bound to furnish such information within the meaning of Sec. 176 of the Indian Penal code, 1860 (45 of 1860).

(3) The Commission shall be deemed to be a civil court and when any offence described in Sections. 175, 178, 179, 180 or Sec. 228 of the Indian Penal Code, 1860 (45 of 1860), is committed in the view or presence of the Commission, the Commission may, after recording the facts constituting the offence and the statement of the accused as provided for in the Code of Criminal Procedure, 1898 (5 of 1898)11[11] forward the case to a Magistrate having jurisdiction to try the same and the Magistrate to whom any such case is forwarded shall proceed to hear the complaint against the accused as if the case had been forwarded to him under Section 482 of the said Code12[12].

(4) Any proceeding before the Commission shall be deemed to be a judicial proceeding within the meaning of Sections. 193 and 228 of the Indian Penal Code, 1860

QUESTION NO.14:- Why are commodity derivatives required?

India is among the top-5 producers of most of the commodities, in addition to being a major consumer of bullion and energy products. Agriculture contributes about 22% to the GDP of the Indian economy. It employs around 57% of the labour force on a total of 163 million hectares of land. Agriculture sector is an important factor in

achieving a GDP growth of 8-10%. All this indicates that India can be promoted as a major center for trading of commodity derivatives.

It is unfortunate that the policies of FMC during the most of 1950s to 1980s suppressed the very markets it was supposed to encourage and nurture to grow with times. It was a mistake other emerging economies of the world would want to avoid. However, it is not in India alone that derivatives were suspected of creating too much speculation that would be to the detriment of the healthy growth of the markets and the farmers. Such suspicions might normally arise due to a misunderstanding of the characteristics and role of derivative product.

It is important to understand why commodity derivatives are required and the role they can play in risk management. It is common knowledge that prices of commodities, metals, shares and currencies fluctuate over time. The possibility of adverse price changes in future creates risk for businesses. Derivatives are used to reduce or eliminate price risk arising from unforeseen price changes. A derivative is a financial contract whose price depends on, or is derived from, the price of another asset. Two important derivatives are futures and options.

(i) Commodity Futures Contracts: A futures contract is an agreement for buying or selling a commodity for a predetermined delivery price at a specific future time. Futures are standardized contracts that are traded on organized futures exchanges that ensure performance of the contracts and thus remove the default risk. The commodity futures have existed since the Chicago Board of Trade (CBOT, www.cbot.com) was established in 1948 to bring farmers and merchants together. The major function of futures markets is to transfer price risk from hedgers to speculators. For example, suppose a farmer is expecting his crop of wheat to be ready in two months time, but is worried that the price of wheat may decline in this period. In order to minimize his risk, he can enter into a futures contract to sell his crop in two months' time at a price determined now. This way he is able to hedge his risk arising from a possible adverse change in the price of his commodity.

(ii) Commodity Options contracts: Like futures, options are also financial instruments used for hedging and speculation. The commodity option holder has the right, but not the obligation, to buy (or sell) a specific quantity of a commodity at a specified price on or before a specified date. Option contracts involve two parties – the seller of the option writes the option in favour of the buyer (holder) who pays a certain premium to the seller as a price for the option. There are two types of commodity options: a 'call' option gives the holder a right to buy a commodity at an agreed price, while a 'put' option gives the holder a right to sell a commodity at an agreed price on or before a specified date (called expiry date).

The option holder will exercise the option only if it is beneficial to him; otherwise he will let the option lapse. For example, suppose a farmer buys a put option to sell 100 Quintals of wheat at a price of ' 1250 per quintal and pays a 'premium' of ' 25 per quintal (or a total of '2500). If the price of wheat declines to say '1000 before expiry, the farmer will exercise his option and sell his wheat at the agreed price of ' 1250 per quintal. However, if the market price of wheat increases to say ' 1500 per quintal, it would be advantageous for the farmer to sell it directly in the open market at the spot price, rather than exercise his option to sell at ' 1250 per quintal.

Futures and options trading therefore helps in hedging the price risk and also provide investment opportunity to speculators who are willing to assume risk for a possible return. Further, futures trading and the ensuing discovery of price can help farmers in deciding which crops to grow. They can also help in building a competitive edge and enable businesses to smoothen their earnings because non-hedging of the risk would increase the volatility of their quarterly earnings. Thus futures and options markets perform important functions that cannot be ignored in modern business environment. At the same time, it is true that too much speculative activity in essential commodities would destabilize the markets and therefore, these markets are normally regulated as per the laws of the country.

QUESTION NO.15:- Write a short note on Wholesale Price Index (WPI)

This index is the most widely used inflation indicator in India. This is published by the Office of Economic Adviser, Ministry of Commerce and Industry. WPI captures price movements in a most comprehensive way. It is widely used by Government, banks, industry and business circles. Important monetary and fiscal policy changes are linked to WPI movements. It is in use since 1939 and is being published since 1947 regularly. We are well aware that with the changing times, the economies too undergo structural changes. Thus, there is a need for revisiting

such indices from time to time and new set of articles /commodities are required to be included based on current economic scenarios. Thus, since 1939, the base year of WPI has been revised on number of occasions. The current series of Wholesale Price Index has 2004-05 as the base year. Latest revision of WPI has been done by shifting base year from 1993-94 to 2004-05 on the recommendations of the Working Group set up with Prof Abhijit Sen., Member, Planning Commission as Chairman for revision of WPI series. This new series with base year 2004-05 has been launched on 14th September, 2010. A brief on the historical development of this WPI is given below:

<u>Base Year</u>	<u>Year of Introduction</u>	<u>No of Items in Index</u>	<u>No of Price Quotations</u>
Week ended 19th August 1939	1942	23	23
End August 1939	1947	78	215
1952-53 (1948-49 as weight base)	1952	112	555
1961-62	July 1969	139	774
1970-71	January 1977	350	1295
1981-82	July 1989	447	2371
1993-94	April 2000	435	1918
2004-05	September 2010	676	5482

Earlier, the concept of wholesale price covered the general idea of capturing all transactions carried out in the domestic market. The weights of the WPI did not correspond to contribution of the goods concerned either to value - added or final use. In order to give this idea a more precise definition, it was decided to define the universe of the wholesale price index as comprising as far as possible all transactions at first point of bulk sale in the domestic market.

QUESTION NO.16:- Explain the fundamental factors that derive the commodity market.

Fundamental Factors

There are various fundamentals factors that drive the commodity markets. These fundamentals may be different for different commodities based on its characteristics. There are certain important fundamentals that apply to all commodities either directly or indirectly.

(a) Demand & supply :- Demand and supply are basic factors that affect the movement of any commodity prices. The law of demand and supply is same for equity as well as commodity markets. However demand and supply of all commodities vary during different time periods depending upon seasons, domestic and global conditions and various other major factors influencing its characteristics.

(b) Demand Curve:- It is refined form of demand analysis. Demand curve in a laymen's term is a graphical representation of demand over a period of time. Price is represented on y-axis and demand on the x-axis. The graph is a line graph representing demand at particular prices over a period of time. It gives a clear understanding of the demand situation over a period of time at various price levels.

(c) Global and domestic economy:- Economic scenario significantly affects the prices of a commodity. Demand and supply of any commodity has a direct relationship with economic condition in the state. Depending upon the nature of the commodity, global and domestic economic scenarios affect the commodity prices. For e.g.; Steel prices highly depend on global economic factors as this is a globally and massively used commodity. However as far as a commodity like Kapas (cotton beans) is concerned global factors affect less when compared to domestic factors.

(d) Economic growth:- Economic growth of the world as well as the domestic economy is an important fundamental that will affect the demand and supply positions in a country. If the country is growing at a fast rate the consumption level will also be at a higher rate. This will increase the demand on one hand but supply may not increase at the same rate as it takes time to set up new industries and increase production. This drives the commodity prices of all major commodities.

(e) Inflation:- Commodities are considered as hedge against inflation because unlike equity, commodity prices move in direction of inflation. With increase in inflation the prices of major commodities tend to increase and it is true the other way as well.

(f) Geo-political concerns:- Political factors have a direct as well as indirect effect on commodity prices. For example if we take the case of Potato when one year back it was barred from trading on the exchanges. However at time political factors can have positive effects as well.

(g) Major Economic Indicators:- The Gross Domestic Product, Industrial Production, Purchasing Managers Index ,Durable Goods, Housing data, Unemployment Data, Retail Sales, Producer Price Index , Consumer Price Index, Interest Rate, Consumer Confidence Index etc.

(h) Extra-ordinary events:- There may be certain extra-ordinary factors that do not occur very frequent. Wars, natural calamities, depression etc. are such events that affect the commodity prices in a dramatic way.

(i) Speculation:- Speculators bring information into system at times fake or over hyped in-order to trigger the price movement in a particular direction. Speculators are though a part of technical analysis but it is important in the matter of fact that speculation may be of some fundamental factors. However, they are an important part of the market 's price discovery mechanism.

QUESTION NO.17:- Define Index Number.

An Index number is a single figure that shows how the whole set of related variables has changed over time or from one place to another. In particular, a price index reflects the overall change in a set of prices paid by a consumer or a producer, and is conventionally known as Cost-of-Living index or Producer's Price Index as the case may be.

QUESTION NO.18:- State the term Commission house and Consumption Commodity in commodity market.

Commission House: A concern that buys and sells actual commodities or futures contract for the accounts of customers.

Consumption Commodity: - Consumption commodities are held mainly for consumption purpose. Example: Oil, Steel

QUESTION NO.19:- State the characteristics of Commodity Exchange in India.

Commodity Exchange in India - Characteristics

(1) There is no value-adding process performed on commodity items. A unit of one type of commodity is broadly interchangeable with another unit. This allows the units to be traded on exchanges without prior inspection.

(2) Commodities are produced "naturally" which means that each commodity is subject to unique supply factors. For example, the production of coffee is affected by the weather, while that of copper is affected by availability of ore. The supply of oil is subject to a great deal of disruptions including wars, geopolitical uncertainty, accidents, or transport issues.

(3) Commodities are subject to cycles in demand from both intermediate players and end users. High prices usually lead to a boost in resource investments causing excess supply in the future which eventually pushes down commodity prices.

(4) Commodities from different groups can often exhibit negative correlation at any point of time. For example, the prices of wheat and aluminum can move in the opposite direction as they are affected by a different set of factors.

(5) Commodity prices are positively correlated with growth measures, although there may be a significant lag between a pickup in industrial production and commodity prices.

(6) Commodities generally exhibit positive correlation with inflation indicators. In particular, commodities tend to react to an early stage of inflation as raw material price appreciation generally tends to precede, and quite often exceed consumer price inflation growth. While true over the very long term, the relationship between inflation and commodity prices has been considerably weaker over the last 10 years, which has been characterized by disinflation/low inflation.

Security Analysis & Portfolio Management including Equity Research

QUESTION NO. 1:- State the objectives of Portfolio Management.

The objectives of Portfolio management are —

(i) Reduce Risk: To reduce the risk of loss of capital / income, by investing in various types of securities and over a wide range of industries, i.e. diversification.

(ii) Safety of Principal: To keep the capital / principal amount intact, in terms of value and in terms of purchasing power. The capital or the principal amount invested should not erode, either in value or in terms of purchasing power. By earning return, principal amount will not erode in nominal terms, by earning returns at a rate not lesser than the inflation rate; principal amount will be intact in present value terms.

(iii) Stability of Income: To facilitate a more accurate and systematic re-investment of income, to ensure growth and stability in returns.

(iv) Capital Growth: To enable attainment of capital growth by reinvesting in growth securities or through purchase of growth securities.

(v) Marketability: To have an easily marketable investment portfolio, so that the investor is able to take advantage of attractive opportunities in the market.

(vi) Liquidity: Some investors prefer that the portfolio should be such that whenever they need their money, they may get the same.

(vii) Maintaining the Purchasing Power: Inflation eats the value of money, i.e., purchasing power. Hence, one object of the portfolio is that it must ensure maintaining the purchasing power of the investor intact besides providing the return.

(viii) Tax Savings: To effectively plan for and reduce the tax burden on income, so that the investor gets maximum from his investment.

QUESTION NO. 2:- What are the components of risk?

Components of Risk $\text{Total Risk} = \text{Systematic Risk} + \text{Unsystematic Risk}$

(i) Systematic Risk: It represents that portion of Total Risk which is attributable to factors that affect the market as a whole. Beta is a measure of Systematic Risk.

(ii) Unsystematic Risk: It is the residual risk or balancing figure, i.e., Total Risk Less Systematic Risk.

QUESTION NO. 3:- Write is the Relationship Between Correlation And Diversification.

Relationship Between Securities: The level of diversification of a Portfolio depends on how the investments (in the Portfolio) react with one another. If they offset each other properly, then the value of Portfolio is well protected.

Examination of Correlation: The interaction among the investments can be determined by examining the correlation coefficient between pairs of investments. Inference from Correlation: The relationship between Correlation and Diversification can be described as follows —

<u>Correlation coefficient</u>	<u>Nature</u>	<u>Diversification</u>
+1	Perfectly positively correlated	(a) Investments do not offset each other and they move in tandem. (b) No diversification.
-1	Perfectly negatively correlated	(a) Investments offset each other totally and they move in opposite direction. (b) Full diversification achieved.
0	No correlation	(a) No predictability of movement of investments.

(b) Not a good diversification.

QUESTION NO. 4:- Write short note on Dividend Payout Ratio.

Dividend payout ratio is the fraction of net income a firm pays to its stockholders in dividends:

The part of the earnings not paid to investors is left for investment to provide for future earnings growth. Investors seeking high current income and limited capital growth prefer companies with high Dividend payout ratio. However investors seeking capital growth may prefer lower payout ratio because capital gains are taxed at a lower rate. High growth firms in early life generally have low or zero payout ratios. As they mature, they tend to return more of the earnings back to investors. Note that dividend payout ratio is calculated as DPS / EPS .

Calculated as: = Dividends / Net Income

The payout ratio provides an idea of how well earnings support the dividend payments. More mature companies tend to have a higher payout ratio.

QUESTION NO.5:- Write short note DuPont model.

This breaks ROE down into several components so that one can see how changes in one area of the business changes return on equity. $ROE = [NP / Sales] \times [Assets / Equity] \times [Sales / Total assets]$

Return on equity grows, all else equal: -

- (i) the more net margin increases,
- (ii) - the more revenue is generated from a firm's assets, -
- (iii) The more leveraged a firm becomes.

While the first two seem fairly straight forward, the third one doesn't seem to be, but it really is. If revenue-generating assets are purchased through the use of debt (not equity), then the increased amount of net income generated by that greater amount of assets will increase the return on the fixed amount of equity.

QUESTION NO.6:- What are the weaknesses of technical analysis? Explain the differences of Security Market Line (SML) and Characteristic Line.

Weaknesses of Technical Analysis

Analyst Bias: Just as with fundamental analysis, technical analysis is subjective and our personal biases can be reflected in the analysis. It is important to be aware of these biases when analyzing a chart. If the analyst is a perpetual bull, then a bullish bias will overshadow the analysis. On the other hand, if the analyst is a disgruntled eternal bear, then the analysis will probably have a bearish tilt.

Open to Interpretation: Furthering the bias argument is the fact that technical analysis is open to interpretation. Even though there are standards, many times two technicians will look at the same chart and paint two different scenarios or see different patterns. Both will be able to come up with logical support and resistance levels as well as key breaks to justify their position. While this can be frustrating, it should be pointed out that technical analysis is more like an art than a science, somewhat like economics. Is the cup half-empty or half-full? It is in the eye of the beholder.

Too Late: Technical analysis has been criticized for being too late. By the time the trend is identified, a substantial portion of the move has already taken place. After such a large move, the reward to risk ratio is not great. Lateness is a particular criticism of Dow Theory. Always another Level Even after a new trend has been identified, there is always another "important" level close at hand. Technicians have been accused of sitting on the fence and never taking an unqualified stance. Even if they are bullish, there is always some indicator or some level that will qualify their opinion.

Trader's Remorse: Not all technical signals and patterns work. When you begin to study technical analysis, you will come across an array of patterns and indicators with rules to match. For instance: A sell signal is given when the neckline of a head and shoulders pattern is broken. Even though this is a rule, it is not steadfast and can be

subject to other factors such as volume and momentum. In that same vein, what works for one particular stock may not work for another. A 50-day moving average may work great to identify support and resistance for IBM, but a 70-day moving average may work better for Yahoo. Even though many principles of technical analysis are universal, each security will have its own idiosyncrasies.

Technical analysts consider the market to be 80% psychological and 20% logical. Fundamental analysts consider the market to be 20% psychological and 80% logical. Psychological or logical may be open for debate, but there is no questioning the current price of a security. After all, it is available for all to see and nobody doubts its legitimacy. The price set by the market reflects the sum knowledge of all participants, and we are not dealing with lightweights here. These participants have considered (discounted) everything under the sun and settled on a price to buy or sell. These are the forces of supply and demand at work. By examining price action to determine which force is prevailing, technical analysis focuses directly on the bottom line: What is the price? Where has it been? Where is it going?

Even though there are some universal principles and rules that can be applied, it must be remembered that technical analysis is more an art form than a science. As an art form, it is subject to interpretation. However, it is also flexible in its approach and each investor should use only that which suits his or her style. Developing a style takes time, effort and dedication, but the rewards can be significant.

Distinguish between a Security Market Line (SML) and Characteristic Line

<u>Aspect</u>	<u>Security Market Line</u>	<u>Characteristic Line</u>
Scheme	It represents the relationship between return and risk (measured in terms of systematic risk) of a security or portfolio.	It represents the relationship between the returns of two securities or a security and the market return, over a period of time.
Nature of Graph	Security Market Line is a crosssectional graph.	Security Characteristic Line is a Time Series Graph.
Comparison	Security Market Line graphs beta versus expected return.	Characteristic Line graphs time series of Security Returns versus the Index Returns.
Utility	It is used for estimating the expected return for a security relative to its beta risk.	To estimate beta and also to determine how a security return correlates to a market index return.

QUESTION NO.7:- Discuss the techniques used in company analysis.

(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 same is quantified using the correlation coefficient between the variables and standard deviation of the variables.

(2) Time Series and Trend Analysis: A Trend line or characteristic line is drawn using the method of least squares to identify and extrapolate the trend obtained based on a given Time Series.

(3) Decision Tree Analysis: This involves the use of probability to find out the expected value arising out a given course of action. In this method various probabilities are assigned to states of nature and the expected value of a given course of action is determined.

QUESTION NO.8:- "Systematic Risk arises out of external and uncontrollable factors, which are not specific to a security or industry to which such security belongs."- Justify.

