2008

Question 1 : **Nov RTP**

What are the investors' rights & obligations under the Mutual Fund Regulations?

Ans:

Investors' rights and obligations under the Mutual Fund Regulations:

Important aspect of the mutual fund regulations and operations is the investors' protection and disclosure norms. It serves the very purpose of mutual fund guidelines.

Due to these norms it is very necessary for the investor to remain vigilant. Investor should continuously evaluate the performance of mutual fund.

Following are the steps taken for improvement and compliance of standards of mutual fund:

1. All mutual funds should disclose full portfolio of their schemes in the annual report within one month of the close of each financial year. Mutual fund should either send it to each unit holder or publish it by way of an advertisement in one English daily and one in regional language.

2. The Asset Management Company must prepare a compliance manual and design internal audit systems including audit systems before the launch of any schemes.

   The trustees are also required to constitute an audit committee of the trustees which will review the internal audit systems and the recommendation of the internal and statutory audit reports and ensure their rectification.

3. The AMC shall constitute an in-house valuation committee consisting of senior executives including personnel from accounts, fund management and compliance departments. The committee would on a regular basis review the system practice of valuation of securities.

4. The trustees shall review all transactions of the mutual fund with the associates on a regular basis.

Investors' Rights:

1. Unit holder have proportionate right in the beneficial ownership of the schemes assets as well as any dividend or income declared under the scheme.

2. Receive dividend warrant within 42 days.

3. AMC can be terminated by 75% of the unit holders.

4. Right to inspect major documents i.e. material contracts, Memorandum of Association and Articles of Association (M.A. & A.A) of the AMC, Offer document etc.
5. 75% of the unit holders have the right to approve any changes in the close ended scheme.
6. Every unit holder have right to receive copy of the annual statement.

Legal limitations to investors' rights:

1. Unit holders cannot sue the trust but they can initiate proceedings against the trustees, if they feel that they are being cheated.
2. Except in certain circumstances AMC cannot assure a specified level of return to the investors. AMC cannot be sued to make good any shortfall in such schemes.

Investors' Obligations:

1. An investor should carefully study the risk factors and other information provided in the offer document. Failure to study will not entitle him for any rights thereafter.
2. It is the responsibility of the investor to monitor his schemes by studying the reports and other financial statements of the funds.

Question 2

Distinguish between:

(a) Event-Described and Activity-Described Network

(b) Primary Market and Secondary Market

(c) Caps & Floors Vs. Swaptions

Ans:

(a) Distinction between Event-Described or Activity-Described Network Often, a network is described by stating the events, i.e., the start and finish of activities. Usually, the PERT network is described by events, because activities consuming time are considered uncertain and a probabilistic approach is resorted to. In the so-called CPM network, activities between two nodes, i.e., the arc elements, are stated. Here, the nodes are dependent on the deterministic assessment of activities.

However, this distinction based on describing the procedure either through nodes or by activities is fast disappearing and both PERT and CPM can be described interchangeably by either of the above methods. But it is important that a consistent convention is adhered to throughout the network logic.

(b) Distinction between primary and secondary markets

(1) Nature of Securities: The primary markets deals with new securities, that is, securities, which were not previously available and are, therefore, offered to the investing public for the first time. The market, therefore, derives its name from the fact that it makes available a new block of securities for public subscription. The stock market, on the other hand, is a market for old securities, which may be defined as securities, which have been issued already and granted stock exchange quotation. The stock exchanges, therefore, provide a regular and continuous market for buying and selling of securities.

(2) Nature of Financing: Another aspect related to the separate functions of these two parts of the securities market is the nature of their contribution to industrial financing. Since the primary market is concerned with new securities, it provides additional funds to the issuing companies either for starting a new enterprise or for the expansion or diversification of the existing one and, therefore, its contribution to company financing is direct. In contrast, the secondary markets can in no circumstance supply additional funds since the company is not involved in the transaction. This, however, does not mean that the stock markets do not have relevance in the process of transfer of resources from savers to investors. Their role regarding the supply of capital is indirect. The usual course in the development of industrial enterprise seems to be that those who bear the initial burden of financing a new enterprise pass it on to others when the enterprise becomes well established. The existence of secondary markets which provide institutional facilities for the continuous purchase and sale of securities and, to that extent, lend liquidity and marketability, play an important part in the process.

(3) Organizational Differences: The stock exchanges have physical existence and are located in a particular geographical area. The primary market is not rooted in any particular spot and has no geographical existence. The primary market has neither any tangible form any administrative organizational setup like that of stock exchanges, nor is it subjected to any centralized control and administration for the consummation of its business. It is recognized only by the services that it renders to the lenders and borrowers of capital funds at the time of any particular operation.

(c) Distinction between Caps & floors vs. Swaptions

For caps/floors, the relevant stochastic variable is the implied forward rate for each time bucket. Comparatively, the underlying stochastic variable for swaptions would be the forward-starting swap. It is also important to note that a swaption will actually only has one date of exercise compared to a cap (which is essentially a series of separate call

options on forward rates). Although the cash flow dates will be similar, each caplet in a cap should be treated independently. Once a swaption is exercised, all the cash flows on the underlying IRS of the swaption will occur. There is consequently quite a big difference between a 2-year cap on 3-month instrument (a total of 7 options) and a 3-month swaption on an 18-month forward-start IRS (only a single option). This difference is reflected in the fact that swaptions attract a lower premium.

Where swaptions are used to hedge a borrowing, it would appear at first glance that the cost of the premium of swaptions would cancel any benefit. This would be the case if the hedge were priced entirely off the forward curve, as is the case when caps are used. The volatility element in the cap premium is determined by taking into account the consideration of each time bucket. As pointed out, a swaption is however an option on a forward start IRS. The volatility curve is therefore drawn around the swap and not the forward curve. The swap curve will always be below the forward curve as long as the two curves are positive. This relationship results from the fact that the swap rate is the one fixed rate that causes the sum of the net present values of the fixed cash flows to equal the sum of the net present values of the floating flows.

Another difference between the instruments is the fact that once a swaption is exercised, the holder has entered into a swap. This swap will have been entered into at a favourable rate, but the holder can still lose money if the rates move against him. When a cap is exercised, the holder can never lose money.

Question 3: **Nov Paper**

Write short notes on any four of the following :

(a) Financial restructuring

(b) Cross border leasing

(c) Embedded derivatives

(d) Arbitrage operations

(e) Rolling settlement.

Answer

(a) **Financial Restructuring:** Financial restructuring, is carried out internally in the firm with the consent of its various stakeholders. Financial restructuring is a suitable mode of restructuring of corporate firms that have incurred accumulated sizable losses for / over a number of years. As a sequel, the share capital of such firms, in many cases, gets substantially eroded / lost; in fact, in some cases, accumulated losses over the years may be more than share capital, causing negative net

worth. Given such a dismal state of financial affairs, a vast majority of such firms are likely to have a dubious potential for liquidation. Can some of these Firms be revived ? Financial restructuring is one such a measure for the revival of only those firms that hold promise/prospects for better financial performance in the years to come. To achieve the desired objective, 'such firms warrant / merit a restart with a fresh balance sheet, which does not contain past accumulated losses and fictitious assets and shows share capital at its real/true worth.

(b) **Cross-Border Leasing:** Cross-border leasing is a leasing agreement where lessor and lessee are situated in different countries. This raises significant additional issues relating to tax avoidance and tax shelters. It has been widely used in some European countries, to arbitrage the difference in the tax laws of different countries. Cross-border leasing have been in practice as a means of financing infrastructure development in emerging nations. Cross-border leasing may have significant applications in financing infrastructure development in emerging nations - such as rail and air transport equipment, telephone and telecommunications, equipment, and assets incorporated into power generation and distribution systems and other projects that have predictable revenue streams.

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.

(c) Embedded Derivatives: An embedded derivative is a derivative instrument that is embedded in another contract - the host contract. The host contract might be a debt or equity instrument, a lease, an insurance contract or a sale or purchase contract.

Derivatives require being marked-to-market through the income statement, other than qualifying hedging Instruments. This requirement on embedded derivatives is designed to ensure that market-to-market through the income statement cannot be avoided by including embedding - a derivative in another contract or financial instrument that is not market-to market through the income statement.

An embedded derivative can arise from deliberate financial engineering and intentional shifting of certain risks between parties. Many embedded derivatives, however, arise inadvertently through market practices and common contracting arrangements. Even purchase and sale contracts that qualify for executory contract treatment may contain embedded

derivatives. An embedded derivative causes modification to a contract's cash flow, based on changes in a specified variable

(d) Arbitrage Operations: Arbitrage is the buying and selling of the same commodity in different markets. A number of pricing relationships exist in the foreign exchange market, whose violation would imply the existence of arbitrage opportunities - the opportunity to make a profit without risk or investment. These transactions refer to advantage derived in the transactions of foreign currencies by taking the benefits of difference in rates between two currencies at two different centers at the same time or of difference between cross rates and actual rates.

For example, a customer can gain from arbitrage operation by purchase of dollars in the local market at cheaper price prevailing at a point of time and sell the same for sterling in the London market. The Sterling will then be used for meeting his commitment to pay the import obligation from London.

(e) Rolling Settlement : SEBI introduced a new settlement cycle known as the 'rolling settlement cycle'. This cycle starts and ends on the same day and the settlement take place on the 'T+5' day, which is 5 business days from the date of the transaction. Hence, the transaction done on Monday will be settled on the following Monday and the transaction done on Tuesday will be settled on the following -Tuesday and so on. Hence unlike a BSE or NSE weekly settlement cycle, in the rolling settlement cycle, the decision has to be made at the conclusion of the trading session, on the same day, Rolling settlement cycles were introduced in both exchanges on January 12, 2000.

Internationally, most developed countries follow the rolling settlement system. For instance both the US and the UK follow a roiling settlement (T+3) system, while the German stock exchanges follow a (T+2) settlement cycle.