Systematic Risk: It arises out of external and uncontrollable factors, which are not specific to a security or industry to which such security belongs. It is that part of risk caused by factors that affect the price of all the securities. Systematic Risk cannot be eliminated by diversification.

(1) Market Risk: • These are risks that are triggered due to social, political and economic events. Example: When CBDT issued a draft circular on how to treat income from trading in shares, whether as Capital Receipts or Business Receipts, the stock prices fell down sharply, across all sectors. • These risks arises due to changes in

demand and supply, expectations of the investors, information flow, investor's risk perception, etc. consequent to the social, political or economic events.

(2) Interest Rate Risk: • Uncertainty of future market values and extent of income in the future, due to fluctuations in the general level of interest, is known as Interest Rate Risk. • These are risks arising due to fluctuating rates of interest and cost of corporate debt. The cost of corporate debt depends on the interest rates prevailing, maturity periods, credit worthiness of the borrowers, monetary and credit policy of RBI, etc.

(3) Purchasing Power Risk: Purchasing Power Risk is the erosion in the value of money due to the effects of inflation.

QUESTION NO. 9:- What are the techniques used in Industry Analysis?

Techniques Used in Industry Analysis:

(i) Regression Analysis: Investor diagnoses the factors determining the demand for output of the industry through product demand analysis. The following factors affecting demand are to be considered - GNP, disposable income, per capita consumption / income, price elasticity of demand. These factors are then used to forecast demand using statistical techniques such as regression analysis and correlation.

(ii) 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.

QUESTION NO. 10:- Mention any four important factors that you would consider for investment decisions in portfolio management.

Factors are:

(i) Type of securities;

(ii) Proportion of investment in fixed interest / dividend securities;

(iii) Identification of industry (i.e., which particular industry shows potential of growth);

(iv) Selection of company;

(v) Objectives of portfolio;

(vi) Timing and quantity of purchase of shares;

(vii) Risk tolerance (i.e., conservative investors are risk-averse and aggressive investors generally dare to take risk).

QUESTION NO.11:- Define "owned fund" and "net owned fund " in relation to non-banking financial company?

"Owned Fund" means aggregate of the paid-up equity capital , preference shares which are compulsorily convertible into equity, free reserves , balance in share premium account and capital reserves representing surplus arising out of sale proceeds of asset, excluding reserves created by revaluation of asset, after deducting therefrom accumulated balance of loss, deferred revenue expenditure and other intangible assets.

"Net Owned Fund" is the amount as arrived at above, minus the amount of investments of such company in shares of its subsidiaries, companies in the same group and all other NBFCs and the book value of debentures, bonds, outstanding loans and advances including hire purchase and lease finance made to and deposits with subsidiaries and companies in the same group, to the extent it exceeds 10% of the owned fund.

QUESTION NO.12:- Describe the term "Portfolio rebalancing".

Portfolio rebalancing is the action of bringing a portfolio of investments that has deviated away from one's target asset allocation back into line. Under-weighted securities can be purchased with newly saved money; alternatively, over-weighted securities can be sold to purchase underweighted securities. The investments in a portfolio will

perform according to the market. As time goes on, a portfolio's current asset allocation can move away from an investor's original target asset allocation. If left un-adjusted, the portfolio could either become too risky, or too conservative. The goal of rebalancing is to move the current asset allocation back in line to the originally planned asset allocation.

Determining an effective rebalancing strategy is a function of the portfolio's assets: their expected returns, their volatility, and the correlation of their returns. For example, a high correlation among the returns of a portfolio's assets means that they tend to move together, which will tend to reduce the need for rebalancing. In addition, the investment time horizon affects the rebalancing strategy. A portfolio with a short time horizon is less likely to need rebalancing because there is less time for the portfolio to drift from the target asset allocation. In addition, such a portfolio is less likely to recover the trading costs of rebalancing.

QUESTION NO.13:- Write short notes on Unsystematic Risk

Unsystematic Risk: These are risks that emanate from known and controllable factors, which are unique and / or related to a particular security or industry. These risks can be eliminated by diversification of portfolio.

(i) Business Risk:

(a) It is the volatility in revenues and profits of particular Company due to its market conditions, product mix, competition, etc.

(b) It may arise due to external reasons or (Government policies specific to that kind of industry) internal reasons (labour efficiency, management, etc.)

(ii) Financial Risk (RTP):

(a) These are risks that are associated with the Capital Structure of a Company. A Company with no Debt Financing, has no financial risk. Higher the Financial Leverage, higher the Financial Risk.

(b) These may also arise due to short term liquidity problems, shortage in working capital due to funds tied in working capital and receivables, etc.

(iii) Default Risk: These arise due to default in meeting the financial obligations on time. Non-payment of financial dues on time increases the insolvency and bankruptcy costs.

QUESTION NO.14:- Write a short note on Capital Market Line VS Security Market Line

The two terms, CML and SML, though sound somewhat similar, represent different things. The CML describes the percentage holdings in the risk - free asset and the risky diversified market portfolio. The line is also sometimes referred to as borrowing lending line.

The CML tells the return an investor should get for a given level of risk. The SML graphs individual asset risk premiums as a function of asset risk. It actually depicts the relationship between systematic risk and return.

The above two lines differ in two significant respects. The first one relates to risk measures. In the CML case, risk is measured by standard deviation, which is total risk. In the SML case, risk is measured by beta, which measures the security's risk contribution, to market portfolio. It is a relative measure.

The other significant difference between the CML and the SML relates to the nature of the portfolio with which each is concerned. The CML graph defines only efficient portfolio whereas the SML graph defines both efficient and non-efficient portfolio of securities

QUESTION NO.15:- What is meant by Capital Asset Pricing Model (CAPM)? State the underlying assumptions of CAPM.

In finance, the capital asset pricing model (CAPM) is used to determine a theoretically appropriate required rate of return of an asset, if that asset is to be added to an already well diversified portfolio, given that assets non-diversifiable risk. The model takes into account the asset's sensitivity to non-diversifiable risk (also known as systematic risk or market risk), often represented by the quantity beta in the financial industry, as well as the expected return of the market and the expected return of a theoretical risk-free asset.

The assumptions underlying the CAPM's development are as follows:

- (1) All investors focus on a single holding period, and they seek to maximize the expected utility of their terminal wealth by choosing among alternative portfolios on the basis of each portfolio's expected return and standard deviation.
- (2) All investors can borrow or lend an unlimited amount at a given risk-free rate of interest and there are no restrictions on short sales of any assets.
- (3) All investors have identical estimated of the expected returns, variances, and covariance among all assets (that is, investors have homogeneous expectations).
- (4) All assets are perfectly divisible and perfectly liquid (that is, marketable at the going price).
- (5) There are no transaction costs.
- (6) There are no taxes.
- (7) All investors are price takers (that is, all investors assume that their own buying and selling activity will not affect stock prices).
- (8) The quantities of all assets are given and fixed.

QUESTION NO.16:- What is meant by "delta" of an option? How would you utilize it in constructing a riskless portfolio?

The delta of a stock option is the ratio of the change in the price of the stock option to the change in the price of the underlying stock.

Delta = Change in option price / Change in stock price

Delta gives the number of units of the underlying stock which an investor should hold for each option sold in order to create a riskless hedge.

QUESTION NO.17:- Express ROE (Return on Equity) in terms of sustainable growth of a firm.

Return on Equity also ties into how much growth one can expect from a company. When a firm reinvests its net income, then it can be expected to grow. The fastest this can be expected to occur is the return on equity. This is calculated as:

Sustainable growth = Retention ratio x ROE = (1 - Payout ratio) × ROE = (1 - Total dividend paid/ Net income) × ROE

QUESTION NO.18:- Write a short note: 'Arbitrage Pricing Model' in portfolio analysis.

Arbitrage pricing theory states that the expected return on an investment is dependent on how that investment reacts to a set of individual macro-economic factors [degree of reaction measured by Betas] and the risk premium associated with each of those macroeconomic factors. Most factors such as inflation and money supply, interest rate, industrial production and personal consumption are interrelated. It seeks to identify the risk return relationship, for each of the factors individually. In Arbitrage Pricing Theory, Expected Return = $R_f + R_1 \beta_1 + R_2 \beta_2 + \dots + R_n \beta_n$

Where R_n is the risk premium for each of the factors in the model and β_n is the measure of sensitivity of the particular security to each of the factors.

QUESTION NO.19:- Explain any three macro economic factors considered in Economic analysis.

The Commonly analyzed macro economic factors are:

(i) **Gross domestic product (GDP):** GDP indicates the rate of growth of the economy. GDP represents the value of all the goods and services produced by a country in one year. The higher the growth rate is more favourable to the share market.

(ii) Savings and investment: The economic growth results in substantial amount of domestic savings. Stock market is a channel through which the savings of the investors are made available to the industries. The savings and investment pattern of the public affect stock market.

(iii) Inflation: Along with the growth of GDP, if the inflation rate also increases, then the real rate of growth would be very little. The decreasing inflation is good for corporate sector.

(iv) Interest rates: The interest rate affects the cost of financing to the firms. A decrease in interest rate implies lower cost of finance for firms and more profitability.

(v) Budget: Budget is the annual financial statement of the government, which deals with expected revenues and expenditures. A deficit budget may lead to high rate of inflation and adversely affect the cost of production. Surplus budget may result in deflation. Hence, balanced budget is highly favourable to the stock market.

(vi) The tax structure: The tax structure which provides incentives for savings and investments.

(vii) The balance of payment: The balance of payment is the systematic record of all money transfer between India and the rest of the world. The difference between receipts and payments may be surplus or deficit. If the deficit increases, the rupee may depreciate against other currencies. This would affect the industries, which are dealing with foreign exchange.

(viii) Monsoon and agriculture: India is primarily an agricultural country. The importance of agricultural in Indian economy is evident. Agriculture is directly and indirectly linked with the industries. For example, Sugar, Textile and Food processing industries depend upon agriculture for raw material. Fertilizer and Tractor industries are supplying input to the agriculture. A good monsoon leads better harvesting; this in turn improves the performance of Indian economy.

(ix) Infrastructure: Infrastructure facilities are essential for growth of Industrial and agricultural sector. Infrastructure facilities include transport, energy, banking and communication. In India even though Infrastructure facilities have been developed, still they are not adequate.

(x) Demographic factors: The demographic data provides details about the population by age, occupation, literacy and geographic location. This is needed to forecast the demand for the consumer goods.

(xi) Political stability: A stable political system would also be necessary for a good performance of the economy. Political uncertainties and adverse change in government policy affect the industrial growth.

QUESTION NO.20:- Define Security Analysis? What are the factors considered in company analysis?

Security is an instrument of promissory note or a method of borrowing or lending, or a source of contributing to the funds needed by the corporate body or non-corporate body. Portfolio is a combination of securities with different risk-return characteristics will constitute portfolio of the investor.

Security analysis is the first part of investment decision process involving the valuation and analysis of individual securities. Security Analysis is primarily concerned with the analysis of a security with a view to determine the value of the security, so that appropriate decisions may be made based on such valuation as compared with the value placed on the security in the market.

Factors considered in Company Analysis are:

(A) Net Worth and Book Value:

(i) Computation:

<u>Particulars</u>	<u>Amount</u>
Equity Share Capital	XXX
Add: Free Reserves	XXX
Less: Accumulated Losses	(XXX)
Total Net Worth of Business	XXX
Book Value of Share = Total Net Worth Number of Shares Outstanding	XX

(ii) Book Value may not be an indicator of the intrinsic worth of the share, due to the following reasons :-

(a) 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. Example: Service Sector, where intrinsic value is based more on future earning potential than on Asset Backing.

(b) 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 utilisation of funds:

(i) The identification of sources and uses of funds is known as Funds Flow and Cash Flow Analysis.

(ii) 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.

(iii) 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. This increases the Credit and Default Risk of the Entity.

(C) Time Series Analysis, Common Sized Statements and Financial Ratio Analysis:

(i) Financial Statements are utilized to make Inter and Intra Firm Comparison.

(ii) The techniques that are used to do such comparative analysis are: Common-Sized Statements, and Financial Ratio Analysis.

(D) Size and Ranking:

(i) 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.

(ii) It may also be useful to assess the position of the company in terms of Technical Know-how, Research and Development activity and price leadership.

(E) Growth Record:

(i) The growth in sales, net income, net capital employed and Earnings per share of the company in the past few years should be examined.

(ii) **The following three growth indicators may be looked into in particular:**

(a) Price Earnings ratio,

(b) Percentage Growth rate of Earnings per annum, and

(c) Percentage growth rate of net block.

(iii) **An evaluation of future growth prospects of the company should be carefully made. This requires an analysis of-**

(a) Existing capacities and their utilization which is indicated by the Quantitative information present in the Financials,

(b) Proposed expansion and diversification plans and the nature of the company's technology - which is generally indicated by Director's Reports

(iv) Growth is the single most important factor in company analysis for the purpose of investment management. A company may have a good record of profits and performance in the past; but if it does not have growth potential, its shares cannot be rated high from the investment point of view.

QUESTION NO. 21:- Write short notes on Price to Book Ratio

Book value is determined by subtracting liabilities from assets. The value of a growing company will always be more than book value because of the potential for future revenue. The price to book ratio (P/B) is the value the market places on the book value of the company. It is calculated by dividing the current price per share by the book value per share (book value / number of outstanding shares). Companies with a low P/B are good value and are often sought after by long term investors who see the potential of such companies. A lower P/B ratio could mean that the stock is undervalued. However, it could also mean that something is fundamentally wrong with the

company. As with most ratios, be aware that this varies by industry. This ratio also gives some idea of whether you're paying too much for what would be left if the company went bankrupt immediately. It is also known as the price-equity ratio. **$P/B = \text{Share Price} / \text{Book Value per Share}$**

QUESTION NO.22:- Write short notes on Book value per share

A measure used by owners of common shares in a firm to determine the level of safety associated with each individual share after all debts are paid accordingly.

Should the company decide to dissolve, the book value per common indicates the dollar value remaining for common shareholders after all assets are liquidated and all debtors are paid. In simple terms it would be the amount of money that a holder of a common share would get if a company were to liquidate.

Fundamental analysis can be used to identify companies that represent good value. Hence it is good for long term investments. Valuation techniques vary depending on the industry group. For this reason, a different techniques or model is required for different industry. This can get quite time consuming and limit the amount of research that can be performed. In fundamental analysis, companies should be compared against other companies in the same sector. For example, a software company (Infosys Technologies) should be compared with a software company (Wipro), not to a bank (ICICI Bank).

QUESTION NO. 23:- Write short notes on Bollinger Bands

Bollinger Bands represents the space between two lines drawn on either side of the simple moving average. It consists of a centreline and two price channels, one above the centreline and one below. The centreline is an Exponential Moving Average, and the price channels are standard deviations of the stock the chartist is studying. The bands will expand and contract as the price action of an issue becomes volatile (expansion) or becomes bound into a tight trading pattern (contraction). Because standard deviation is a measure of volatility, Bollinger Bands adjust themselves to the market conditions. When the markets become more volatile, the bands widen (move further away from the average), and during less volatile periods, the bands contract (move closer to the average). The tightening of the bands is often used by technical traders as an early indication that the volatility is about to increase sharply.

This is one of the most popular technical analysis techniques. The closer the prices move to the upper band, the more overbought the market, and the closer the prices move to the lower band, the more oversold the market.

The purpose of Bollinger Bands is to provide a relative definition of high and low. By definition, prices are high at the upper band and low at the lower band. This definition can aid in rigorous pattern recognition and is useful in comparing price action to the action of indicators to arrive at systematic trading decisions.

QUESTION NO. 24:- What are the Basic principles of portfolio management

There are two basic principles of Portfolio Management, viz.

(1) Effective Investment Planning: Effective investment planning is made by taking into account —

- (i)** Fiscal, financial and monetary policies of the Government, and the Reserve Bank of India.
- (ii)** Industrial and economic environment and its impact on industry prospects in terms of prospective technological changes, competition in the market, capacity utilization by the industry and demand prospects, etc.

(2) Constant Review of investment: The Portfolio Manager should review the investment in securities on a continuous basis, to identify more profitable avenues for selling and purchasing the investment. This review requires analysis of the following —

- (i)** Assessment of quality of management of the Companies in which investment has already been made or is proposed to be made.
- (ii)** Financial and trend analysis of Companies' Financial Statements, to identify sound Companies with optimum capital structure and better performance and to disinvest the holding of those Companies whose performance is not satisfactory.

(iii) Analysis of securities Market and its trend. The above analysis will help the portfolio manager to arrive at a conclusion as to whether the securities already in possession should be disinvested and new securities be purchased. If, so the timing for investment or dis-investment is also revealed.

QUESTION NO. 25:- What are the assumptions of modern portfolio theory? What are the factors providing momentum to outward foreign investments?

The framework of MPT makes many assumptions about investors and markets. Some are explicit in the equations, such as the use of Normal distributions to model returns. Others are implicit, such as the neglect of taxes and transaction fees. None of these assumptions are entirely true, and each of them compromises MPT to some degree.

(i) Investors are interested in the optimization problem described above (maximizing the mean for a given variance). In reality, investors have utility functions that may be sensitive to higher moments of the distribution of the returns. For the investors to use the mean-variance optimization, one must suppose that the combination of utility and returns make the optimization of utility problem similar to the mean-variance optimization problem. A quadratic utility without any assumption about returns is sufficient. Another assumption is to use exponential utility and normal distribution, as discussed below.

(ii) Asset returns are (jointly) normally distributed random variables. In fact, it is frequently observed that returns in equity and other markets are not normally distributed. Large swings (3 to 6 standard deviations from the mean) occur in the market far more frequently than the normal distribution assumption would predict. While the model can also be justified by assuming any return distribution that is jointly elliptical, all the joint elliptical distributions are symmetrical whereas asset returns empirically are not.

(iii) Correlations between assets are fixed and constant forever. Correlations depend on systemic relationships between the underlying assets, and change when these relationships change. Examples include one country declaring war on another, or a general market crash. During times of financial crisis all assets tend to become positively correlated, because they all move (down) together. In other words, MPT breaks down precisely when investors are most in need of protection from risk.

(iv) All investors aim to maximize economic utility (in other words, to make as much money as possible, regardless of any other considerations). This is a key assumption of the efficient market hypothesis, upon which MPT relies.

(v) All investors are rational and risk-averse. This is another assumption of the efficient market hypothesis. In reality, as proven by behavioral economics, market participants are not always rational or consistently rational. The assumption does not account for emotional decisions, stale market information, herd behavior, or investors who may seek risk for the sake of risk. Casino gamblers clearly pay for risk, and it is possible that some stock traders will pay for risk as well.

(vi) All investors have access to the same information at the same time. In fact, real markets contain information asymmetry, insider trading, and those who are simply better informed than others. Moreover, estimating the mean (for instance, there is no consistent estimator of the drift of a brownian when subsampling between 0 and T) and the covariance matrix of the returns (when the number of assets is of the same order of the number of periods) are difficult statistical tasks.

(vii) Investors have an accurate conception of possible returns, i.e., the probability beliefs of investors match the true distribution of returns. A different possibility is that investors' expectations are biased, causing market prices to be informationally inefficient.

(viii) There are no taxes or transaction costs. Real financial products are subject both to taxes and transaction costs (such as broker fees), and taking these into account will alter the composition of the optimum portfolio. These assumptions can be relaxed with more complicated versions of the model.

(ix) All investors are price takers, i.e., their actions do not influence prices. In reality, sufficiently large sales or purchases of individual assets can shift market prices for that asset and others (via cross elasticity of demand.) An investor may not even be able to assemble the theoretically optimal portfolio if the market moves too much while they are buying the required securities.

(x) Any investor can lend and borrow an unlimited amount at the risk free rate of interest. In reality, every investor has a credit limit.

(xi) All securities can be divided into parcels of any size. In reality, fractional shares usually cannot be bought or sold, and some assets have minimum orders sizes.

(xii) Risk/Volatility of an asset is known in advance/is constant. In fact, markets often misprice risk (e.g. the US mortgage bubble or the European debt crisis) and volatility changes rapidly.

Factors Providing Momentum to Outward Foreign Investments

(i) According to UNCTAD's World Investment Report 2011, the stock of outward FDI from developing economies reached US\$ 3.1 trillion in 2010 (15.3 per cent of global outward FDI stock), up from US\$ 857 billion (10.8 per cent of global outward FDI stock) 10 years ago. On flow basis, outward FDI from developing economies has grown from US\$ 122 billion in 2005 to US\$ 328 billion in 2010 accounting for around a quarter of total outward FDI witnessed at global level.

(ii) FDI is a natural extension of globalisation process that often begins with exports. In the process, countries try to access markets or resources and gradually reduce the cost of production and transaction by expanding overseas manufacturing operations in countries where certain ownership-specific advantages can help them to compete globally. Adoption of such strategies helps them to catch up with competing economies.

(iii) A significant uptrend in outward FDI has also been observed in the case of India in recent years. Since globalisation is a two-way process, integration of the Indian economy with the rest of the world is evident not only in terms of higher level of FDI inflows but also in terms of increasing level of FDI outflows.

(iv) The overseas investment of domestic corporate sector through FDI has provided them better access to global networks and markets, transfer of technology and skills and also enables them to share research and development efforts and outcomes. It can also be seen as a corporate strategy to promote the brand image and utilisation of raw materials available in the host country. In the Indian context, overseas investments have been primarily driven by either resource seeking or market seeking or technology seeking motives. Of late, there has been a surge in resource seeking overseas investments by Indian companies, especially to acquire energy resources in Australia, Indonesia and Africa.

(v) It is against this background that I intend to speak on recent trends and emerging issues in relation to Indian outward FDI. I am thankful to Bombay Chamber of Commerce for choosing this topical subject for today's discussion. In my presentation, I would briefly talk about the evolution of outward FDI policy in India, trends and analysis of outward FDI, funding pattern of outward FDI, measures taken by the Reserve Bank of India and Government of India, emerging issues and end with some thoughts on way forward.

QUESTION NO. 26:- Describe the techniques used in economic analysis.

(1) Anticipatory Surveys:

(i) Facilitate investors to form an opinion about the future state of the economy.

(ii) Incorporates industry surveys on construction activities, expenditure on plant and machinery, levels of inventory - all having a definite bearing on economic activities.

(iii) Future spending habits of consumers are taken into account. However, an important limitation is that the survey results do not guarantee that intentions surveyed would materialize. They are not regarded as forecasts per se, as there can be a consensus approach by the investor for exercising his opinion.

(2) 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:

(i) 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.

(ii) Roughly Coincidental Indicators: They reach their peaks and troughs at approximately the same time as the economy.

(iii) Lagging Indicators: They are time series data of variables that lag behind in their consequences vis-à-vis the economy. They reach their turning points after the economy has reached its own already.

(iv) Diffusion/composite index: This index combines several indicators into one index to measure the magnitude of the movement of a particular set of indicators. Computation of diffusion indices are however difficult. Moreover it does not eliminate irregular movements. But this is most useful when the other indicators give conflicting signals and also since they do not measure the magnitude of change.

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

(i) Hypothesize total economic demand by measuring total income (GNP) based on political stability, rate of inflation, changes in economic levels.

(ii) Forecast the GNP by estimating levels of various components viz. consumption expenditure, gross private domestic investment, government purchases of goods/services, net exports.

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

(iv) Comparison is made of total GNP thus arrived at with that from an independent agency for the forecast of GNP and then the overall forecast is tested for consistency.

(4) Gross National Product Analysis: Gross National Product (GNP) as a measure national income reflects the growth rate in economic activities and is regarded as a forecasting tool for analyzing the overall economy along with its various components during a particular period.

QUESTION NO. 27:- Write Short notes on Diversification and Efficient Portfolio

Diversification and Efficient Portfolio:

(i) Efficient Frontier: Markowitz developed the concept of efficient frontier. For selection of a portfolio, comparison between combinations of portfolios is essential. A portfolio is not efficient if there is another portfolio with — Higher expected value of return and a lower standard deviation (risk). Higher expected value of return and the same standard deviation (risk) Same expected value but a lower standard deviation (risk)

(ii) Optimum Portfolio: Investor has to select a portfolio from amongst all those represented by the efficient frontier. This will depend upon his risk-return preference. As different investors have different preferences with respect to expected return and risk, the optimal portfolio of securities will vary considerably among investors.

(iii) Diversification: Diversification is the process which combines assets that are less than perfectly positively correlated in order to reduce portfolio risk without sacrificing any portfolio returns. If an investors' portfolio is not efficient he may —

(a) Increase the expected value of return without increasing the risk.

(b) Decrease the risk without decreasing the expected value of return, or

(c) Obtain some combination of increase of expected return and decrease risk.

QUESTION NO. 28:- Write short note on Alpha:

The difference between the investment's actual expected return and its fair return (as per CAPM) is known as the investment's alpha (i.e.). It is an absolute measure, which is the return on the Portfolio in excess of the CAPM predicted return. Alpha measures the relative value addition provided by an Asset Manager compared to a market index, given a Portfolio's market risk. Alpha can also be interpreted as the deviation from the SML in the CAPM.

Features:

(i) Alpha is appropriate, when the investment represents one of the many investments held by a client.

(ii) Alpha enables to evaluate how well a Manager has performed, when accounting for the level of risk undertaken on to achieve their returns.

Value:

(i) Positive Alpha: A positive alpha indicates that the expected return from this stock is higher than the return under CAPM, to the extent of the alpha value. Hence stocks with positive alpha should be considered as undervalued stocks and hence should be bought.

(ii) Negative Alpha: A negative Alpha value indicates that expected return from the stock is less than the return under CAPM, to the extent of the alpha value. Hence stocks with negative alpha should be considered as over-valued stocks and should be sold.

QUESTION NO.29:- “Technical analysts consider the market to be 80% psychological and 20% logical. Fundamental analysts consider the market to be 20% psychological and 80% logical”. Explain briefly.

Not all technical signals and patterns work. When you begin to study technical analysis, you will come across an array of patterns and indicators with rules to match. For instance: A sell signal is given when the neckline of a head and shoulders pattern is broken. Even though this is a rule, it is not steadfast and can be subject to other factors such as volume and momentum. In that same vein, what works for one particular stock may not work for another. A 50-day moving average may work great to identify support and resistance for IBM, but a 70-day moving average may work better for Yahoo. Even though many principles of technical analysis are universal, each security will have its own idiosyncrasies. Technical analysts consider the market to be 80% psychological and 20% logical. Fundamental analysts consider the market to be 20% psychological and 80% logical. Psychological or logical may be open for debate, but there is no questioning the current price of a security. After all, it is available for all to see and nobody doubts its legitimacy. The price set by the market reflects the sum knowledge of all participants, and we are not dealing with lightweights here. These participants have considered (discounted) everything under the sun and settled on a price to buy or sell. These are the forces of supply and demand at work. By examining price action to determine which force is prevailing, technical analysis focuses directly on the bottom line: What is the price? Where has it been? Where is it going? Even though there are some universal principles and rules that can be applied, it must be remembered that technical analysis is more an art form than a science. As an art form, it is subject to interpretation. However, it is also flexible in its approach and each investor should use only that which suits his or her style. Developing a style takes time, effort and dedication, but the rewards can be significant.

QUESTION NO. 30:- State gross national product analysis.

Gross National Product Analysis: Gross National Product (GNP) as a measure national income reflects the growth rate in economic activities and is regarded as a forecasting tool for analyzing the overall economy along with its various components during a particular period.

QUESTION NO. 31:- List the advantages of Book Value Weights.

Advantages of Book Value weights:

- (1) The capital structure targets are usually fixed in terms of book value.
- (2) It is easy to know the book value.
- (3) Investors are interested in knowing the debt-equity ratio on the basis of book values.
- (4) It is easier to evaluate the performance of a management in procuring funds by comparing on the basis of book values.

QUESTION NO. 32:- Write short notes on Earning per Share

The overall earnings of a company is not in itself a useful indicator of a stock's worth. Low earnings coupled with low outstanding shares can be more valuable than high earnings with a high number of outstanding shares. Earnings per share are much more useful information than earnings by itself. Earnings per share (EPS) is calculated by dividing the net earnings by the number of outstanding shares.

EPS = Net Earnings / Outstanding Shares

For example: ABC company had net earnings of \$1 million and 100,000 outstanding shares for an EPS of 10 (1,000,000 / 100,000 = 10). This information is useful for comparing two companies in a certain industry but should not be the deciding factor when choosing stocks.

QUESTION NO. 33:- Write short notes on Price to Earnings Ratio

The Price to Earnings Ratio (P/E) shows the relationship between stock price and company earnings. It is calculated by dividing the share price by the Earnings per Share.

$$P / E = \text{Stock Price} / \text{EPS}$$

For Example: ABC company the EPS is 10 so if it has a price per share of \$50 the P / E is 5 (50 / 10 = 5). The P/E tells you how many investors are willing to pay for that particular company's earnings. P / E's can be read in a variety of ways. A high P/E could mean that the company is overpriced or it could mean that investors expect the company to continue to grow and generate profits. A low P/E could mean that investors are wary of the company or it could indicate a company that most investors have overlooked. Either way, further analysis is needed to determine the true value of a particular stock.

QUESTION NO. 34:- Write short notes on Price to Sales Ratio

When a company has no earnings, there are other tools available to help investors judge its worth. New companies in particular often have no earnings, but that does not mean they are bad investments. The Price to Sales ratio (P/S) is a useful tool for judging new companies. It is calculated by dividing the market cap (stock price times number of outstanding shares) by total revenues. An alternate method is to divide current share price by sales per share. P / S indicates the value the market places on sales. The lower the P/S the better the value.

$$PSR = \text{Share Price} / \text{Revenue per Share}$$

QUESTION NO. 35:- Write short notes on Projected Earnings Growth Rate - PEG Ratio

A ratio used to determine a stock's value while taking into account earnings growth. The calculation is as follows:
Growth EPS Annual Ratio ingPrice/Earn Ratio PEG

PEG is a widely used indicator of a stock's potential value. It is favoured by many over the price/earnings ratio because it also accounts for growth. Similar to the P/E ratio, a lower PEG means that the stock is more undervalued. Keep in mind that the numbers used are projected and, therefore, can be less accurate. Also, there are many variations using earnings from different time periods (i.e. one year vs. five year). Be sure to know the exact definition your source is using.

QUESTION NO. 36:- Profit Margin and Turnover Ratio vary from one industry to another. What differences would you expect to find between a grocery chain such as Big Bazaar and a steel company such as Tata Steel?

Differences in the amounts of assets necessary to generate a rupee of sales cause Asset Turnover Ratios to vary among industries. For example, a steel company needs a greater number of rupees in assets to produce a rupee in sales than does a grocery store chain. Also, profit margins and Turnover Ratios may vary due to differences in the amount of expenses incurred to produce sales. For example, one would expect a grocery store chain to spend more per rupee of sales than does a steel company. Often, a large turnover will be associated with a low profit margin and vice versa.

QUESTION NO. 37:- 'Two basic approaches of security analysis are fundamental analysis and technical analysis.' – Discuss.

Two basic approaches of security analysis are fundamental analysis and technical analysis. Security Analysis is based on the following parameters:-

(i) Fundamental Analysis: This involves the determination of the intrinsic value of the Share based on the Company's profits and dividend expectations.

(a) Economic Analysis: It is concerned with the analysis of the overall economy, of which the entity is a part. Economic analysis is used to forecast National Income with its various components that have a bearing on the concerned industry and the company in particular.

(b) Industry Analysis: It involves analysis of the specific industry to which the company belongs as against analysis of the economy as a whole.

(c) Company Analysis: Economic and industry framework provides the investor with proper background against which shares of a particular company are purchased. Company Analysis requires the assessment of the particular company in which the investment is sought to be made. This requires careful examination of the company's quantitative and qualitative fundamentals.

(ii) Technical Analysis: Technical Analysis is concerned with the fundamental strength or weakness of a company or an industry; as reflected by investor and price behaviour. It is the study and analysis of Security Price movements on the following assumptions —

(a) There is a basic trend in the share price movements

(b) Such trend is repetitive.

(c) Share prices have little relationship with Intrinsic Value and based more on investor psychology and perception.

QUESTION NO. 38:- Describe the concepts of Support Levels and Resistance Levels.

The concepts of support and resistance are undoubtedly two of the most highly discussed attributes of technical analysis and they are often regarded as a subject that is complex by those who are just learning to trade. Support and resistance represent key junctures where the forces of supply and demand meet. In the financial markets, prices are driven by excessive supply (down) and demand (up). Supply is synonymous with bearish, bears and selling. Demand is synonymous with bullish, bulls and buying. As demand increases, prices advance and as supply increases, prices decline. When supply and demand are equal, prices move sideways as bulls and bears slug it out for control.

Support Levels: When the Index / Price rebounds after reaching a trough subsequently, the lowest value reached becomes the support level. A support level is a price level where the price tends to find support as it is going down. This means the price is more likely to ?bounce? off this level rather than break through it. However, once the price has passed this level, by an amount exceeding some noise, it is likely to continue dropping until it finds another support level.

Resistance Levels: Represents the peak value from which the index or price goes down. A resistance level is the opposite of a support level. It is where the price tends to find resistance as it is going up. This means the price is more likely to ?bounce? off this level rather than break through it. However, once the price has passed this level, by an amount exceeding some noise, it is likely that it will continue rising until it finds another resistance level.

QUESTION NO. 39:- Write short notes on Standard & Poor's Currency Indices

Standard & Poor's Currency Indices – Standard & Poor's has launched two real-time currency indices on India and Chinese currency that provide investors with exposure to emerging economic superpowers that currently lack a liquid currency futures market. The S&P Indian Rupee Index and the S&P Chinese Renminbi Index are the first in what will be a series of real-time currency indices launched by Standard & Poor's in 2008. S&P is the first index provider to offer this type of index on a global basis. S&P is the first major index provider to venture into the Currency Beta space another sign of S&P's breadth of asset class coverage. Neither market has liquid currency futures, so S&P has innovated by using non-deliverable forward contracts. The indices will provide information on the currencies and the costs of hedging positions in a convenient and consistent form. Given the appreciation in currencies of these two trading powers, these indexes and index-linked products will provide a transparent hedging mechanism for trade participants in the local markets. A Chinese or Indian exporter sells services to US in dollars. If the rupee or yuan rises, they suffer. Now they can hedge in a exchange listed, transparent framework without worrying about futures market, liquidity of contracts, over-the-counter transactions etc. This is the first ever way for US retail investors to get access to currencies of two emerging economic superpowers- China and India.

Financial Risk & Management

QUESTION NO. 1:- Identify the type of risk in each of the following (Present only the Roman numeral and state the risk in your answers without copying the statements given below.):

(i) Frauds committed by employees. (ii) The fear of the seller of a fall in prices and of the buyer, of rise in prices. (iii) Risk of loss arising from the inability of a debtor to pay his loan obligation. (iv) Risk that a borrower of a housing loan prepaies his loan much ahead of his scheduled duration.

(i) Operational risk. (ii) Market risk or price risk. (iii) Credit default risk or simply, Credit risk. (iv) Asset backed risk or prepayment risk.

QUESTION NO. 2:- State the type of risk in each of the following independent situations : (You may present only the question Roman numeral and type of risk without copying the situations into your answer books).

(i) The owner of a house property wants to sell it, but he is not able to find buyers. (ii) The risk of recession anticipated by the automobile industry (iii) The risk of loss in value of investment that cannot be eliminated by an investor through diversification. (iv) The risk of a bank which has given a car loan to a person who has no defaulted two instalments of EMLs.

(i) Liquidity Risk (ii) Market Risk (iii) Systematic Risk (iv) Credit Risk

QUESTION NO. 3:- What is 'credit default risk' and 'counter party risk'?

(i) Credit default risk : The risk of loss arising from a debtor being unlikely to pay its loan obligations in full or the debtor is more than 90 days past due on any material credit obligation ; default risk may impact all credit sensitive transactions, including loans, securities and derivatives.

(ii) Counterparty risk : The risk of loss arising from non performance of counterparty in trading activities such as buying and selling of commodities, securities, derivatives and foreign exchange transactions. If inability to perform contractual obligations in such trading activities is communicated before the settlement date of the transaction, then counterparty risk is in the form of pre-settlement risk, while if one of the counterparty defaults in its obligations on the settlement date, the counterparty risk is in the form of settlement risk.

QUESTION NO. 4:- State the type of risk in the following situation: (You may present only the question Roman numeral and the type of risk in your answer)

(i) The risk of loss arising from sovereign State freezing foreign currency payments. (ii) The risk that stock prices or stock indices values and/or their implied volatility may change. (iii) The risk arising from the people, system and processes through which a company operates. (iv) Changes in currency exchange rates.

Answer: (i) Credit risk. (ii) Equity risk under Market risk. (iii) Operational risk. (iv) Foreign Investments Risk.

QUESTION NO. 5:- Illustrate types of Liquidity Risk.

Types of Liquidity Risk Market liquidity - An asset cannot be sold due to lack of liquidity in the market – essentially a sub-set of market risk. This can be accounted for by: (i) Widening bid/offer spread (ii) Making explicit liquidity reserves (iii) Lengthening holding period for VaR calculations

Funding liquidity - Risk that liabilities: (i) Cannot be met when they fall due (ii) Can only be met at an uneconomic price (iii) Can be name-specific or systemic

QUESTION NO. 6:- State the measures of the potential loss amount due to market risk.