2009

Question 4: **May RTP**

Write Short Note on a) Debt Securitization b) Insider Trading c) REPO and REVERSE REPO d) Foreign Exchange Rate Risk

Ans:

(a) Debt Securitization

Debt Securitization is a process by which financial assets like loan receivables, mortgage backed receivables, credit card balances, hire purchase debtors, lease receivables, trade debtors etc are transformed into securities. It is basically a method of recycling of funds. Assets

generating steady cash flow are packaged together and against this asset pools market securities are issues. The process involved three functions :

(i) Origination : Against a loan, security of this kind of set of assets are placed to the financing company. However, credit worthiness of repayment of loan over its life are to be structured depending on the varying volume of each ingredients in the pool of asset.

(ii) Pooling : Similar loans or receivables are clubbed together to create an underlying pool of assets. This pool is transferred in favour of SPV (Special purpose vehicle), which acts as a trustee for the investor. Once, the assets are transferred they are held in the organizers portfolio.

(iii) Securitization : It is job of SPV to structure and issue the securities on the basis of asset pool. The securities carry coupon and expected maturity which can be asset based or mortgage based. These are generally sold to investors through merchant bankers. The investors interested in this type of securities are generally institutional investors like mutual fund, insurance companies etc.

(b) Insider Trading : Insider trading is buying or selling or dealing in securities of a listed company, by a director, member of management, an employee or any other person such as internal or statutory auditor, agent, analyst consultant etc who have knowledge of material, inside information not available to general public.

The insider trading is illegal as the person concern, by dint of his access to inside information about the company because of his direct or indirect involvement in the affairs of the company either at operation level or analysis level, makes profit in dealing with shares and other securities on the basis of secret information. This profit is considered to be illegal as the same is at the cost of general investors in the securities of the company and the persons involved in this kind of practice is punishable.

This unethical practice has caused serious concern in India and elsewhere in the world for the investors as the same results in huge losses to common investors and driving them away from capital market. In other words, loss of confidence of investors caused by insider trading has a damaging effect on creation of capital for the growth of corporate world.

(c) REPO and REVERSE REPO

There are money market transactions entered into by players in the money market such as commercial banks, financial institutions, large players like mutual fund but are in restricted use because of policy guidelines of RBI. The word REPO is abbreviation of a repurchase

option. An agreement by which a borrower sells certain acceptable securities to a lender against fund received and agrees to reverse the transaction at an agreed future date is the essential feature of a REPO transaction. In essence it is a contract of lending and difference between the prices of securities on two dates will represent the cost of fund which the borrower agrees to bear.

A single transaction as described above is a 'REPO' transaction when viewed from the point of the borrower-seller of securities ; the same transaction when viewed from the point of view of lender-buyer is understood as a 'REVERSE REPO'. Hence, essentially, there is no difference between "repo" and 'REVERSE REPO' transaction excepting that the identification is from a different point of view. The essential feature of Repo transaction are :

(i) A financial institution places certain securities (presently restricted to Treasury bills) with the buyer and borrows a certain amount of money.

(ii) On a given date specified in advance (between 14 days to 1 year) the entire transaction is reversed.

(iii) The difference between the purchase and sale price is the interest or gain to the buyer. Sometimes the seller may also gain from a transaction. This is when the buyer is in need of securities and initiates the transaction.

(d) Foreign Exchange Rate Risk: This risk relates to the uncertainty attached to the exchange rates between two currencies. For example, the amount borrowed in foreign currency is to be repaid in the same currency or in some other acceptable currency.

Thus if the foreign currency becomes stronger than (say) Indian rupees, the Indian borrower has to repay the loan in terms of more rupees than the rupees he obtained by way of loan. The extra rupees he pays is not due to an increase in interest rate but because of unfavourable exchange rate. Conversely he will gain if the rupee is stronger. The fluctuation in the exchange rate causes uncertainty and this uncertainty gives rise to exchange rate risk.

The following tools are available to cover exchange rate risk:

(i) Spot contracts.

(ii) Rupee forward contract.

(iii) Rupee roll over contract.

(iv) Cross-currency forward contract.

(v) Cross currency roll over contract.

(vi) Cross currency options.

(vii) Currency futures.

(viii) Currency and interest rate swaps.

(ix) Arbitrage.

Question 5: **NOV RTP**

Write a detailed note on the Forward Rate Agreement (FRA).

Ans:

A forward rate agreement (FRA) is an over-the-counter version of a short interest rate future. Primarily used as an inter-bank hedging instrument in the early 1980s, its use has since spread to a number of corporates as well. Although, as an over-the-counter, offbalance-sheet instrument, volume figures can only be guessed at, the FRA is very popular method of hedging interest rate risk, and volume in various currencies must run to many billions of US dollars annually.

A forward rate agreement is an agreement between two parties to protect themselves against future movements in interest rates. Under the contract, the two parties agree to an interest rate that applies to a notional loan or deposit of an agreed amount, which is to be drawn or placed on an agreed future date for a specified term.