Measuring the potential loss amount due to market risk: ??As with other forms of risk, the potential loss amount due to market risk may be measured in a number of ways or conventions. Traditionally, one convention is to use Value at Risk. The conventions of using Value at risk are well established and accepted in the short-term risk management practice. ??However, it contains a number of limiting assumptions that constrain its accuracy. The first assumption is that the composition of the portfolio measured remains unchanged over the specified period. Over short time horizons, this limiting assumption is often regarded as reasonable. However, over longer time horizons, many of the positions in the portfolio may have been changed. The Value at Risk of the unchanged portfolio is no longer relevant. ??The Variance Covariance and Historical Simulation approach to calculating Value at Risk also assumes that historical correlations are stable and will not change in the future or breakdown under times of market stress. ??In addition, care has to be taken regarding the intervening cash flow, embedded options, changes in floating rate interest rates of the financial positions in the portfolio. They cannot be ignored if their impact can be large.

QUESTION NO. 7:- List four types of market risk.

Market risk is the risk of losses in positions arising from movements in market prices.

Some market risks include:

- (1)** Equity risk, the risk that stock prices or stock indices values and/or their implied volatility may change.
- (2)** Interest rate risk, the risk that interest rates (e.g. Libor, Euribor, etc.) may fluctuate.
- (3)** Currency risk, the risk of fluctuations in foreign exchange rates (e.g. EUR/USD, EUR/GBP, etc.).
- (4)** Commodity risk, the risk that commodity prices (e.g. corn, copper, crude oil, etc.) may change adversely.

QUESTION NO. 8:- Write short note on prepayment risk.

Prepayment is the event that a borrower prepays the loan prior to the scheduled repayment date. Prepayment takes place when the borrowers can benefit from it, for example, when the borrowers can refinance the loan at a lower interest rate from another lender. Prepayments result in loss of future interest collections because the loan is paid back pre-maturely and can be harmful to the loan-backed securities, especially for long term securities. A second, and maybe more important consequence of prepayments, is the impudence of un-scheduled prepayment of principal that will be distributed among the securities according to the priority of payments, reducing the outstanding principal amount, and thereby affecting their weighted average life. If an investor is concerned about a shortening of the term we speak about contraction risk and the opposite would be the extension risk, the risk that the weighted average life of the security is extended. In some circumstances, it will be borrowers with good credit quality that prepay and the credit quality pool backing securities will deteriorate as a result. Other circumstances will lead to the opposite situation. Prepayment is the event that a borrower prepays the loan prior to the scheduled repayment date. Prepayment takes place when the borrowers can benefit from it, for example, when the borrowers can refinance the loan at a lower interest rate from another lender. Prepayments result in loss of future interest collections because the loan is paid back pre-maturely and can be harmful to the loan-backed securities, especially for long term securities. A second, and maybe more important consequence of prepayments, is the impudence of un-scheduled prepayment of principal that will be distributed among the securities according to the priority of payments, reducing the outstanding principal amount, and thereby affecting their weighted average life. If an investor is concerned about a shortening of the term we speak about contraction risk and the opposite would be the extension risk, the risk that the weighted average life of the security is extended. In some circumstances, it will be borrowers with good credit quality that prepay and the credit quality pool backing securities will deteriorate as a result. Other circumstances will lead to the opposite situation.

QUESTION NO. 9:- What are the Benefits of Objectives of Risk Management.

The objectives behind risk management are as follows:

- (a) Risk management ensures higher revenue growth
- (b) Risk management ensures increased profit margin
- (c) Risk management ensures increased market share.
- (d) Risk management brings industry awards and recognition.
- (e) Risk management helps to improve image and customer trust.
- (f) Risk management ensures less default by counterparties.
- (g) Risk management ensures enough liquidity to meet the uncertainties.
- (h) Risk management helps to meet regulatory requirements.
- (i) Risk management ensures higher efficiency.

QUESTION NO. 10:- Explain the major risks associated with holding Government securities.

Major risks in holding Govt. securities:

i) Market risk – Market risk arises out of adverse movement of prices of the securities that are held by an investor due to changes in interest rates. This will result in booking losses on marking to market or realizing a loss if the securities are sold at the adverse prices. Small investors, to some extent, can mitigate market risk by holding the bonds till maturity so that they can realize the yield at which the securities were actually bought.

ii) Reinvestment risk – Cash flows on a Government security includes fixed coupon every half year and repayment of principal at maturity. These cash flows need to be reinvested whenever they are paid. Hence there is a risk that the investor may not be able to reinvest these proceeds at profitable rates due to changes in interest rate scenario.

iii) Liquidity risk – Liquidity risk refers to the inability of an investor to liquidate (sell) his holdings due to non availability of buyers for the security, i.e., no trading activity in that particular security. Usually, when a liquid bond of fixed maturity is bought, its tenor gets reduced due to time decay. For example, a 10 year security will become 8 year security after 2 years due to which it may become illiquid. Due to illiquidity, the investor may need to sell at adverse prices in case of urgent funds requirement. However, in such cases, eligible investors can participate in market repo and borrow the money against the collateral of the securities.

QUESTION NO. 11:- How would you measure the potential loss amount due to Market Risk?

Measuring the potential loss amount due to Market Risk : As with other forms of risk, the potential loss amount due to market risk may be measured in a number of ways. Traditionally, one method is to use Value-at-risk. For short-term risk management practice, use of VaR is well established.

However, it contains a number of limiting assumptions that constrain its accuracy. The first assumption is that the composition of the portfolio measured remains unchanged over the specified period. Over short-term horizons, this limiting assumption is often regarded as reasonable. However, over the longer term horizons, many of the positions in the portfolio may have been changed. The value-at-risk of the unchanged portfolio is no longer relevant.

The Variance - Covariance and Historical Simulation approach for calculating value-at-risk also assumes that historical correlations are stable and will not change in the future or breakdown under times of market stress. In addition, care has to be taken regarding the intervening cash flow, embedded options, changes in floating interest rates of the financial positions in the portfolio. They cannot be ignored if their impact is large.

QUESTION NO. 12:- What do you mean by liquidity risk? Explain the causes of Liquidity Risk. Why asset backed risk matters?

In finance, liquidity risk is the risk that a given security or asset cannot be traded quickly enough in the market to prevent a loss (or make the required profit).

Causes of liquidity risk

Liquidity risk arises from situations in which a party interested in trading an asset cannot do it because nobody in the market wants to trade for that asset. Liquidity risk becomes particularly important to parties who are about to hold or currently hold an asset, since it affects their ability to trade.

Manifestation of liquidity risk is very different from a drop of price to zero. In case of a drop of an asset's price to zero, the market is saying that the asset is worthless. However, if one party cannot find another party interested in trading the asset, this can potentially be only a problem of the market participants with finding each other. This is why liquidity risk is usually found to be higher in emerging markets or low-volume markets.

Liquidity risk is financial risk due to uncertain liquidity. An institution might lose liquidity if its credit rating falls, it experiences sudden unexpected cash outflows, or some other event causes counterparties to avoid trading with or lending to the institution. A firm is also exposed to liquidity risk if markets on which it depends are subject to loss of liquidity.

Market and funding liquidity risks compound each other as it is difficult to sell when other investors face funding problems and it is difficult to get funding when the collateral is hard to sell. Liquidity risk also tends to compound other risks. If a trading organization has a position in an illiquid asset, its limited ability to liquidate that position at short notice will compound its market risk. Suppose a firm has offsetting cash flows with two different counterparties on a given day. If the counterparty that owes it a payment defaults, the firm will have to raise cash from other sources to make its payment. Should it be unable to do so, it too will default. Here, liquidity risk is compounding credit risk.

A position can be hedged against market risk but still entail liquidity risk. This is true in the above credit risk example—the two payments are offsetting, so they entail credit risk but not market risk. Another example is the 1993 Metallgesellschaft debacle. Futures contracts were used to hedge an Over-the-counter finance OTC obligation. It is debatable whether the hedge was effective from a market risk standpoint, but it was the liquidity crisis caused by staggering margin calls on the futures that forced Metallgesellschaft to unwind the positions. Accordingly, liquidity risk has to be managed in addition to market, credit and other risks. Because of its tendency to compound other risks, it is difficult or impossible to isolate liquidity risk. In all but the most simple of circumstances, comprehensive metrics of liquidity risk do not exist. Certain techniques of asset-liability management can be applied to assessing liquidity risk. A simple test for liquidity risk is to look at future net cash flows on a day-by-day basis. Any day that has a sizeable negative net cash flow is of concern. Such an analysis can be supplemented with stress testing. Look at net cash flows on a day-to-day basis assuming that an important counterparty defaults.

Analyses such as these cannot easily take into account contingent cash flows, such as cash flows from derivatives or mortgage-backed securities. If an organization's cash flows are largely contingent, liquidity risk may be assessed using some form of scenario analysis.

A general approach using scenario analysis might entail the following high-level steps:

- (i) Construct multiple scenarios for market movements and defaults over a given period of time
- (ii) Assess day-to-day cash flows under each scenario.

Because balance sheets differ so significantly from one organization to the next, there is little standardization in how such analyses are implemented.

Regulators are primarily concerned about systemic and implications of liquidity risk.

Asset Backed risk Matters: Asset-backed securities have several important benefits. Primarily, they give lenders a way to obtain cash for more lending, and they offer investors a way to invest in a diversified group of income-producing assets.

The ABS market is not always as overvalued as the markets for other income-producing securities such as corporate bonds or Treasuries. For this reason, investors must carefully examine the features and underlying assets of a particular ABS before investing.

Note that the ABS are subject to prepayment risk; that is, if any of the borrowers pay their cars off early, this reduces the cash flows ultimately going to the ABS investors.

QUESTION NO. 13:- What do you mean by Credit Risk? Explain the types of credit risk.

Credit risk refers to the risk that a borrower will default on any type of debt by failing to make payments which it is obligated to do. The risk is primarily that of the lender and includes lost principal and interest, disruption to cash flows, and increased collection costs. The loss may be complete or partial and can arise in a number of circumstances.

For example:

- (1) A consumer may fail to make a payment due on a mortgage loan, credit card, line of credit, or other loan
- (2) A company is unable to repay amounts secured by a fixed or floating charge over the assets of the company
- (3) A business or consumer does not pay a trade invoice when due
- (4) A business does not pay an employee’s earned wages when due
- (5) A business or government bond issuer does not make a payment on a coupon or principal payment when due
- (6) An insolvent insurance company does not pay a policy obligation
- (7) An insolvent bank won’t return funds to a depositor
- (8) A government grants bankruptcy protection to an insolvent consumer or business

To reduce the lender’s credit risk, the lender may perform a credit check on the prospective borrower, may require the borrower to take out appropriate insurance, such as mortgage insurance or seek security or guarantees of third parties, besides other possible strategies. In general, the higher the risk, the higher will be the interest rate that the debtor will be asked to pay on the debt.

Types of credit risk

- (1) **Credit default risk** - The risk of loss arising from a debtor being unlikely to pay its loan obligations in full or the debtor is more than 90 days past due on any material credit obligation; default risk may impact all credit-sensitive transactions, including loans, securities and derivatives.
- (2) **Concentration risk** - The risk associated with any single exposure or group of exposures with the potential to produce large enough losses to threaten a bank’s core operations. It may arise in the form of single name concentration or industry concentration.
- (3) **Country risk** - The risk of loss arising from sovereign state freezing foreign currency payments (transfer/ conversion risk) or when it defaults on its obligations (sovereign risk).

Financial Derivatives - Instruments for Risk Management

QUESTION NO.1:- What are the constituents of an interest rate cap?

Constituents of an interest rate cap : (i) Notional Principal amount (ii) Interest Rate Index : specified maturity of LIBOR (iii) A cap rate, which is equivalent to strike or exercise price on an option (iv) Period of agreement, including payment dates and interest rate reset dates.

QUESTION NO.2:- You are required to present Columns I, IV and V after filling up the contents of columns II And V.

<u>Sl. No.</u>	<u>Situation</u>	<u>Option Type</u>	<u>_____ the money</u> <u>(Fill up In/At/Out of)</u>	<u>Action:</u> <u>(Exercise/Lapse/ Indifferent)</u>
<u>Column</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>
(i)	CMP<EP	Call		
(ii)	CMP<EP	Put		
(iii)	CMP>EP	Call		
(iv)	CMP>EP	Put		

EP=Exercise Price; CMP=Current Market Price

<u>Sl. No.</u>	<u>Situation</u>	<u>Option Type</u>	<u>the money (Fill up</u> <u>In/At/Out of)</u>	<u>Action: (Exercise/</u> <u>Lapse/ Indifferent)</u>
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<u>Column I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>
(i)	CMP<EP	Call	Out of	Lapse
(ii)	CMP<EP	Put	In	Exercise
(iii)	CMP>EP	Call	In	Exercise
(iv)	CMP>EP	Put	Out of	Lapse

QUESTION NO.3:- Compare commodity futures and financial futures with respect to the following aspects : (i) Valuation (ii) Delivery and settlement (iii) Contract features and life (iv) Supply and consumption pattern

(i) Valuation :- Financial futures are easier to understand as the cost of carry model for its valuation applies. The argument of arbitrage also holds because of the absence of convenience yield in financial futures. Financial futures involve financial instruments which do not have consumption value. The consumption value makes valuation of futures contracts on commodities difficult.

(ii) Delivery and Settlement :- The provisions of delivery are applicable equally to commodities and financial futures. In case of financial futures delivery of underlying assets is prompt and hassle free, and so is its settlement. For futures on financial assets the price adjustment on account of discrepancy in quality of which was contracted and what is being delivered, is not required. There is ample scope of controversy over quality in case of commodity futures. In case of futures on indices or intangibles the underlying is non-deliverable and futures contracts on them are necessarily cash settled.

(iii) Contract Features and Life. :- Commodity futures are governed by seasons and perishable nature of the underlying asset. The delivery is linked to the availability, and therefore contracts specifications have to consider physical characteristics of the underlying assets. Futures contracts on commodities normally do not exceed 90 days, while there is no such limitation on the financial futures. Financial futures can have much longer life, though generally maturity of many financial futures is kept at 90 days.

(iv) Supply and Consumption Patterns :- In case of financial products, such as stocks, indices and foreign exchange, the supply can be considered as unlimited and independent of weather and seasons. The supply of commodities is dependent upon weather, storage capacity, shelf life etc. For commodity, consumption is uniform throughout the year. Deterioration in value of commodities with time is another phenomenon that does not effect futures on financial products.

QUESTION NO.4:- Name the most appropriate combined trading strategy on the stock of PQ Ltd. in the following independent cases. (You may present only columns I and II in your answer books.)

<u>Sl. No.</u>	<u>Strategy</u>	<u>Action</u>		<u>Expiry Date</u>	<u>Strike Price</u>
		<u>Buy</u>	<u>Sell</u>		
<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>	<u>VI</u>
(i)		One call		30th June	215
		One put		30th June	215
(ii)			Two Calls	20th June	220
			One Put	20th June	220
(iii)			One Call	20th June	230
			Two Puts	20th June	230
(iv)		One call		20th June	215
		One Put		20th June	220

<u>Sl. No.</u>	<u>Strategy</u>
<u>I</u>	<u>II</u>
(i)	Straddle or Long Straddle
(ii)	Strap
(iii)	Strip

(iv) Strangle

QUESTION NO.5:- What are the benefits of future trading?

Benefits of Futures Trading

- (1) Price discovery for commodity players - A farmer can plan his crop by looking at prices prevailing in the futures market
- (2) Hedging against price risk - A farmer can sell in futures to ensure remunerative prices - A processor/ manufacturing firm can buy in futures to hedge against volatile raw material costs - An exporter can commit to a price to his foreign clients - A stockiest can hedge his carrying risk to ensure smooth prices of the seasonal commodities round the year
- (3) Easy availability of finance - Based on hedged positions commodity market players (farmers, processors, manufacturers, exporters) may get easy financing from the banks.

QUESTION NO.6:- Write short notes on Derivatives.

A derivative is a financial instrument, whose value depends on the values of basic underlying variable. In the sense, derivatives is a financial instrument that offers return based on the return of some other underlying asset, i.e., the return is derived from another instrument. Derivatives are a mechanism to hedge market, interest rate, and exchange rate risks. Derivatives market is divided into two types- Financial market and Commodity market. Types of Financial Derivatives include: Forwards, Futures, Options, Warrants, Swaps, Swaptions. There are three types of traders in the derivatives market: Hedger, Speculator and arbitrageur.

QUESTION NO.7:- Does interest rate parity imply that interest rates are the same in all countries?

No, interest rate parity implies that an investment in the U.S. with the same risk as a similar investment in a foreign country should have the same return. Interest rate parity is expressed as:

Interest rate parity shows why a particular currency might be at a forward premium or discount. A currency is at a forward premium whenever domestic interest rates are higher than foreign interest rates. Discounts prevail if domestic interest rates are lower than foreign interest rates. If these conditions do not hold, then arbitrage will soon force interest rates back to parity.

QUESTION NO.8:- Write short note on Futures contract.

It is an agreement between two parties to buy or sell a specified and standardized quantity and quality of an asset at certain time in the future at price agreed upon at the time of entering in to contract on the futures exchange. It is entered on centralized trading platform of exchange. It is standardized in terms of quantity as specified by exchange. Contract price of futures contract is transparent as it is available on centralized trading screen of the exchange. Here valuation of Mark-to- Mark position is calculated as per the official closing price on daily basis and MTM margin requirement exists. Futures contract is more liquid as it is traded on the exchange. In futures contracts the clearing- house becomes the counter party to each transaction, which is called novation. Therefore, counter party risk is almost eliminated. A regulatory authority and the exchange regulate futures contract. Futures contract is generally cash settled but option of physical settlement is available. Delivery tendered in case of futures contract should be of standard quantity and quality as specified by the exchange.

QUESTION NO.9:- Write short note on Currency swaps

A currency swap is the one in which principal and fixed rate interest payments on a loan in one currency are exchanged for the same in another currency. Akin to interest rate swaps, the currency swaps are also influenced by comparative advantage. The currency swaps are arrangements whereby currencies are exchanged at a specified

exchange rates and specified intervals. The currency swap is a derivative instrument which takes care of both, principal-only-swap and interest rate swap, together. If a company has borrowed in US\$ and wants to convert it into a Rupee loan, it can do a currency swap, wherein it will receive from the bank the principal and interest in US\$, and pay the bank a fixed Rupee interest rate and also freeze its principal payment for the entire tenure of the loan. Effectively, the Dollar loan becomes a Rupee loan in Indian Rupees.

QUESTION NO.10:- Write are the Role of Financial intermediaries in swap arrangements.

1. Swap arrangements: Non-financial Companies do not get in touch directly to arrange a swap. They each deal with a financial intermediary such a Bank or other Financial Institution.

2. Contracts: The Financial Institution has two separate contracts, one with either party. Generally, the parties to the Swap arrangement will not know that the Financial Institution has entered into an offsetting swap with the other beneficiary.

3. Risk of Default: If one of the beneficiary Company defaults, the Financial Institution still has to honour its agreement with the other Company.

4. Compensation: Swaps are structured to ensure that the financial institution earns around 5% on a pair of offsetting transactions. The margin of 5 basis points is partly to compensate the Financial Institution for the risk that one of the two beneficiaries will default on the swap payments.

QUESTION NO.11:- Write short note on Swaption.

A swaption is an option on a forward start swap which provides the purchaser the right to either pay or receive a fixed rate. A buyer of a swaption who has the right to pay fixed and receive floating is said to have purchased a 'payers swaption'. Alternatively, the right to exercise into a swap whereby the buyer receives fixed and pays floating is known as a 'receivers swaption'.

Since the underlying swap can be thought of as two streams of cash flows, the right to receive fixed is the same as the right to pay floating. In this sense, swaptions are analogous to foreign exchange options where a call in one currency is identical to a put on the other currency. However, the option terminology of calls and puts is somewhat confusing for swaptions as it is not used consistently in the market. Some participants describe the right to pay fixed as a call since it provides the right to buy the swap (i.e. pay fixed). Others look at a swaption's relationship to the bond market and say that if you pay fixed you are short the bond and therefore look at this swaption as a put. To eliminate any confusion, market participants generally describe swaptions as 'payers' versus 'receivers' with respect to the fixed rate.

Swaptions can be used as hedging vehicles for fixed debt, floating debt or swaps.

The primary purposes for entering into a swaption are:

- to hedge call or put positions in bond issues
- to change the tenor of an underlying swap
- to assist in the engineering of structured notes
- to change the payoff profile of the firm Original interest arose from the issuance of bonds with embedded put features. Often, the price of the bond did not fully reflect the fair value of the embedded option and the issuer would sell a swaption to obtain a lower fixed cost of funds. This application of swaptions continues today for both bonds with call or put features.

QUESTION NO.12:- Write short note on Put-Call Parity Theory.

Put-Call Parity is the relationship between the price of an European Call Option and the price of the European Put Option, when they have the same strike price and maturity date, namely that a portfolio of long a call option and short a put option is equivalent to (and hence has the same value as) a single forward contract at this strike price and expiry. This is because if the price at expiry is above the strike price, the call will be exercised, while if it is below, the put will be exercised, and thus in either case one unit of the asset will be purchased for the strike

price, exactly as in a forward contract. The validity of this relationship requires that certain assumptions be satisfied; these are specified and the relationship derived below. In practice transaction costs and financing costs (leverage) mean this relationship will not exactly hold, but in liquid markets the relationship is close to exact. theory:

$C + PV \text{ of } EP = SP + P$; Where, C = Price of a Call Option, i.e. Call Option Premium EP = Exercise Price SP = Current Stock Price P = Price of a Put Option, i.e. Put Option Premium

Significance and Application: When options are priced such that the Put-Call Parity does not hold good, then there is scope for arbitrage, by investing in risk free investments or borrowing at risk free rate.

QUESTION NO.13:- What are the Benefits of using Financial Derivatives.

The general benefits of using financial derivatives as follows:

- (1) A prudent use of financial derivatives can provide a new mechanism to manage or reduce various business risks at low transaction cost.
- (2) The innovative use of financial derivatives can greatly help end-users cut their financing cost.
- (3) Financial derivatives can provide more access to financial markets, especially to unfamiliar ones at lower costs. Put another way, they can create more complete markets to investors.
- (4) financial derivative instruments play an important role in asset management due to their lower transaction costs relative to the spot market instruments.
- (5) The users of financial derivatives can expect to be offered opportunities on taking advantage of asymmetries in tax and regulatory requirements across different countries, markets or securities. Financial derivatives can be used to speculate and make profits by assuming certain risks, probably with suitable degree.

QUESTION NO.14:- What are the factors affecting fluctuation of call rate? Point out the measures adopted from time to time for stabilizing call rates?

After the removal of ceiling, the call rate has fluctuated widely. The call rate is volatile due to following reasons:

- (1) Large borrowings on certain dates by banks to meet the CRR requirements (then call rate rise sharply) and demand for call money falls when CRR needs are met.
- (2) The credit operations of certain banks tend to be much in excess of their own resources.
- (3) Disturbance in the banking industry.
- (4) When liquid fund of an institution is very essential to repay the loan, advance tax, matured amount of security, and at the boom position of institution the call rates increase.
- (5) When call market is easy, Banks invest funds in govt. securities, bonds in order to maximise earnings. But with no buyers in the market, these securities are not cashed. Due to such liquidity crisis, call rate is high.
- (6) The structural deficiencies in the banking system. The banking system tries to build up deposits in last week of end of the year.
- (7) Forex market turbulence.
- (8) Call market is over-the-telephone-market. Borrowers and lenders contact each other over telephone. In the absence of perfect communication they deal at different rates.
- (9) In call market, main borrowers are commercial banks and lenders are UTI, LIC etc. In absence of lenders for few days, call rates rise up.
- (10) When Govt. securities mature and are encashed by the public, supply of call loans increases and call rates fall.
- (11) Cyclical mass import payments reduce liquidity in the money market and hence call rates decreases.

Measures adopted from time to time for stabilizing call rates: The volatility of call rate can be controlled to achieve a state of stability by the following ways:

- (a) Intervention by the DFHI as market maker.
- (b) Channelization of more funds by the RBI through the DFHI, & STCI.

(c) Channelization of more funds by certain financial institutions with surplus funds. (i) Introduction of new money market instruments and allowing large number of participants in call money market. (ii) Use of call loans for normal banking operation. For this purpose, the RBI has been established different policy. The money market support by RBI and the reduction in CRR for credit expansion & for increase liquidity, and increasing Govt. securities refinancing had helped to moderate the call rate in 1995. The spot foreign exchange purchases by the RBI had helped to reduce the call rate in March 1996. The recommencement of repo auctions by RBI in November 1996 had provided a reasonable floor to call money rates. It cannot be said that these measures have reduced the volatility in the call market in India. Inter – Bank Money and its distinction from Call Money and Notice Money: Inter Bank Market for deposits of maturity beyond 14 days is referred to as Inter-Bank Term Money. Term Money is accepted by the institutions at a discounted value, and on the due date payment will be made equal to the face value.

QUESTION NO.15:- What are currency futures? List the steps involved in the technique of hedging through futures.

A currency futures contract is a derivative financial instrument that acts as a conduct to transfer risks attributable to volatility in prices of currencies. It is a contractual agreement between a buyer and a seller for the purchase and sale of a particular currency at a specific future date at a predetermined price. A futures contract involves an obligation on both parties to fulfil the terms of the contract. A futures contract can be bought or sold only with reference to the USD.

There are six steps involved in the technique of hedging through futures:

- (a) Estimating the target income (with reference to the spot rate available on a given date.)
- (b) Deciding on whether Futures Contracts should be bought or sold.
- (c) Determining the number of contracts (since contract size is standardised).
- (d) Identifying profit or loss on target outcome.
- (e) Closing out futures position and vi. Evaluating profit or loss on futures.

QUESTION NO.16:- What is a swap? Explain its necessity. Also state financial benefits created by swap transactions.

Swaps Exchange of one obligation with another — Financial swaps are funding technique, which permit a borrower to access one market and exchange the liability for another market / instrument - exchange one type of risk with another.

Necessity – (1) Difference in borrowers and investors preference and market access (2) Low cost device (3) Market saturation (4) Differences in financial norms followed by different countries.

Financial Benefits Created by Swap Transactions (1) The Theory of Comparative Advantage (2) Information asymmetries.

QUESTION NO.17:- State the term “Contango” and “Backwardation” as used with respect to Future Contracts.

Although the spot price and futures price generally move in line with each other, the basis is not constant. Usually basis decreases with time, until on the date of expiry the basis is zero and futures price equals spot price.

Contango: If the futures price is greater than the spot price it is called contango. Under normal market conditions futures contracts are priced above spot price. This is known as contango market. In this case, the futures price tends price tends to fall over time towards the spot price, equaling spot on the day of delivery.

Backwardation: If the spot price is greater than the futures price it is called backwardation. In this case futures price tends to rise over time to equal the spot price on the day of delivery.

QUESTION NO.18:- Draw a relationship between call option and put option in put-call parity theory

Options are the most important group of derivative securities. A call option gives the holder the right to buy an asset at a specified date for a specified price whereas in put option, the holder gets the right to sell an asset at the specified price and time. 'Put-Call Parity theory' is the relationship between the price of the European Call Option and Put Option, when they have the same strike price and maturity date, namely that a Portfolio of long a call option and short a put option is equivalent to a single forward contract at the strike price and expiry. This is because if the price at expiry is above the strike price, the call will be exercised, while it is below, the put will be exercised. Thus, in either case, one unit of the asset will be purchased for the strike price, exactly as in a forward contract. Theory: $C + PV \text{ of } EP = SP + P$, Where, C = Call option premium; EP = Exercise price; SP = Current stock price; and P = Put option premium.

QUESTION NO.19:- Write a short note on Forward VS Future.

	<u>Forward</u>	<u>Futures</u>
Standardization	Forwards not standardized contracts, they are only private contracts	These are standardized contracts which are traded in stock exchanges
Price Negotiation	Prices are negotiated between buyer and seller directly	Prices are market determined. No single buyer or seller can influence
Liquidity	No liquidity as forwards cannot be traded in stock exchanges.	Highly liquid, as futures are traded in exchanges
Contract Closure	Contracts will be settled by delivery.	Settlement may be by delivery. Or, by paying the price differential. Or, by taking an offsetting position
Margins	None	Yes
Guarantor	Nobody will be there as a guarantor on behalf of the seller or the buyer	Clearing house guarantees for settlement. That's the reason why clearing house insists for margin money.

QUESTION NO.20:- Write short notes on Forward as hedge instrument.

Forward as hedge instrument: International transactions both trade and financial give rise to currency exposures. A currency exposure if left unmanaged leaves a corporate open to profits or losses arising on account of fluctuations in currency ratio. One way in which corporate can protect itself from effects of fluctuations in currency rates is through buying or selling in forward markets.

A forward transaction is a transaction requiring delivery at future date of a specified amount of one currency for a specific amount of another currency.

The exchange rate is determined at the time of entering into contract but payment and delivery takes place on maturity. Corporate use forwards to hedge themselves against fluctuations in currency price that would have a significant impact on their financial position. Banks use forward to offset the forward contracts entered into with non-bank customers.

QUESTION NO.21:- Define Swap. State the reasons why swaps are becoming popular.

Swap in finance means an exchange of one obligation with another. Financial swaps are a funding technique, which permit a borrower to access one market or instrument and exchange the liability for another market or instrument. Investors can exchange one type of risk with another.

Swaps are increasingly becoming popular for the following reasons:

- (i)** Difference in borrowers and investors preferences and market access
- (ii)** A low cost device to achieve certain objectives, which can be achieved by other means but at a higher cost
- (iii)** Market saturation i.e. lack of availability of the desired currency due to saturation.

(iv) Differences in financial norms followed by different countries.

QUESTION NO.22:- State the two components of value of currency option. Show a relationship between volatility of currency and option value.

Relationship between volatility of currency and option value may be explained as follows:

(i) **The intrinsic value:** The amount by which an option is in the money. A call option whose exercise price is below the current spot price of the underlying instrument, or a put option whose exercise price is above the current spot price of the underlying instrument, is said to be in the money.

(ii) **The extrinsic value:** It is the total premium of an option less the intrinsic value. It is also known as the time value or volatility value. As per the expiry time increases, the premium of an option also increases. However, with each passing day, the rate of increase in the premium decreases. Conversely, as an option approaches expiry, the rate of decline in its intrinsic value increases. This decline is known as the time decay. Therefore, the more volatile a currency, the higher will be its option value.

QUESTION NO.23:- Write a short note on Commodity swaps.

Commodity Swaps: Commodities are physical assets such as precious metals, base metals, energy stores (such as natural gas or crude oil) and food (including wheat, cattle, etc). Commodity swaps enable producers and consumers to hedge commodity prices. Swaps involving oil prices are probably the most common; however swaps involving weather derivatives are increasingly popular. The floating leg of a commodity swap is tied to the price of a commodity or a commodity index, while the fixed leg payments are stipulated in the contract as in an interest rate swap. It is common for a commodity swap to be settled in cash, although physical delivery is becoming increasingly common. The floating leg is typically held by a commodity consumer, who is willing to pay a fixed rate for a commodity to guarantee its price. The fixed leg is typically held by a commodity producer who agrees to pay a floating rate which is set by the market price of the underlying commodity, thereby hedging against falls in the price of the commodity. In most cases, swap rates are fixed either by commodity futures or by estimating the commodity forward price.

There are two main types of commodity swaps:

(1) **Fixed floating commodity swaps** - These are similar to the interest rate fixed-floating swaps except that both legs are commodity based. These are used by commodity producers and consumers to lock in commodity prices.

(2) **Commodity for interest swaps:** These are similar to equity swaps, in which a total return on the commodity is exchanged for some money market rate [plus or minus a spread].

QUESTION NO.24:- State the features of the call money market on the following aspects: (i) Purpose (ii) Duration (iii) Security (iv) Call rate (v) Lenders (Name four lenders)

Call Money Market – Features:

(i) **Purpose:** Close to Money; Provide liquidity for Government and banks Low risk
Short term Banks use this for CRR or SLR requirements Bill market, stock Exchange Dealers and high net worth individuals To meet sudden demand for funds arising out of large outflows.

(ii) **Duration:** One day to fifteen days.

(iii) **Securities:** Unsecured; No collateral security.

(iv) **Call rate:** Varies as per market demand and supply conditions. It is high during March (even around 25 %) and low in April, October, etc (even as low as 7 %). It also varies according to place - It is higher in Kolkata and lower in Mumbai.

(v) **Lenders:** RBI, Banks, Primary Dealers, Financial Institutions like LIC, UTI, GIC, IDBI, NABARD, ICICI, Specified All India Financial Institutions, Mutual Funds.

QUESTION NO.25:-List down any two uses for SWAPS.

(i) Interest rate swaps, an essential tool for many types of investors, as well as corporate treasurers, risk managers and banks, have potential uses. These are:

(A) **Portfolio management:** These swaps allow portfolio managers to add or subtract duration, adjust interest rate exposure and offset the risks posed by interest rate volatility. By increasing or decreasing interest rate exposure in various parts of the yield curve using swaps, managers can either ramp-up or neutralize their exposure to changes in the shape of the curve, and can also express views on credit spreads. Swaps can also act as substitutes for other, less liquid fixed income instruments.

(B) **Speculation:** Because swaps require little capital up-front, they give fixed income traders a way to speculate on movements in interest rates while potentially avoiding the cost of long and short positions in Treasuries.

(C) **Corporate finance:** Firms with floating rate liabilities, such as loans linked to LIBOR, can enter into swaps where they pay fixed and receive floating, as noted earlier. Companies might also set up swaps to pay floating and receive fixed as a hedge against falling interest rates, or if floating rates more closely match their assets or income stream.

(D) **Risk management:** Banks and other financial institutions are involved in a huge number of transactions involving loans, derivatives, contracts and other instruments. The bulk of fixed and floating interest rate exposure typically cancel each other out, but any remaining interest rate risk can be offset with interest rate swaps.

(E) **Rate-locks on bond issuance:** When corporations decide to issue fixed rate bonds, they usually lock in the current interest rate by entering into swap contracts. That gives them time to go out and find investors for the bonds. Once they actually sell the bonds, they exit the swap contracts. If rates have gone up since the decisions to sell the bonds, the swap contracts would be worth more, offsetting the increased financing cost.

QUESTION NO.26:- Identify and explain the factors on which the Options' prices commonly depend.

Option price = intrinsic value + time value
Intrinsic value: The intrinsic value of an option is the difference between the actual price of the underlying security and the strike price of the option. The intrinsic value of an option reflects the effective financial advantage which would result from the immediate exercise of that option.
The time value: It is determined by the remaining lifespan of the option, the volatility and the cost of refinancing the underlying asset (interest rates).

(i) **Stock price** - Consider a call option. If you want to own an option that gives you the right to buy stock. The higher the stock price the more a call option is worth. Similarly, the lower the stock price, the more a put option is worth.

(ii) **Strike Price** – The price at which the call owner may buy, and the put owner may sell, stock. Thus, calls increase in value as the strike price moves lower. And puts increase in value as the strike price increases

(iii) **Type of option** (there are only two types) – An option's value depends on whether it is a put or a call.

(iv) **Time before expiration arrives** – The more time, the more an option is worth. As the option owner, you want the stock to undergo a favorable move. The more time, the greater the possibility of that favorable move occurring.

(v) **Interest rates** – This is a minor factor in the price of an option. As interest rates rise, call options increase in value. When investors buy calls instead of stock, they have extra cash (not used to buy stock) and that cash can earn interest. When rates are higher, they earn more interest, and thus, are willing to pay more to own call options.

(vi) **Dividends** – When a stock goes ex-dividend (trades without the stockholder receiving that dividend), the stock price declines by the amount of that dividend. Thus, call are worth less, and puts are worth more, as the dividend increases.

(vii) **Volatility** – Volatility is a measure of how much the stock prices varies from day to day. In other words, it's a measure of how much the stock price is likely to change over time. Volatile stocks undergo larger and more frequent price changes than nonvolatile stocks. Because the option owner is hoping for a big price change, the

value of an option on a volatile stock is much greater than the option on a less volatile stock. A small change in the volatility estimate can have a significant impact on the price of an option.

QUESTION NO.27:-Write short notes on any two of the following: (i) Forward Interest Rate Arrangement. (ii) Criticism of the Purchasing Power Parity (PPP) Theory

(i) Forward Interest Rate Arrangement: These are contracts entered into between two parties, whereby one party will pay/charge interest at a fixed rate on the amount borrowed / lent. Forward interest rate agreements will freeze today, for the interest payable / receivable on a loan or deposit to be made at a later point in time. Example: On 01.06. 2014, A Ltd. enters into a Forward rate agreement with Mumbai Bank for borrowing loan of ' 1,000 crores at 10 % p.a. in September 2015.