In a forward rate agreement, the bank quoting prices agrees to pay its customer (a corporate or another bank) the difference resulting from a change in LIBOR (or another reference rate) in a specified direction compared with the agreed FRA rate, based on a notional principal amount loaned for a notional period of time. Note that this can involve LIBOR either rising or falling, as the bank will quote a two-way price to cater for either requirement. If LIBOR should move the other ways the customer must pay the bank. The payment to be made in either case is the present value of the difference in the two interest rates. It is unfortunately rather confusing that a hedger who buys a future is, in theory, agreeing to lend cash at the specified rate, whereas if he buys an FRA he is agreeing (in effect) to borrow cash at the specified rate.

Under an FRA

- The buyer (borrower) is the party seeking to protect itself against a rise in interest rates.
- The seller (lender) is the party seeking to protect itself against a fall in interest rates.

In August 1985, the British Bankers Association issued standard terms and conditions which now form the usual basis for deals in US dollars, sterling, Deutschemarks, Swiss francs and yen. The Australian Bankers Association has also produced a separate set of terms and conditions for domestic Australian FRAs reflecting the dominance of bank bills (a discount instrument) as the prevailing funding arrangement in their market.

By convention, FRA rates are quoted in terms of the time to the start and the time to the end of the notional loan period, as of now.

The main features of the FRA as follows:

- An FRA is a simple agreement between two parties, with details confirmed directly between themselves.
- An FRA achieves approximately the same result as futures or forward contracts, but offers much greater flexibility. Start dates, interest periods and notional principal amount are agreed by the two parties to the contract. An FRA can therefore be exactly tailored to suit a customer's specific requirements.

The customer agrees a future rate with a bank and at the beginning of the specific period (value date), receives or pays a cash sum representing the interest differential between the agreed rate and LIBOR. No initial or variation margins are involved.

- If the customer's view of the market changes, he can close out his FRA by taking out a reversing FRA (an equal and opposite FRA at a new price). The price of the reversing FRA will reflect the market rate for the period at the time of closing the hedge.

FRAs are widely used by corporates, especially in historically high and volatile interest rate countries, such as the UK and Australia, where FRAs are commonly used to hedge against the risk of rising interest rates by a company with a borrowing. In general, FRAs are used by corporates for the following broad purposes:

- To lock in the cost of borrowing on an existing floating-rate loan.
- To guarantee the rate of interest a company has to pay on future draw downs.
- To guarantee the interest rate earned on surplus funds for any period.

FRAs are available in any amount, generally from £500,000 or the equivalent upwards, and are now available in a broad range of currencies, including US dollars, sterling, Swiss Francs, Deutschemarks, French francs, yen, guilders and Australian dollars.

FRAs are widely quoted out to two years in Europe and US. Customers can transact for any period over one month, including 'broken' or non-standard dates. However, a customer may have to pay a wider spread for a broken-date FRA (such as 11/2 on 41/2). Users of FRAs

1. FRAs are far more widely used than futures by corporates. Usually, this is because corporates, being less interest-rate sensitive on the whole than financial institutions, do not place such a high value on the facility futures offer of being in and out of the market in minutes. The forward rate agreement provides corporate treasurers with approximately the same hedging benefits of futures, but with none of the technical and administrative difficulties.

2. Banks are also heavy users of the FRA market. The most common use of FRAs by banks is to iron out mismatches in the short-term structure of their assets and liabilities. For example, let's suppose a bank found that it has £100m of lending at six months (say at an average of 14%) versus £100m of three-month deposits (say at an average of 12%). That bank would be running the risk that its healthy 2% profit margin on the first three months might be eroded over the second three by a general rise in interest rates, which would force it to rollover its borrowing at a higher rate. It might therefore consider it prudent to match its exposures but would not wish (or be able) to do so by actually restructuring its loans and deposits. Instead, it could buy a three-on-six FRA which would lock in the return it would receive over the second three months, and synthetically create a more precise match of maturities.

   Bank quoting FRA prices all use the futures market to hedge themselves, calculating what proportions of the nearby and succeeding contracts to buy or sell to match their FRA positions. There is, as a result, a very close link between the futures and FRA markets.

Question

Write Short Notes on

(i) Drawbacks of investments in Mutual Funds

(ii) ESOS and ESPS

(iii) Factoring and Bill discounting

Ans.

(i) Drawbacks of investment in mutual funds

(a) There is no guarantee of return as some Mutual Funds may underperform and Mutual Fund Investment may depreciate in value which may even effect erosion / Depletion of principal amount

(b) Diversification may minimize risk but does not guarantee higher return.

(c) Mutual funds performance is judged on the basis of past performance record of various companies. But this cannot take care of or guarantee future performance.

(d) Mutual Fund cost is involved like entry load, exit load, fees paid to Asset Management Company etc.

(e) 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.

(f) MFs, systems do not maintain the kind of transparency, they should maintain

(g) Many MF scheme are, at times, subject to lock in period, therefore, deny the market drawn benefits

(h) At times, the investments are subject to different kind of hidden costs.

(i) Redressal of grievances, if any , is not easy

(ii) ESOS and ESPS

ESOS

1. Meaning

Employee Stock Option Scheme means a scheme under which the company grants option to employees

2. Auditors' Certificate

Auditors' Certificate to be placed at each AGM stating that the scheme has been implemented as per the guidelines and in accordance with the special resolution passed.

3. Transferability

It is not transferable.

4. Consequences of failure

The amount payable may be forfeited. If the options are not vested due to non-fulfillment of condition relating to vesting of option then the amount may be refunded to the employees.

5. Lock in period

Minimum period of 1 year shall be there between the grant and vesting of options. Company is free to specify the lock in period for the shares issued pursuant to exercise of option.

ESPS

1. Meaning

Employee Stock Purchase Scheme means a scheme under which the company offers shares to employees as a part of public issue.

2. Transferability

It is transferable after lock in period.

3. Lock in period

One year from the date of allotment. If the ESPS is part of public issue and the shares are issued to employees at the same price as in the public issue, the shares issued to employees pursuant to ESPS shall not be subject to any lock in.

(iii) Factoring and Bill discounting: The main differences between Factoring and Bill discounting are:

(1) While factoring is management of book-debts, bill discounting is a sort of borrowing from commercial banks.

(2) In factoring no grace period is given, whereas in bill discounting grace period is 3 days.

(3) For factoring there is no Specific Act, whereas in case of bill discounting Negotiable Instruments Act applies.

(4) Factoring is a portfolio of complementary financial services whereas bill discounting is usually on case to case basis.

(5) In factoring the basis of financing is turnover. Whereas in bill discounting it is the security provision as well as the requirement of finance which determine the amount of financing.

(6) In factoring the risk of bad debts is passed on to the factor, whereas in bill discounting it is still retained by the business

Question 6 : **Nov Paper**

What is the impact of GDRs on Indian Capital Market?

Ans:

Impact of Global Depository Receipts (GDRs) on Indian Capital Market

After the globalization of the Indian economy, accessibility to vast amount of resources was available to the domestic corporate sector. One such accessibility was in terms of raising financial resources abroad by internationally prudent companies. Among others, GDRs were the most important source of finance from abroad at competitive cost. Global

depository receipts are basically negotiable certificates denominated in US dollars, that represent a non- US company's publicly traded local currency (Indian rupee) equity shares. Companies in India, through the issue of depository receipts, have been able to tap global equity market to raise foreign currency funds by way of equity.

Since the inception of GDRs, a remarkable change in Indian capital market has been observed. Some of the changes are as follows:

(i) Indian capital market to some extent is shifting from Bombay to Luxemburg and other foreign financial centres.

(ii) There is arbitrage possibility in GDR issues. Since many Indian companies are actively trading on the London and the New York Exchanges and due to the existence of time differences, market news, sentiments etc. at times the prices of the depository receipts are traded at discounts or premiums to the underlying stock. This presents an arbitrage opportunity wherein the receipts can be bought abroad and sold in India at a higher price.

(iii) Indian capital market is no longer independent from the rest of the world. This puts additional strain on the investors as they now need to keep updated with worldwide economic events.

(iv) Indian retail investors are completely sidelined. Due to the placements of GDRs with Foreign Institutional Investor's on the basis free pricing, the retail investors can now no longer expect to make easy money on heavily discounted right/public issues.

(v) A considerable amount of foreign investment has found its way in the Indian market which has improved liquidity in the capital market.

(vi) Indian capital market has started to reverberate by world economic changes, good or bad.

(vii) Indian capital market has not only been widened but deepened as well.

(viii) It has now become necessary for Indian capital market to adopt international practices in its working including financial innovations.

Question 7

What are the limitations of Credit Rating?

Ans:

Limitations 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:

(a) Rating agencies getting more of their revenues from a single service or group.

(b) 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.

(c) 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.

2010

Question 8 : **May RTP**

Explain the various types of risks to which the Swap Dealer is exposed to.

Ans:

In the process of swap, the role of swap dealer is significant insofar as it brings together two counter-parties whose interests are complementary to each other. For this role, it takes a small part of the interest payment flow. Since the principal amount is large, even a small percentage of the interest

payment adds considerably to its profit. But, on the other hand, the swap dealer has to face a variety of risks. It is a fact that the swap dealers are professional bodies and they anticipate almost with certainty the changes in interest rate or the exchange rate. But there is every possibility that their anticipation proves wrong. In that case, they have to bear the interest rate exposure or the exchange rate exposure. In addition to these two forms of risk, there are some other forms of risk that they are exposed to. These different forms of risks as follows:

(a) Interest-rate Risk: Interest-rate risk arises when the interest rate on a particular loan fails to keep abreast of the movement of the market interest rate. Thus it can be said that the fixed loans under the swap carry higher risk. On the contrary, floating interest rate should not be risky because it changes with the changing profile of the money market. But it does carry risk at least between two reset dates when the interest rate of a particular loan may not be reset despite changes in the market interest rates.

The swap dealer is faced with the interest-rate risk, especially when it has a naked position in the swap. Suppose the swap dealer pays fixed-rate interest to the end-user or to the counter-party; and in exchange it receives LIBOR. If LIBOR moves to the swap dealer's disadvantage, it will have to pay more in form of interest. But the risk can be reduced if the swap dealer does not have a naked position and passes on the risk to another counter-party.