This arrangement helps a borrower in eliminating risks associated with borrowing or investing funds. Adverse movements in the interest rates will not affect or alter the interest receipt or liability of the investor or borrower. Forward interest rate arrangements can be entered into for - I. an existing loan - for making interest payments at agreed rates from a future period; or II. a prospective loan - to be taken at a later point in time.

From a given set of data on interest rates applicable for bonds with different maturity periods, one can compute Forward interest rates from interest rates on securities with different maturity periods. Forward rates are the rates of interest implied for a specific period in time in the future. These rates are implied from the prevailing interest rates for instruments with different maturity periods.

Mathematically, Forward Interest Rate = $[R_2 T_2 - R_1 T_1] / [T_2 - T_1]$; where R_2 = Rate of interest for the longer time period; R_1 = Rate of interest for the shorter time period; T_2 = Longer time period; and T_1 = Shorter time period.

(ii) Criticism of the Purchasing Power Parity (PPP) Theory - these are as follows:

(i) Limitations of the Price Index: PPP theory uses the price index in order to measure the changes in the equilibrium rate of exchange. However, price indices suffer from various limitations and thus theory too.

(ii) Neglecting the demand and supply approach: PPP theory fails to explain the demand for as well as the supply of foreign exchange. The theory proves to be unsatisfactory due to the negligence, because in actual practice the exchange rate is determined according to the market forces such as the demand for and supply of foreign currency.

(iii) Unrealistic approach: Use of price indices is unrealistic in the sense that the quality of goods and services included in the indices differs from nation to nation. Thus, any comparison without due significance for the quality proves to be unrealistic.

(iv) Unrealistic assumptions: Absence of the element of transport cost in the PPP theory. Theory wrongly assumes that there is an absence of any barriers to the international trade.

(v) Neglecting the impact of international capital flows: PPP theory neglects impact of international capital flows on the foreign exchange market.

(vi) Contrast to the practical approach: PPP theory is in contrast to the practical approach, because rate of exchange between any two currencies based on the domestic price ratios is a very rare occurrence.

QUESTION NO.28:- When are call options and put options said to be 'in the money' in the futures market?

In call options when strike price is below the price of underlying futures, call option is 'in the money'.

In put options, when the strike price is above the price of underlying futures put option 'is in the money'.

QUESTION NO.29:- Explain the steps to be adopted in Money market hedge.

Steps to be adopted in Money market Hedge:

(a) Identify whether Foreign Currency (FC) is asset or liability

- (b) Create the opposite position either by borrowing or depositing the amount equal to present value of FC liability
- (c) Convert the borrowed funds in to required currency
- (d) Invest the borrowed funds v. Settle the payment by withdrawing deposited amounts along with interest.

QUESTION NO.30:- Why Purchasing Power Parity (PPP) theory does not always work in practice? Explain

Anything which limits the free trade of goods will limit the opportunities people have in taking advantage of these arbitrage opportunities. A few of the larger limits are:

- (i) **Import and Export Restrictions** - Restrictions such as quotas, tariffs and laws will make it difficult to buy goods in one market and sell them in another. If there is a 300% tax on imported cricket bats, then in our first example it is no longer profitable to buy the bat in India instead of the Australia. Australia could also just pass a law make it illegal to import cricket bats.
- (ii) **Travel costs** - If it is very expensive to transport goods from one market to another, we would expect to see a difference in prices in the two markets.
- (iii) **Perishable goods** - It may be simply physically impossible to transfer goods from one market to another. There may be a place which sells cheap sandwiches in Indore, but that doesn't help me if I'm living in Delhi. Of course, this effect is mitigated by the fact that many of the ingredients used in making the sandwiches are transportable, so we'd expect that sandwich makers in Delhi and Indore should have similar material costs.
- (iv) **Location** - You can't buy a piece of property in Indore and move it to New Delhi. Because of that real estate prices in markets can vary wildly. Since the price of land is not the same everywhere, we would expect this to have an impact on prices, as retailers in New Delhi have higher expenses than retailers in Indore.

QUESTION NO.31:- Narrate the assumptions of the Black-scholes Option Pricing Model.

The BS model is based on the following assumptions:

- (i) It considers only those options which can be exercised at their maturity that is European options.
- (ii) The market is efficient and there are no transactions cost and taxes.
- (iii) The risk free rate or interest rates are known and constant during the period of option contract.
- (iv) No Dividend is paid in shares.
- (v) Share prices behave in a manner consistent with a random walk in continuous time.
- (vi) The probability distributions of Financial returns on the shares is normal.
- (vii) The variance / standard deviation of the return is constant during the life of option contract.

QUESTION NO.32:- What are Forward transactions? How can they be used to hedge?

A Forward Contract is an agreement between two persons for the purchase and sale of Commodity or Financial Asset at a specified price to be delivered at a specified future date.

It is an agreement to purchase one currency and sale another for some date beyond two business days. A forward contract involves no fee, and no cash changes hands until the settlement date of the forward. A forward contract allows one to lock in an exchange rate today for a future payment or receipt, thereby eliminating the rate risk. Forward contracts are tailor-made to the needs of the parties who may be banks in case of financial assets and trader or processor in case of commodities. Forward markets have flourished as a means to reduce price uncertainty. Forward contract can be used to hedge or protect oneself from the price fluctuations on the future commitment date to the extent of 100%.

QUESTION NO.33:- Write short notes on Money Market Hedge

1. Hedging payables. This involves the following steps: (i) Borrow funds in home currency; (ii) Use them to purchase the foreign currency; (iii) Invest the foreign currency for the period after which the foreign currency

payable falls due; (iv) Use the proceeds to make the payment; (v) Repay the borrowed amount together with interest.

2. Hedging receivables. This involves the following steps: (i) Borrow funds in the foreign currency for the period after which the receivable is due; (ii) The amount to be borrowed should be equal to the amount of the receivable as discounted by the prevailing rate of interest; (iii) Convert the borrowed amount into home currency and use it till the receivable arrives; (iv) If the home currency funds cannot be used gainfully in the enterprise itself, invest them to earn interest.

QUESTION NO.34:- Briefly describe stochastic Model of Cash Management.

This model is developed to avoid the problems associated with EOQ mode. Model developed by Miller and Orr. The basic assumption of this model is that cash balances are irregular. The model prescribed two control limits. **Upper Control Limits (UCL)** – When cash balance reaches the upper limits, a transfer of cash to investment account should be made.

Lower Control Limits (LCL)- When cash balance reaches the lower point, a portion of securities from investment account should be liquidated to return the cash balances to its return point.

The Miller and Orr model is the simplest model to determine the optimal behavior in irregular cash flow situation. The model is a control limit model to determine the time and size of transfers between an investment account and cash account. The optimal point (O) of cash balance is determined by :-

Where O-target (Optimal) cash balance; T- Fixed cost associated with security transactions; I-Interest per day on marketable securities; V- Variance of daily net cash flows.

Limitations : Problems in respect of collection of data- cost of time devoted by finance manager- does not take in account short-term borrowings.

(1) The first and important problem is in respect of collection of accurate data about transfer costs, holding costs, number of transfers and expected average cash balance.

(2) The cost of time devoted by financial managers in dealing with the transfers of cash to Securities and vice-versa.

(3) The model does not take into account the short-term borrowings as an alternative to selling of marketable securities when cash balance reaches lower limit.

QUESTION NO.35:- Write short notes on Interest Rate Floors

Interest Rate Floor: Variable rate investors are the typical users of Interest Rate Floors. They used Floors to obtain certainty for their investments and budgeting process by setting the minimum interest rate they will receive on their investments. By implementing this type of financial management, variable rate investors obtain peace of mind from falling interest rates and the freedom to concentrate on their aspect of their business / investments. An Interest Rate Floor enables variable rate investors to retain the upside advantages of their variable rate investment while obtaining the comfort of a known minimum interest rate.

QUESTION NO.36:- Write Short Note on Forward Rate Agreement (FRA) :

FRA is an agreement between two parties who wishes to protect themselves against fluctuations in interest rates. The parties agree on an interest rate for a specific period of time on a specified Principal amount. The buyer of an FRA is a party wishing to protect itself against a decline. The price of FRA will depend on the slope of the yield curve which reflects interest rate expectations – FRAs now cover a wide selection of currencies and maturities- Helps a corporate crystallize its interest costs – Banks can offer FRAs linked to the LIBOR.

QUESTION NO.37:- What are the hedging strategies?

a) A wide range of hedging strategies is available to hedge funds.

For example: (i) Selling short - selling shares without owning them, hoping to buy them back at a future date at a lower price in the expectation that their price will drop.

(ii) Using arbitrage - seeking to exploit pricing inefficiencies between related securities - for example, can be long convertible bonds and short the underlying issuer's equity.

(iii) Trading options or derivatives - contracts whose values are based on the performance of any underlying financial asset, index or other investment.

(iv) Investing in anticipation of a specific event - merger transaction, hostile takeover, spin-off, exiting of bankruptcy proceedings, etc.

(v) Investing in deeply discounted securities - of companies about to enter or exit financial distress or bankruptcy, often below liquidation value.

(vi) Many of the strategies used by hedge funds benefit from being non-correlated to the direction of equity markets

QUESTION NO.38:- Mention the key characteristics of hedge funds.

(a) Hedge funds utilize a variety of financial instruments to reduce risk, enhance returns and minimize the correlation with equity and bond markets. Many hedge funds are flexible in their investment options (can use short selling, leverage, derivatives such as puts, calls, options, futures, etc.).

(b) Hedge funds vary enormously in terms of investment returns, volatility and risk. Many, but not all, hedge fund strategies tend to hedge against downturns in the markets being traded.

(c) Many hedge funds have the ability to deliver non-market correlated returns.

(d) Many hedge funds have as an objective consistency of returns and capital preservation rather than magnitude of returns.

(e) Most hedge funds are managed by experienced investment professionals who are generally disciplined and diligent.

(f) Pension funds, endowments, insurance companies, private banks and high net worth individuals and families invest in hedge funds to minimize overall portfolio volatility and enhance returns.

(g) Most hedge fund managers are highly specialized and trade only within their area of expertise and competitive advantage.

(h) Hedge funds benefit by heavily weighting hedge fund managers' remuneration towards performance incentives, thus attracting the best brains in the investment business. In addition, hedge fund managers usually have their own money invested in their fund.

(i) Performance of many hedge fund strategies, particularly relative value strategies, is not dependent on the direction of the bond or equity markets — unlike conventional equity or mutual funds (unit trusts), which are generally 100% exposed to market risk

The popular misconception is that all hedge funds are volatile — that they all use global macro strategies and place large directional bets on stocks, currencies, bonds, commodities, and gold, while using lots of leverage. In reality, less than 5% of hedge funds are global macro funds. Most hedge funds use derivatives only for hedging or don't use derivatives at all, and many use no leverage.

QUESTION NO.39:- Write Short notes on Options

Options are fundamentally different from forward and futures contracts. An option gives the holder of the option the right to do something. The holder does not have to exercise this right. In contrast, in a forward or futures contract, the two parties have committed themselves to doing something. Whereas it costs nothing (except margin requirements) to enter into a futures contract, the purchase of an option requires an up-front payment. There are two basic types of options, call options and put options.

Call option: A call option gives the holder the right but not the obligation to buy an asset by a certain date for a certain price.

Put option: A put option gives the holder the right but not the obligation to sell an asset by a certain date for a certain price.

QUESTION NO. 40:- Can it be said that Derivatives are complex and exotic instruments that Indian investors will have difficulty in understanding?

Trading in standard derivatives such as forwards, futures and options is already prevalent in India and has a long history. Reserve Bank of India allows forward trading in RupeeDollar forward contracts, which has become a liquid market. RBI also allows CrossCurrency options trading. Forward Market Commission has allowed trading in Commodity Forwards on Commodities Exchanges which are Called Futures in International markets. Commodities futures in India are available in turmeric, black pepper, coffee, Gur (jaggery) hessian, Castor seed oil etc. There are plans to set up commodities futures Exchanges in soya bean oil as also in cotton. International markets have also been allowed (dollar denominated contracts) in certain commodities. RBI also allows the users to hedge their portfolios through derivatives exchanges abroad. Derivatives in Commodities markets have a long history. The first commodity futures exchange was set up in 1875 in Mumbai under the aegis of Mumbai Cotton Traders Association (Dr. A. S. Naik 1968, Chairman, Forward Market Commission, India 1963-68). History and existence of markets along with setting up of new markets prove that the concept of Derivatives is not alien in India. In commodity markets there is no resistance from the users or market participants to trade in commodity futures or foreign exchange markets. Government of India has also been facilitating the setting up and operations of these markets in India by providing approvals and defining appropriate regulatory frameworks for their operations. This amply proves that the Concept of options and futures has been well ingrained in the Indian equities market for a longtime and is not alien as it is made out to be. Even to-day complex strategies of options are being traded in many exchanges which are called tejimandi, Jotaphatak, bhav-bhav at different places in India (vohra and Bagari 1998). In that sense, the derivatives are not new to India and are also currently prevalent in various markets including equities markets.

QUESTION NO.41:- Write down the features of Interest Rate Caps.

- (1) The buyer of an Interest Rate Cap pays premium to the seller for the right to receive the difference in interest cost (on notional principal) when a specified index of market interest rates rises above a stipulated "cap rate".
- (4) The buyer has no obligation or liability if interest rates fall below the specified cap rate.
- (3) Thus, a cap resembles an option which represents a right rather than an obligation to the buyer.
- (4) Interest rate caps cover periods ranging from 1-10 years with interest rate reset and payment dates most commonly set either 3 or 6 months apart.

QUESTION NO. 42:- Describe the two main types of commodity swaps.

Two main types of commodity swaps are:

- (1) Fixed-floating commodity swaps are similar to the interest rate fixed-floating swaps except that both legs are commodity based. These are used by commodity producers and consumers to lock in commodity prices.
- (2) Commodity for interest swaps are similar to equity swaps, in which a total return on the commodity is exchanged for some money market rate (plus or minus a spread)

QUESTION NO. 43:- Explain briefly Call Money in the context of financial market.

Call Money: The Call Money is a part of the money market where, day to day surplus funds, mostly of banks, are traded. Moreover, the call money market is most liquid of all short-term money market segments.

The maturity period of call loans vary from 1 to 14 days. The money that is lent for one day in call money market is also known as 'overnight money'. The interest paid on call loans are known as the call rates. The call rate is expected to freely reflect the day-today lack of funds. These rates vary from day-to-day and within the day, often

from hour-to-hour. High rates indicate the tightness of liquidity in the financial system while low rates indicate an easy liquidity position in the market.

In India, call money is lent mainly to even out the short-term mismatches of assets and liabilities and to meet CRR requirement of banks. The short-term mismatches arise due to variation in maturities i.e. the deposits mobilized are deployed by the bank at a longer maturity to earn more returns and duration of withdrawal of deposits by customers vary. Thus, the banks borrow from call money markets to meet short-term maturity mismatches.

Moreover, the banks borrow from call money market to meet the cash Reserve Ratio (CRR) requirements that they should maintain with RBI every fortnight and is computed as a percentage of Net Demand and Time Liabilities (NDTL).

QUESTION NO. 44:- What is meant by “Exercising the Option”? What are the implications for a buyer?

The Call option gives the buyer a right to buy the requisite shares on a specific date at a specific price. This puts the seller under the obligation to sell the shares on that specific date and specific price. The Call Buyer exercises his option only when he/she feels it is profitable. This Process is called “Exercising the Option”. This leads us to the fact that if the spot price is lower than the strike price then it might be profitable for the investor to buy the share in the open market and forgo the premium paid.

The implications for a buyer are that it is his/her decision whether to exercise the option or not. In case the investor expects prices to rise far above the strike price in the future then he/she would surely be interested in buying call options. On the other hand, if the seller feels that his shares are not giving the desired returns and they are not going to perform any better in the future, a premium can be charged and returns from selling the call option can be used to make up for the desired returns. At the end of the options contract there is an exchange of the underlying asset. In the real world, most of the deals are closed with another counter or reverse deal. There is no requirement to exchange the underlying assets then as the investor gets out the contract just before its expiry.

QUESTION NO. 45:- Write short note on Interest Rate Floors.

Variable rate investors are the typical users of Interest Rate Floors. They used Floors to obtain certainty for their investments and budgeting process by setting the minimum interest rate they will receive on their investments. By implementing this type of financial management, variable rate investors obtain peace of mind from falling interest rates and the freedom to concentrate on their aspect of their business/investments. An Interest Rate Floor enables variable rate investors to retain the upside advantages of their variable rate investment while obtaining the comfort of a known minimum interest rate.

QUESTION NO. 46:- Write short note on Interest Rate Swap:

An interest rate ‘swap’ is an exchange of interest payments between two parties. It can also be that fixed rate payments and floating rate payments are exchanged at periodic intervals based on an underlying notional principal amount by the counterparties. This is an Interest Rate Swap. Thus Interest rate swaps are generally used for ‘swapping’ from a floating rate of interest into a fixed rate of interest, or vice-versa. Interest rate swaps are used to hedge interest rate risks as well as to take on interest rate risks. If a treasurer is of the view that interest rates will be falling in the future, he may convert his fixed interest liability into floating interest liability; and also his floating rate assets into fixed rate assets. If he expects the interest rates to go up in the future, he may do vice versa. Since there are no movements of principal, these are off balance sheet instruments and the capital requirements on these instruments are minimal. It is to be noted that individual borrowers do not perform swap though they may face similar situations with their borrowings.

Hence, Interest rate swaps may be defined as, a contract which involves two counter parties to exchange over an agreed period, two streams of interest payments, each based on a different kind of interest rate, for a particular notional amount.

QUESTION NO. 47:- Define Forward Contract and list its salient features.

A forward contract is an agreement to buy or sell an asset on a specified date for a specified price.

One of the parties to the contract assumes a long position and agrees to buy the underlying asset on a certain specified future date for a certain specified price. The other party assumes a short position and agrees to sell the asset on the same date for the same price. Other contract details like delivery date, price and quantity are negotiated bilaterally by the parties to the contract. The forward contracts are normally traded outside the exchanges.

The salient features of forward contracts are:

- (a) They are bilateral contracts and hence exposed to counter-party risk.
- (b) Each contract is custom designed, and hence is unique in terms of contract size, expiration date and the asset type and quality.
- (c) The contract price is generally not available in public domain.
- (d) On the expiration date, the contract has to be settled by delivery of the asset.
- (e) If the party wishes to reverse the contract, it has to compulsorily go to the same counterparty, which often results in high prices being charged.

However forward contracts in certain markets have become much standardized, as in the case of foreign exchange, thereby reducing transaction costs and increasing transactions volume. This process of standardization reaches its limit in the organized futures market.

QUESTION NO. 48:- Write short note on embedded derivative

An embedded derivative is a derivative instrument that is embedded in a separate host contract. The host contract might be a debt or equity instruments, a lease, an insurance contract or a sale or purchase contract. It is a component of a hybrid (combined) instrument that also includes a non-derivative host contract, with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. An embedded derivative can arise from deliberate financial engineering and intentional shifting of certain risks between parties. It causes modification to a contract's cash flow, based on changes in a specified variable. An embedded derivative should be separated from the host contract and considered as a derivative if:

- (a) The economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract and
- (b) A separate instrument with the same terms as the embedded derivative can be considered a derivative.

QUESTION NO. 49:- Write short notes on Forward to forward contracts

A forward-to-forward contract is a swap transaction that involves the simultaneous sale and purchase of one currency for another, where both transactions are forward contracts. It allows the company to take advantage of the forward premium without locking on to the spot rate. The spot rate has to be locked on to before the starting date of the forward-to-forward contract. A forward-to-forward contract is a perfect tool for corporate houses that want to take advantage of the opposite movements in the spot and forward market by locking in the forward premium at a high or low. Now, CFOs can defer locking on the spot rate to the future when they consider the spot rate to be moving in their favour. However a forward-to-forward contract can have serious cash flows implications for a corporate

QUESTION NO. 50:- What are forwards? How they can be used to hedge?

Forwards are custom made contracts to buy or sell foreign exchange in the future at a specific price. Maturity and size of contracts can be determined individually to almost exactly hedge the desired position. The hedging method uses up bank credit lines even when two forward contracts exactly offset each other. The company can hedge its receivables. It could sell dollars forward at a rate which it can obtain from the bank today and thus know for certain the quantum of rupee inflows after three months. A similar approach can be used in the case of a payable. In this case, the company could buy forward at a rate, which is known to-day. A partial or full cover can be adopted by the firm depending on its perception of the risk involved. All corporate treasurers, hedging their forex exposures with forward contracts, are aware that forward contracts are best hedging instruments for safeguarding against adverse rate movements. Forward contracts only turn the risk upside and lead to opportunity losses in the event of favourable market movements.

QUESTION NO. 51:- When are call options and put options said to be 'At the money' in the Options market?

When the Asset(share) price is same as the exercise(strike) price, the option is said to be at the money.

Financial Risk Management in International Operations

QUESTION NO. 1:- State any four features of Foreign Currency Convertible Bonds (FCCB).

Features of Foreign Currency Convertible Bonds:

- (i) FCCB can be either secured or unsecured.
- (ii) FCCB issues have a call and put option.
- (iii) Public issue shall be through reputed lead managers and private placement is subjected to certain conditions.
- (iv) It is also possible to issue zero coupon bonds where the holders are generally interested in converting them into equity.
- (v) The yield to maturity is normally between 2 - 7%.
- (vi) FCCBs are normally listed to stock exchanges to increase liquidity.
- (vii) FCCB issue related expenses shall not exceed 4% of issue size for public and 2% for private placement.

QUESTION NO. 2:- List the steps involved in raising equity through American Depository Receipts (ADR).

Process for Raising Equity through ADR:

- (i) **Issue Intermediaries:** ADRs are issued by Overseas Depository Bank (ODB), who have a Domestic Custodian Bank (DCB) in India.
- (ii) **Deposit of Securities:** Company willing to raise equity through ADRs should deposit the securities with the DCB in India.
- (iii) **Authorization for Issue of ADRs:** The Indian Company authorizes the ODB to issue ADR against the security of Company's Equity Shares.
- (iv) **Issue of ADR:** ODB issues ADRs to investors at a predetermined ratio to the Company's securities.
- (v) **Redemption of ADR:** When an investor redeems his ADRs, the appropriate number of underlying equity shares or bonds is released.
- (vi) **Dividend / Interest:** The Indian Company pays interest to the ODB, which in turn distributes dividends to the ADR holders based on the prevailing exchange rate.

QUESTION NO.3:- Write Short Note on Leading and lagging.

It refers to the adjustment of the times of payments that are made in foreign currencies. Leading is the payment of an obligation before due date while lagging is delaying the payment of an obligation past due date. The purpose of these techniques is for the company to take advantage of expected devaluation or revaluation of the

appropriate currencies. Lead and lag payments are particularly useful when forward contracts are not possible. It is more attractive to use for the payments between associate companies within a group. Leading and lagging are aggressive foreign exchange management tactics designed to take the advantage of expected exchange rate changes. Buckley (1988) supports the argument.

QUESTION NO. 4:- What are the Role of hedging as foreign exchange risk management.

In International finance, hedging means a transaction undertaken to offset some exposure arising from a firm's usual operation. In order to reduce or eliminate currency exposure, internal strategies such as currency invoicing, netting and offsetting, leading and lagging, indexation clause in contract, switching the base of manufacture are resorted to.

A money market hedge involves taking a money market position to cover future foreign currency payable and receivables position.

Hedging is a risk management technique, primarily done to protect the foreign exchange exposures against the volatility of exchange rates, by using derivatives like Currency Options, Currency Futures, Forward Contracts, Currency Swaps, and Money Markets etc. by taking off-setting positions against the underlying asset. Hedging refers to process, whereby one can protect the price of financial instrument at a date in the future by taking an opposite position in the present by using derivatives like Currency Options, Currency Futures, Forward Contracts, Currency Swaps, Money Markets, etc. It refers to technique of protecting the financial exposures in the underlying asset or liability due to volatility in the exchange rates by taking offsetting positions through derivatives to offset the losses in the cash market by a corresponding gain in the derivatives market.

Hedging involves

- (i)** Foreign exchange exposure identification
- (ii)** Value of exposure
- (iii)** Creation of offsetting positions through derivatives.
- (iv)** Measurement of Hedge ratio.

In order to reduce or eliminate currency exposure, internal strategies such as currency invoicing, netting and offsetting, leading and lagging, indexation clause in contract, switching the base of manufacturer etc are resorted to.

QUESTION NO.5:- Write short note on Global Depository Receipt.

These are a class of investment which allows international investors to own shares in foreign companies where the foreign market is hard to access for the retail investor, and without having to worry about foreign currencies and tax treatments. Global Depository Receipts are issued by international investments banks as certificates (the GDR) which represents the foreign shares but which can be traded on the local stock exchange. For example a UK investor may be able to buy shares in a Vietnamese company via a GDR issued by a UK investment. The GDR will be denominated in GB Pounds and will be tradable on the London Stock Exchange. The investment bank takes care of currency exchange, foreign taxes etc. and pays dividends on the GDR in GB Pounds.

The concept originally started in the USA with the creation of American Depository Receipts which were created so that US retail investors could buy shares in a foreign company without having to worry about foreign exchange, or foreign taxes.

It should be noted that although the risks of owning the foreign shares directly has been removed, there is now a risk of third party default, because the investment bank owns the underlying assets, and may not be able to pass on the benefits to ADR holders if they get into financial difficulty.

Global Depository Receipts (GDRs) are negotiable certificates issued by depository banks which represent ownership of a given number of a company's shares which can be listed and traded independently from the underlying shares. These instruments are typically used by companies from emerging markets and marketed to professional investors only. GDRs can be listed on either the Main Market via a Standard Listing or on the Professional Securities Market. A GDR will be used to access two or more markets, usually London and the US.

They are often launched for capital raising purposes, so the US element is generally either a Rule 144(a) ADR or a Level III ADR, depending on whether the issuer aims to tap the private placement or public US markets. These securities are generally traded in US dollars on the Exchange's Electronic Trading Service the International Order Book (IOB). Associated dividends are paid to investors in US dollars. GDRs are settled in either DTC or Euroclear Bank enhancing their cross border liquidity. The more liquid IOB securities have central counterparty clearing ensuring pre and post trade anonymity as well as mitigation of counterparty risk.

QUESTION NO. 6:- Write short note Warrants.

A warrant is a security that entitles the holder to buy the underlying stock of the issuing company at a fixed exercise price until the expiration date.

Some important characteristics to consider include the following:

- (i)** A warrant is exercised when the holder informs the issuer of their intention to purchase the shares underlying the warrant.
- (ii)** A warrant's "premium" represents how much extra you have to pay for your shares when buying them through the warrant as compared to buying them in the regular way.
- (iii)** A warrant's "gearing" is the way to ascertain how much more exposure you have to the underlying shares using the warrant as compared to the exposure you would have if you buy the shares through the market.
- (iv)** If you plan on exercising the warrant, you must do so before the expiration date. The more time remaining until expiration, the more time for the underlying security to appreciate, which, in turn, will increase the price of the warrant (unless it depreciates). Therefore, the expiration date is the date on which the right to exercise ceases to exist.
- (v)** Like options, there are different exercise types associated with warrants such as American style (holder can exercise anytime before expiration) or European style (holder can only exercise on expiration date). Sometimes, the issuer will try to establish a market for the warrant and to register it with a listed exchange. In this case, the price can be obtained from a stockbroker. Often, though, warrants are privately held or not registered, which makes their prices less obvious.

QUESTION NO. 7:- Explain the major sources for raising foreign currency finances?

Major sources for raising foreign currency finances are as follows:

(i) Foreign Currency Term Loan: Financial Institutions provide Foreign Currency Term Loan for meeting the foreign currency expenditures towards — a. Import of Plant, Machinery and Equipment, and b. Payment of Foreign Technical Know How Fees.

(ii) Export Credit Schemes: Export Credit Agencies finance exports of capital goods and related technical services.

Types of Export Credit:

(a) Buyer's Credit: Credit is provided directly to the Indian buyer, for purchase of capital goods and / or technical service from the overseas exporter.

(b) Supplier's Credit: Credit is provided to the overseas exporters, so that they can make available medium-term finance to Indian importers. Regulatory: These agencies are formed by the Governments of the respective countries and follow certain consensus guidelines for supporting exports, under a convention known as the Berne Union.

(iii) External Commercial Borrowings (ECB): These include raising finance from international markets for plant and machinery imports. Funds can be raised subject to the terms and conditions stipulated by the Government of India, which imposes restrictions on the amount raised under automatic route. Funds raised above the stipulated limit would require the prior approval of the Ministry of Finance.

Types of ECB: External Commercial Borrowings include Bank Loans, Supplier's and Buyer's credit, fixed and floating rate bonds and Borrowing from private sector windows of Multilateral Financial Institutions such as International Finance Corporation.

(iv) Euro Issues: Subscription can come from any part of the world except India. This takes the following forms —

a. Depository Receipts Mechanism: An indirect equity investment, these are issued through Overseas Depository Banks, on behalf of the issuing Company.

b. Foreign Currency/ Euro Convertible Issues: Euro Convertible Issues is a debt with an option to convert it into equity.

c. Debt Route: Funds can also be raised by way of pure Debt Bonds.

(v) Issues in Foreign Domestic Markets: Capital can also be raised by issuing Exchange Traded instruments in Foreign Markets. These include ADRs, GDRs, etc.

QUESTION NO. 8:- What is Covered Interest Arbitrage? Briefly state the role of an arbitrageur under covered interest arbitrage.

A covered interest arbitrage exists when an arbitrage profit can be made. The process of borrowing in one currency and simultaneously investing in another with the exchange risk hedged in the forward market is referred to covered Interest Arbitrage.

If domestic interest rates are higher than the foreign interest rates, an arbitrageur would do the following: He would borrow in foreign currency, convert receipts to domestic currency at the prevailing spot rate, and invest in domestic currency denominated securities (as domestic securities carry higher interest). At the same time he would cover his principal and interest from the investment at the forward rate. At maturity, he would convert the proceeds of the domestic investment at prefixed domestic forward rate and payoff the foreign liability. The difference between the receipts and payments serve as profit to customer.

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QUESTION NO. 9:- Write a short note on Foreign Exchange Risk

Foreign Exchange risk is an exposure of facing uncertain future exchange rate. When firms and individuals are engaged in cross- border transactions, they are potentially exposed to foreign exchange risk that they would not encounter in purely domestic transactions.

The following three categories are the most commonly used classification of foreign exchange risk exposure:

(i) Transaction Exposure- It occurs when one currency is to be exchanged for another and when a change in foreign exchange rate occurs between the time a transaction is executed and the time it is settled.

(ii) Consolidation (Translation) Exposure- When the assets and liabilities of trading transactions are denominated in foreign currencies, then there may be risk of translation from such denominations into home currencies. This will also be due to fluctuations in the rates of different currencies.

(iii) Economic Exposure- It is the risk of a change in the rate affecting the company's competitive position in the market. It is normally defined as the effect on future cash flows of unpredicted future movements in exchange rates. This affects a firm's competitive position across the various markets and products and hence the firm's real economic value.

QUESTION NO.10:- Define 'Exchange Rate Risk'. How is 'Value-at-Risk' (VaR) method used by a firm for measuring the Exchange Rate Risk in management decisions?

A common definition of this of this term relates to the effect of unexpected exchange rate changes on the value of the firm. In particular, it is defined as the possible direct loss. (as a result of an un-hedged exposure) or indirect loss in the firm's cash flows, assets and liabilities, net profit and, in turn, its stock market value from an exchange

rate move. At present, a widely used method is the value-at-risk (VaR) model. Broadly, value-at-risk is defined as the maximum loss for a given exposure over a given time horizon with z% confidence.

The VaR methodology can be used to measure a variety of types of risk, helping firms in their risk management. However, the VaR does not define what happens to the exposure for the (100 - Z) % point of confidence, i.e. the worst case scenario. Since the VaR model does not define the maximum loss with 100% confidence, firms often set operational limits, such as nominal amounts or stop loss orders, in addition to VaR limits, to reach the highest possible coverage.

VaR calculation depends on three parameters:

(i) The holding period. The typical holding period is 1 day.

(ii) The confidence level at which the estimate is planned to be made. The usual confidence levels are 99% and 95%.

(iii) The unit of currency to be used for the denomination of the VaR.

For a 99% confidence level, the VaR can be calculated as: $VaR = (-) VP (MP + 2.33 SP)$

Where, VP is the initial value (in currency units) of the foreign exchange position ; MP is the mean of the currency return on the firm's total foreign exchange position, which is a weighted average of the individual foreign exchange positions. Sp is the standard deviation of currency return on the firm's total foreign exchange position, which is the weighted transformation of the variance-covariance matrix of individual foreign exchange position.

QUESTION NO.11:- What are the benefits of Euro-Issues to Issuing Companies?

Benefit of Euro – Issues to issuing companies

(a) It can absorb issues of larger size

(b) Better corporate image of issuing company both in India and abroad among bankers, Customers.

(c) Proceeds can be used for import and acquisition abroad

(d) It will broaden the share holders base and enhance investors quality

(e) It normally offers better comparative share value

QUESTION NO.12:- Impact of GDRs on Indian capital market.

Arbitrage possibility of GDR issues has created additional responsibility on the investors. Investors are now required to keep track of world-wise economic events and how the company's GDRs are being traded. GDR can be issued for any price; therefore, retail investors can no longer expect discounted rights or public issue. It serves as an easy way for flow of huge volume of foreign funds into Indian capital market. In February 2002, the government has allowed 'two way fungibility' of shares issued under the euro issues. Two- way fungibility means reissue of ADRs /GDRs in place of shares. Which were issued by way of conversions of ADR/ GDR. Regulations relating to GDR, in particular, are :

(i) Reissuance of GDR would be permitted to the extent of GDRs WHICH HAVE BEEN REDEEMED TO UNDERLYING SHARES.

(ii) Transactions would be effected through SEBI registered brokers and under the RBI guidelines.

(iii) Reissuance of GDR will take place through custodian.

(iv) For creation of GDR the Indian broker will purchase the shares from stock exchanges, for which money will come from overseas buyer.

(v) Overseas depositor will issue GDR to foreign investors.

QUESTION NO.13:- What do you understand by 'External Commercial Borrowing' (ECB)? Mention two agencies engaged in ECB.

External Commercial Borrowing (ECB) is the amount borrowed by the Government through designated agents from all India Financial Institutions (AIFIs). The government borrowed these amounts in the international money market during 1991 and 1992 to meet the massive exchange deficits. The lenders include Asian Development

Bank (ADB) and International Monetary Fund (IMF). Our country has also been obtaining foreign capital in the form of external commercial borrowings from agencies like US EXIM Bank, Japanese EXIM Bank, Export Credit Guarantee Corporation (ECGC) of UK etc.

There are 3 options under ECB:

- (i) Raising loan from foreign Commercial Banks.
- (ii) Raising funds, by floating bonds, in the international market.
- (iii) Supplier Countries export credit.

QUESTION NO.14:- When do you think money market hedging is not beneficial?

When interest rate parity holds and no arbitrage- opportunities exist, money market hedge and the forward hedge provide identical costs. In such a scenario, money market hedging is not beneficial.

QUESTION NO.15:- State the two components of value of currency option. Show a relationship between volatility of currency and option value.

(i) **The intrinsic value** – the amount by which an option is in the money. A call option whose exercise price is below the current spot price of the underlying instrument, or a put option whose exercise price is above the current spot price of the underlying instrument, is said to be in the money.

(ii) **The extrinsic value** - it is the total price of an option less the intrinsic value. It is also known as time value or volatility value. As the expiry time increase, the premium of an option also increases. However, with each passing day, the rate of increase in the premium decreases. Conversely, as an option approaches expiry, the rate of decline in its intrinsic value increases. This decline is known as the time decay. Therefore, the more volatile a currency, the higher will be its option value.

QUESTION NO.16:- How are currency swaps different from interest swaps? Explain

Currency Swaps differ from interest swap in the sense that currency swaps involve as follows :

- (i) An exchange of payments in two currencies.
- (ii) Not only exchange of interest, but also exchange of principal.
- (iii) It is not off balance sheet instruments.
- (iv) The agreed exchange rate need not be related to the market.
- (v) Currency swaps can also use two fixed interest rates for the two different currencies - different from the interest rate swaps.
- (vi) The principal amount can be exchanged even at the start of the swap.

QUESTION NO.17:- What do you mean by exchange rate risk management? How many types of exchange rate risk- Explain? What are the determinants of Foreign Exchange Rates?

Foreign exchange risk is the level of uncertainty that a company must manage for changes in foreign exchange rates that will adversely affect the money the company receives for goods and services over a period of time. For example, a company sells goods to a foreign company. They ship the goods today, but will not receive payment for several days, weeks or months. During this grace period, the exchange rates fluctuate. At the time of settlement, when the foreign company pays the domestic company for the goods, the rates may have traveled to a level that is less than what the company contemplated. As a result, the company may suffer a loss or the profits may erode. To minimize or manage the risk, companies enter into contracts to buy foreign currency at a specified rate. This allows the companies to minimize the uncertainty of the risk, so that they can price their products accordingly. A common definition of exchange rate risk relates to the effect of unexpected exchange rate changes on the value of the firm (Madura, 1989). In particular, it is defined as the possible direct loss (as a result of an unhedged exposure) or indirect loss in the firm's cash flows, assets and liabilities, net profit and, in turn, its stock market

value from an exchange rate move. To manage the exchange rate risk inherent in every multinational firm's operations, a firm needs to determine the specific type of current risk exposure, the hedging strategy and the available instruments to deal with these currency risks.