(b) Exchange-rate Risk: Changes in the exchange rate are a common affair in the foreign exchange market. If the swap dealer pays fixed rate of interest on a loan denominated in a currency which is going to depreciate, it will have to pay a greater amount of interest to the end-user. Here it may be noted that if the swap dealer faces both the interest-rate risk and the exchange-rate risk simultaneously, the quantum of risk will be very large. If the two risks are positively correlated, the risk will be still higher. But if they are negatively correlated or uncorrelated, the risk will not be so high.

(c) Credit Risk: Credit risk arises when a counter-party defaults payment to the swap dealer. In such cases, the contract is terminated. However, termination of the contract does not protect the swap dealer from loss. This is because the contract is terminated only with one counter-party. The other needs payment which the swap dealer has to make.

(d) Mismatch Risk: There are occasions when it is difficult for the swap dealer to find a perfect match for a counter-party. When a perfect match is not available, the swap dealer offers concessions to attract suitable counter-party. Any such concession causes loss to it. Sometimes after

giving concessions, perfect match is not available on different counts, such as notional principal, maturity, swap coupon, reset dates, etc. The swap dealer may have to pay more interest.

(e) Sovereign Risk: Sovereign risk arises when the government of a country to which one of the two counter-party belongs, puts restrictions on the flow of foreign exchange. This entails upon payments received by the swap dealer. It should not be called to default risk or credit risk because the counter-party is willing to make payments. It is the governmental restriction that comes in the way.

(f) Delivery Risk: Delivery risk arises when the two counter-parties are located in two different time zones so that the date of maturity differs by one day. However, the swap dealer is not very much affected by it.

Question 9

Write Short Notes on

(i) Enumerate the basic differences between cash and derivatives market.

(ii) Application of Double taxation agreements on Global depository receipts.

(iii) Repo and a Reverse Repo.

Ans:

(i) The basic differences between Cash and the Derivative market are enumerated below:-

(a) In cash market tangible assets are traded whereas in derivative market contracts based on tangible or intangibles assets like index or rates are traded.

(b) In cash market, we can purchase even one share whereas in Futures and Options minimum lots are fixed.

(c) Cash market is more risky than Futures and Options segment because in "Futures and Options" risk is limited upto 20%.

(d) Cash assets may be meant for consumption or investment. Derivative contracts are for hedging, arbitrage or speculation.

(e) The value of derivative contract is always based on and linked to the underlying security. Though this linkage may not be on point-to-point basis.

(f) In the cash market, a customer must open securities trading account with a securities depository whereas to trade futures a customer must open a future trading account with a derivative broker.

(g) Buying securities in cash market involves putting up all the money upfront whereas buying futures simply involves putting up the margin money.

(h) With the purchase of shares of the company in cash market, the holder becomes part owner of the company. While in future it does not happen.

(ii) (a) During the period of judiciary ownership of shares in the hands of the overseas depository bank, the provisions of avoidance of double taxation agreement entered into by the Government of India with the country of residence of the overseas depository bank will be applicable in the matter of taxation of income from dividends from the underline shares and the interest on foreign currency convertible bounds.

(b) During the period if any, when the redeemed underline shares are held by the non-residence investors on transfer from judiciary ownership of the overseas depository bank, before they are sold to resident purchasers, the avoidance of double taxation agreement entered into by the government of India with the country of residence of the non-resident investor will be applicable in the matter of taxation of income from dividends from the underline shares, or interest on foreign currency convertible bonds or any capital gains arising out of the transfer of the underline shares.

(iii) A Repo deal is one where eligible parties enter into a contract another to borrow money at a predetermined rate against the collateral of eligible security for a specified period of time. The legal title of the security does changes. The motive of the deal is to fund a position. Though the mechanics essentially remains the same and the contract virtually remains the same, in case of reverse Repo deal the underlying motive of the deal is to meet the security/instrument specific needs or to lend the money. Indian Repo market is governed by Reserve Bank of India. At present Repo is permitted between 64 players against Central and State Government Securities (including T-Bills) at Mumbai.

Question 10 : **May paper**

Briefly explain what is an exchange traded fund.

Ans:

Exchange Traded Funds (ETFs) were introduced in US in 1993 and came to India around 2002. ETF is a hybrid product that combines the features of

an index mutual fund and stock and hence, is also called index shares. These funds are listed on the stock exchanges and their prices are linked to the underlying index. The authorized participants act as market makers for ETFs.

ETF can be bought and sold like any other stock on stock exchange. In other words, they can be bought or sold any time during the market hours at prices that are expected to be closer to the NAV at the end of the day. NAV of an ETF is the value of the underlying component of the benchmark index held by the ETF plus all accrued dividends less accrued management fees.

There is no paper work involved for investing in an ETF. These can be bought like any other stock by just placing an order with a broker.

Some other important features of ETF are as follows:

1. It gives an investor the benefit of investing in a commodity without physically purchasing the commodity like gold, silver, sugar etc.
2. It is launched by an asset management company or other entity.
3. The investor does not need to physically store the commodity or bear the costs of upkeep which is part of the administrative costs of the fund.