Multinational firms are participants in currency markets by virtue of their international transactions. To measure the impact of exchange rate movements on a firm that is involved in foreign-currency denominated operations, i.e., the implied value-at-risk (VaR) from exchange rate moves, we need to identify the type of risks that the firm is exposed to and the amount of risk encountered (Hakala and Wystup, 2002).

Types of Exchange Rate Risk: The three main types of exchange rate risk are

1. Transaction risk, which is basically cash flow risk and deals with the effect of exchange rate moves on transactional account exposure related to receivables (export contracts), payables (import contracts) or repatriation of dividends. An exchange rate change in the currency of denomination of any such contract will result in a direct transaction exchange rate risk to the firm;

2. Translation risk, which is basically balance sheet exchange rate risk and relates exchange rate moves to the valuation of a foreign subsidiary and, in turn, to the consolidation of a foreign subsidiary to the parent company's balance sheet. Translation risk for a foreign subsidiary is usually measured by the exposure of net assets (assets less liabilities) to potential exchange rate moves. In consolidating financial statements, the translation could be done either at the end-of-the-period exchange rate or at the average exchange rate of the period, depending on the accounting regulations affecting the parent company. Thus, while income statements are usually translated at the average exchange rate over the period, balance sheet exposures of foreign subsidiaries are often translated at the prevailing current exchange rate at the time of consolidation; and

3. Economic risk, which reflects basically the risk to the firm's present value of future operating cash flows from exchange rate movements. In essence, economic risk concerns the effect of exchange rate changes on revenues (domestic sales and exports) and operating expenses (cost of domestic inputs and imports). Economic risk is usually applied to the present value of future cash flow operations of a firm's parent company and foreign subsidiaries. Identification of the various types of currency risk, along with their measurement, is essential to develop a strategy for managing currency risk

Foreign Exchange Rates – Determinants:

1. Interest Rate Differentials: Higher rate of interest for a investment in a particular currency can push up the demand for that currency, which will increase the exchange rate in favour of that currency.

2. Inflation Rate Differentials: Different countries' have differing inflation rates, and as a result, purchasing power of one currency will depreciate faster than currency of some other country. This contributes to movement in exchange rate.

3. Government Policies: Government may impose restriction on currency transactions. Through RBI, the Government, may also buy or sell currencies in huge quantity to adjust the prevailing exchange rates.

4. Market Expectations: Expectations on changes in Government, changes in taxation policies, foreign trade, inflation, etc. contributes to demand for foreign currencies, thereby affecting the exchange rates.

5. Investment Opportunities: Increase in investment opportunities in one country leads to influx of foreign currency funds to that country. Such huge inflow will amount to huge supply of that currency, thereby bringing down the exchange rate.

6. Speculations: Speculators and Treasury Managers influence movement in exchange rates by buying and selling foreign currencies with expectations of gains by exploiting market inefficiencies. The quantum of their operations affects the exchange rates.

QUESTION NO.18:- What is a depository receipt? How does the DR work? Explain the benefits of depository receipts? What is the process for raising equity through ADR?

A depository receipt (DR) is a type of negotiable (transferable) financial security that is traded on a local stock exchange but represents a security, usually in the form of equity, that is issued by a foreign publicly listed company. The DR, which is a physical certificate, allows investors to hold shares in equity of other countries. One

of the most common types of DRs is the American depositary receipt (ADR), which has been offering companies, investors and traders global investment opportunities since the 1920s.

Since then, DRs have spread to other parts of the globe in the form of global depositary receipts (GDRs) (the other most common type of DR), European DRs and international DRs. ADRs are typically traded on a U.S. national stock exchange, such as the New York Stock Exchange (NYSE) or the American Stock Exchange, while GDRs are commonly listed on European stock exchanges such as the London Stock Exchange. Both ADRs and GDRs are usually denominated in U.S. dollars, but can also be denominated in euros.

DR works: The DR is created when a foreign company wishes to list its already publicly traded shares or debt securities on a foreign stock exchange. Before it can be listed to a particular stock exchange, the company in question will first have to meet certain requirements put forth by the exchange. Initial public offerings, however, can also issue a DR. DRs can be traded publicly or over-the-counter. Let us look at an example of how an ADR is created and traded.

The Benefits of Depositary Receipts: The DR functions as a means to increase global trade, which in turn can help increase not only volumes on local and foreign markets but also the exchange of information, technology, regulatory procedures as well as market transparency. Thus, instead of being faced with impediments to foreign investment, as is often the case in many emerging markets, the DR investor and company can both benefit from investment abroad.

Benefits :

For the Company: A company may opt to issue a DR to obtain greater exposure and raise capital in the world market. Issuing DRs has the added benefit of increasing the share's liquidity while boosting the company's prestige on its local market (?the company is traded internationally?). Depositary receipts encourage an international shareholder base, and provide expatriates living abroad with an easier opportunity to invest in their home countries. Moreover, in many countries, especially those with emerging markets, obstacles often prevent foreign investors from entering the local market. By issuing a DR, a company can still encourage investment from abroad without having to worry about barriers to entry that a foreign investor might face.

For the Investor: Buying into a DR immediately turns an investors' portfolio into a global one. Investors gain the benefits of diversification while trading in their own market under familiar settlement and clearance conditions. More importantly, DR investors will be able to reap the benefits of these usually higher risk, higher return equities, without having to endure the added risks of going directly into foreign markets, which may pose lack of transparency or instability resulting from changing regulatory procedures. It is important to remember that an investor will still bear some foreign-exchange risk, stemming from uncertainties in emerging economies and societies. On the other hand, the investor can also benefit from competitive rates the U.S. dollar and euro have to most foreign currencies.

Giving you the opportunity to add the benefits of foreign investment while bypassing the unnecessary risks of investing outside your own borders, you may want to consider adding these securities to your portfolio. As with any security, however, investing in ADRs requires an understanding of why they are used, and how they are issued and traded.

Process for Raising Equity through ADR:

(a) Issue Intermediaries: ADRs are issued by Overseas Depository Bank (ODB), who has a Domestic Custodian Bank (DCB) in India.

(b) Deposit of Securities: Company willing to raise equity through ADRs should deposit the securities with the DCB in India.

(c) Authorization for Issue of ADRs: The Indian Company authorizes the ODB to issue ADR against the security of Company's Equity Shares.

(d) Issue of ADR: ODB issues ADRs to investors at a predetermined ratio to the Company's securities. (d) Redemption of ADR: When an investor redeems his ADRs, the appropriate number of underlying equity shares or bonds is released.

(e) Dividend / Interest: The Indian Company pays interest to the ODB, which in turn distributes dividends to the ADR holders based on the prevailing exchange rate.

QUESTION NO.19:- What do you mean by global financial system (GFS)? Write down the regulations regarding portfolio investments by NRIs/ PIOs.

A brief definition of the global financial system (GFS) is the financial system consisting of institutions, their customers, and financial regulators that act on a global level. The term global is often used synonymously with the terms international or multinational. Economists do not have a standard definition for a global versus a multinational company.

Main Players

1. Global or international systemically important financial institutions, e.g., banks, hedge funds whose failure may cause a global financial crisis, the International Monetary Fund and the Bank for International Settlements,
2. Customers of the global financial system, which include multinational corporations, as well as countries, with their economies and government entities, e.g., the central banks of the G20 major economies, finance ministries EU, NAFTA, OPEC, and others.etc.
3. Regulators of the global financial system, many of which play dual roles, in that they are financial organizations at the same time. These include the above mentioned International Monetary Fund and Bank for International Settlements, particularly its 'Global Economy Meeting (GEM), in which all systemic emerging economies' Central Bank governors are fully participating, has become the prime group for global governance among central banks' per Jean-Claude Trichet, President of the European Central Bank., as well as the financial regulators of the U.S.A (the US agency quintet of Federal Reserve, Office of Comptroller of the Currency, Federal Deposit Insurance Corporation, Commodity Futures Trading Commission, Federal Reserve Board, Securities and Exchange Commission), Europe (European Central Bank) and the Bank of China, besides others.

Regulations Regarding Portfolio Investments by NRIs/PIOs

- (i) Non- Resident Indian (NRIs) and Persons of Indian Origin (PIOs) can purchase or sell shares/ fully and mandatorily convertible debentures of Indian companies on the Stock Exchanges under the Portfolio Investment Scheme. For this purpose, the NRI/ PIO has to apply to a designated branch of a bank, which deals in Portfolio Investment. All sale/ purchase transactions are to be routed through the designated branch.
- (ii) An NRI or a PIO can purchase shares up to 5 per cent of the paid up capital of an Indian company. All NRIs/PIOs taken together cannot purchase more than 10 per cent of the paid up value of the company. This limit can be increased by the Indian company to 24 per cent by passing a General Body resolution. The Indian company has to intimate the raising of the NR Limit to the Reserve Bank to enable the Bank to notify the same on its website for larger public dissemination.
- (iii) The sale proceeds of the repatriable investments can be credited to the NRE/ NRO, etc. accounts of the NRI/ PIO, whereas the sale proceeds of non-repatriable investment can be credited only to NRO accounts.
- (iv) The sale of shares will be subject to payment of applicable taxes.

QUESTION NO.20:- Explain taxation issues in cross-border financing and investment.

India is a federal republic, with 28 states and seven federally administered union territories; it operates a multi-party parliamentary democracy system. It is a common law country with a written constitution. Parliament has two houses: the Lok Sabha (lower house) and the Rajya Sabha (upper house). The President, the constitutional head of the country and of the armed forces, acts and discharges the constitutional duties on the advice of the Council of Ministers, which is headed by the Prime Minister. The Prime Minister and the Council of Ministers are responsible to parliament and subject to the control of the majority members of parliament. The states and union territories are governed by independently elected governments.

India is a three-tier economy, comprising a globally competitive services sector, a manufacturing sector and an agricultural sector. The services sector has proved to be the most dynamic in recent years, with trade, hotels,

transport, telecommunications and information technology, financial, and business services registering particularly rapid growth.

Price controls :- The central and state governments have passed legislation to control production, supply, distribution and the price of certain commodities. The central government is empowered to list any class of commodity as essential and can regulate or prohibit the production, supply, distribution, price and trade of these commodities for the following purposes: maintain or increase supply; equitable distribution and availability at fair prices; and secure an essential commodity for the defense of India or the efficient conduct of military operations.

Intellectual property:- Indian legislation covers patents, copyrights, trademarks, geographical indicators and industrial designs. The Patent Act 1970 has been amended several times to meet India's commitments to the WTO, such as increasing the term of a patent to 20 years.

Trademarks can be registered under the Trade Marks Act, 1999, which provides for registration of trademark for services in addition to goods, simplifies procedures, increases the registration period to 10 years and provides a six-month grace period for the payment of renewal fees.

Copyrights are protected on published and unpublished literary, dramatic, musical, artistic and film works under the Copyright Act 1957. Subsequent amendments have extended protection to other products, such as computer software and improved protection of literary and artistic works and established better enforcement. The protection term for copyrights and rights of performers and producers of phonograms is 50 years.

India is a signatory to the Paris Convention for the Protection of Industrial Property and the Patent Co-operation Treaty, and it extends reciprocal property arrangements to all countries party to the convention. The convention makes India eligible for the Trademark Law Treaty and the Madrid Agreement on Trademarks. The country also participates in the Bern Convention on Copyrights, the Washington Treaty on Layout of Integrated Circuits, the Budapest Treaty on Deposit of Micro-organisms and the Lisbon Treaty on Geographical Indicators.

As a member of the WTO, India enacted the Geographical Indications of Goods (Registration & Protection) Act (1999).

Currency:- The currency is the Indian rupee (INR).

Banking and financing:- India's central bank is the Reserve Bank of India (RBI), which is the supervisory authority for all banking operations in the country. The RBI is the umbrella network for numerous activities, all related to the nation's financial sector, encompassing and extending beyond the functions of a typical central bank. The primary activities of the RBI include: Monetary authority; Issuer of currency; Banker and debt manager to the government; Banker to banks; Regulator of the banking system; Manager of foreign exchange; and Regulator and supervisor of the payment and settlement systems.

The RBI formulates implements and monitors the monetary policy. It is responsible for regulating non-banking financial services companies, which operate like banks but are otherwise not permitted to carry on the business of banking.

The banking sector in India is broadly represented by public sector banks (where the government owns a majority shareholding and includes the State Bank of India and its subsidiaries); private sector banks; foreign banks operating in India through their branches/wholly owned subsidiaries; and regional rural bank and co-operative banks, which usually are regional.

The RBI has released draft guidelines for the licensing of new banks in the private sector. Stringent rules govern the operations of systemically important non-deposit taking non-banking financial services companies, such as those with assets of INR 1 billion or more, to reduce the scope of regulatory arbitrage vis-à-vis a bank. The financial and commercial center in India is Mumbai, and there are proposals to develop this area further as an International Financial Center.

QUESTION NO. 21:- Briefly explain forfeiting as means of financing export receivables.

Forfeiting is a mechanism of financing exports.

- (a) By discounting export receivables
- (b) Evidence by bills of exchange or promissory notes

(c) Without recourse to the seller (viz exporter)

(d) Carrying medium to long term maturities

(e) On a fixed rate basis (discount) ? Upto 100 percent of the contract value. Simply put, forfeiting is the non-recourse discounting of export receivables. In a forfeiting transaction, the exporter surrenders, without recourse to him, his rights to claim for payment on goods delivered to an importer, in return for immediate cash payment from a forfeiter. As a result, an exporter in India can convert a credit sale into a cash sale, with no recourse to the exporter or his banker.

All exports of capital goods and other goods made on medium to long term credit are eligible to be financed through forfeiting.

Receivables under a deferred payment contract for export of goods, evidenced by bills of exchange or promissory notes, can be forfeited.

Bills of exchange or promissory notes, backed by co-acceptance from a bank (which would generally be the buyer's bank), are endorsed by the exporter, without recourse, in favour of the forfeiting agency in exchange for discounted cash proceeds. The banker's co-acceptance is known as avalisation. The co-accepting bank must be acceptable to the forfeiting agency. EXIM. has been authorized by the Reserve Bank of India to facilitate export financing through forfeiting.

QUESTION NO. 22:- State the factors which affect the flow of foreign capital.

The following are some of the factors that may affect the flow of capital into any country:

(1) The expected rates of return or rates of interest on investments;

(2) Attitude of investors for investment in overseas capital market;

(3) The credit standing of the country where the investment is to be made;

(4) The internal economic, social and political stability of a country;

(5) The relative stability in rates of exchange of currencies of the two countries;

(6) The business cycle phase whether passing through depression or boom of a country.

(7) The gap between savings and investment resulting in current account gaps of the country.

(8) The policies of globalisation, liberalization and that of international integration adopted by the country;

(9) Flexible legal and institutional structure of the country which can be easily understood by the investors; and

(10) Availability of innovative financial products in the financial markets etc.

QUESTION NO. 23:- Explain forfeiting as means of financing export receivable.

Forfeiting is a mechanism of financing exports.

(i) by discounting export receivables

(ii) evidence by bills of exchange or promissory notes

(iii) without recourse to the seller (viz exporter)

(iv) carrying medium to long term maturities

(v) on a fixed rate basis (discount)

(vi) upto 100 percent of the contract value

Simply put, forfeiting is the non-recourse discounting of export receivables. In a forfeiting transaction, the exporter surrenders, without recourse to him, his rights to claim for payment on goods delivered to an importer, in return for immediate cash payment from a forfeiter. As a result, an exporter in Indian can convert a credit sale into a cash sale, with no recourse to the exporter or his banker.

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agency in exchange for discounted cash proceeds. The banker's co-acceptance is known as avalisation. The coaccepting bank must be acceptable to the forfaiting agency. EXIM has been authorized by the Reserve Bank of India to facilitate export financing through forfaiting.

QUESTION NO. 24:- Write short notes on Factoring and its advantages.

In credit sales, the firm gives credit to the debtors who pay at a later date. The debtors generally give bills receivables payable at a particular date.

The firm collects the bills on due dates. When business increases, the number of BRs also increases. The firm gives the job of collection of amount of bills receivables to some agent. Factor is an agent who collects the amount on bills receivables on behalf of firm and it charges some commission for giving its services. Generally the firm sells the bills receivables to the factor at a discounted rate. The factor gives immediate cash to the firm and requirement and gets bills receivables. As per factoring agreement, the factor may also give some cash in advance to the firm.

On due dates, the factor collects the amount of bills receivables. The factor is responsible for the credit control, sales accounting and the collection of dues from the debtors or buyers. Depending upon the agreement between the factor and the firm, the following advantages may, be obtained from factoring services:

1. Immediate cash is received by the firm by selling the BRs. 2. The factor maintains all books and ledgers relating to sales. This is major facility to the selling firm. 3. Factor assumes all risks related to credit sales. Problem of bad debts, late collection, and omission in collection, credit risks and restrictions are all transferred to the factor from the firm. 4. Factor acts as an advisor regarding credit sales and administration. 5. Continuous factoring may eliminate the need of credit and collection department.

QUESTION NO. 25:- Write short notes on Exposure netting

Meaning :

(i) Offsetting exposures : Exposure netting is the act of offsetting exposures in one currency with exposures in the same or another currency.

(ii) Example : If an entity has Dollar Receivables, which is exposed to currency risk, it may enter into an offsetting position by entering into a Dollar Payable arrangement.

Objective: The objective of netting, is to offset the likely loss in one exposure, with the likely gain in another.

Hedging tool: It is a form of hedging foreign exchange risks. When a Firm opts for exposure netting, it hedges its risk without taking any forward cover or options cover.

Fundamentals for Banking Transactions : (i) Application : Banking transactions are based on the principle of netting. A Bank generally offsets its position in a currency, by taking opposite positions in the same currency. (ii) Settlement Risk : Settlement Netting / Settlement Risk is the difference of the summed transactions between the parties which is actually transferred. Example, A Bank is required to pay USD 1,00,000 and USD 2,75,000 to Mr. A, and collect from him USD 1,75,000, Euro 50,000, then the net payable is called the settlement netting or settlement risk.

Situation for exposure netting: Exposure netting occurs where outstanding positions are netted against one another in the event of counter party default.