Question 11:

List and briefly explain the main functions of an investment bank

Ans:

Main Functions of an Investment Bank

The following are, briefly, a summary of investment banking functions:

- **Managing an IPO (Initial Public Offering):** This includes hiring managers to the issue, due diligence and marketing the issue.
- **Issue of debt:** When a company requires capital, it sometimes chooses to issue public debt instead of equity.
- **Mergers and Acquisitions:** Acting as intermediary between Acquirer and target company
- **Private Placement:** A private placement differs little from a public offering aside from the fact that a private placement involves a firm selling stock or equity to private investors rather than to public investors.
- **Financial Restructuring:** When a company cannot pay its cash obligations – it goes bankrupt. In this situation, a company can, of course, choose to simply shut down operations and walk away or, it can also restructure and remain in business.

Question 12 :Nov RTP- similar to questions already discussed Nov Paper

Question 13

(a) (i) What is the meaning of NBFC?

(ii) What are the different categories of NBFCs?

(iii) Explain briefly the regulation of NBFCs under RBI Act.

(b) Explain the concept 'Zero date of a Project' in project management.

(c) Give the meaning of 'Caps, Floors and Collars' options.

(d) Distinguish between Open-ended and Close-ended Schemes.

(e) Explain CAMEL model in credit rating.

Ans:

(a) (i) Meaning of NBFC (Non Banking Financial Companies) NBFC stands for Non-Banking financial institutions, and these are regulated by the Reserve Bank of India under RBI Act, 1934. NBFC's principal business is receiving of deposits under any schme or arrangement or in any other manner or lending on any other manner. They normally provide supplementary finance to the corporate sector.

(ii) Different categories of NBFC are

1. Loan companies
2. Investment Companies.
3. Hire Purchase Finance Companies.
4. Equipment Leasing Companies.
5. Mutual Benefit Finance Companies.
6. Housing Finance Companies
7. Miscellaneous Finance Companies

(iii) Regulation of NBFCs-RBI Act

RBI regulates the NBFC through the following measures:

(a) Mandatory Registration.

(b) Minimum owned funds.

(c) Only RBI authorized NBFCs can accept public deposits.

(d) RBI prescribes the ceiling of interest rate.

(e) RBI prescribes the period of deposit.

(f) RBI prescribes the prudential norms regarding utilization of funds.

(g) RBI directs their investment policies.

(h) RBI inspectors conduct inspections of such companies.

(i) RBI prescribes the points which should be examined and reported by the auditors of such companies.

(j) RBI prescribes the norms for preparation of Accounts particularly provisioning of possible losses.

(k) If any of interest or principal or both is/ are due from any customer for more than 6 months, the amount is receivable (interest or principal or both) is termed as non-performing asset.

(b) Zero Date of a Project means a date is fixed from which implementation of the project begins. It is a starting point of incurring cost. The project completion period is counted from the zero date. Pre-project activities should be completed before zero date. The pre-project activities should be completed before zero date. The pre-project activities are:

a. Identification of project/product

b. Determination of plant capacity

c. Selection of technical help/collaboration

d. Selection of site.

e. Selection of survey of soil/plot etc.

f. Manpower planning and recruiting key personnel

g. Cost and finance scheduling.

(c) 'Cap Floors & Collars' options

Cap: It is a series of call options on interest rate covering a medium-to-long term floating rate liability. Purchase of a Cap enables the a borrowers to fix in advance a maximum borrowing rate for a specified amount and for a specified duration, while allowing him to avail benefit of a fall in rates. The buyer of Cap pays a premium to the seller of Cap.

Floor: It is a put option on interest rate. Purchase of a Floor enables a lender to fix in advance, a minimal rate for placing a specified amount for a specified duration, while allowing him to avail benefit of a rise in rates. The buyer of the floor pays the premium to the seller.

Collars: It is a combination of a Cap and Floor. The purchaser of a Collar buys a Cap and simultaneously sells a Floor. A Collar has the effect of locking its purchases into a floating rate of interest that is bounded on both high side and the low side.

(d) Open Ended and Close Ended Schemes

Open Ended Scheme do not have maturity period. These schemes are available for subscription and repurchase on a continuous basis. Investor can conveniently buy and sell unit. The price is calculated and declared on daily

basis. The calculated price is termed as NAV. The buying price and selling price is calculated with certain adjustment to NAV. The key future of the scheme is liquidity.

Close Ended Scheme has a stipulated maturity period normally 5 to 10 years. The Scheme is open for subscription only during the specified period at the time of launce of the scheme. Investor can invest at the time of initial issue and thereafter they can buy or sell from stock exchange where the scheme is listed. To provide an exit rout some close ended schemes give an option of selling bank (repurchase) on the basis of NAV. The NAV is generally declared on weekly basis.

(e) CAMEL Model in Credit Rating

Camel stands for Capital, Assets, Management, Earnings and Liquidity. The CAMEL model adopted by the rating agencies deserves special attention, it focuses on the following aspects-

(i) Capital- Composition of external funds raised and retained earnings, fixed dividends component for preference shares and fluctuating dividends component for equity shares and adequacy of long term funds adjusted to gearing levels, ability of issuer to raise further borrowings.

(ii) Assets- Revenue generating capacity of existing/proposed assets, fair values, technological/physical obsolescence, linkage of asset values to turnover, consistency, appropriation of methods of depreciation and adequacy of charge to revenues, size, ageing and recoverability of monetary assets like receivables and its linkage with turnover.

(iii) Management- Extent of involvement of management personnel, team-work, authority, timeliness, effectiveness and appropriateness of decision making along with directing management to achieve corporate goals.

(iv) Earnings- Absolute levels, trends, stability, adaptability to cyclical fluctuations, ability of the entity to service existing and additional debts proposed.

(v) Liquidity- Effectiveness of working capital management, corporate policies for stock and creditors, management and the ability of the corporate to meet their commitment in the short run.

These five aspects form the five core bases for estimating credit worthiness of an issuer which leads to the rating of an instrument. Rating agencies determine the pre-dominance of positive/negative aspects under

each of these five categories and these are factored in for making the overall rating decision

2011

Question 14 : **May RTP**

Distinguish between

(a) Cash and Derivative Market

(b) Systematic Risk and Unsystematic Risk

(c) Forfeiting and Factoring

(d) Forward and Future Contracts

Ans:

a) Following are main differences between Cash Market and Derivative Market.

(i) In cash market tangible assets are traded whereas in derivative market contracts based on tangible or intangibles assets like index or rates are traded.

(ii) In cash market, we can purchase even one share whereas in Futures and Options minimum lots are fixed.

(iii) Cash market is more risky than Futures and Options segment because in "Futures and Options" risk is limited upto 20%.

(iv) Cash assets may be meant for consumption or investment. Derivative

contracts are for hedging, arbitrage or speculation.

(v) The value of derivative contract is always based on and linked to the underlying security. Though this linkage may not be on point-to-point basis.

(vi) In the cash market, a customer must open securities trading account with a securities depository whereas to trade futures a customer must open a future trading account with a derivative broker.

(vii) Buying securities in cash market involves putting up all the money upfront whereas buying futures simply involves putting up the margin money.

(viii) With the purchase of shares of the company in cash market, the holder becomes part owner of the company. While in future it does not happen.

(b) Systematic risk refers to the variability of return on stocks or portfolio associated with changes in return on the market as a whole. It arises due

to risk factors that affect the overall market such as changes in the nations' economy, tax reform by the Government or a change in the world energy situation. These are risks that affect securities overall and, consequently, cannot be diversified away. This is the risk which is common to an entire class of assets or liabilities. The value of investments may decline over a given time period simply because of economic changes or other events that impact large portions of the market. Asset allocation and diversification can protect against systematic risk because different portions of the market tend to underperform at different times. This is also called market risk. Unsystematic risk however, refers to risk unique to a particular company or industry. It is avoidable through diversification. This is the risk of price change due to the unique circumstances of a specific security as opposed to the overall market. This risk can be virtually eliminated from a portfolio through diversification.

(c) Forfeiting was developed to finance medium to long term contracts for financing capital goods. Forfeiting is a mechanism of financing exports. This is a form of fixed rate finance which involves the purchase by the forfeiture of trade receivables normally in the form of trade bills of exchange or promissory notes, accepted by the buyer with the endorsement or guarantee of a bank in the buyer's country.

The benefits are that the exporter can obtain full value of his export contract on or near shipment without recourse. The importer on the other hand has extended payment terms at fixed rate finance.

The forfeiture takes over the buyer and country risks. Forfeiting provides a real alternative to the government backed export finance schemes.

Factoring can however, broadly be defined as an agreement in which receivables arising out of sale of goods/services are sold by a "firm" (client) to the "factor" (a financial intermediary) as a result of which the title to the goods/services represented by the said receivables passes on to the factor. Henceforth, the factor becomes responsible for all credit control, sales accounting and debt collection from the buyer(s). In a full service factoring concept (without recourse facility) if any of the debtors fails to pay the dues as a result of his financial instability / insolvency / bankruptcy, the factor has to absorb the losses.

(d) Distinction between forward and futures contracts

1. Trading: Forward contracts are traded on personal basis or on telephone or otherwise. Futures contracts are traded in a competitive arena.

2. Size of contract: Forward contracts are individually tailored and have no standardised size. Futures contracts are standardised in terms of quantity or amount as the case may be.
3. Organised exchanges: Forward contracts are traded in an over the counter market. Futures contracts are traded on organised exchanges with a designated physical location.
4. Settlement: Forward contracts settlement takes place on the date agreed upon between the parties. Futures contracts settlements are made daily via exchange's clearing house.
5. Delivery date: Forward contracts may be delivered on the dates agreed upon and in terms of actual delivery. Futures contracts delivery dates are fixed on cyclical basis and hardly takes place. However, it does not mean that there is no actual delivery.
6. Transaction costs: Cost of forward contracts is based on bid – ask spread. Futures contracts entail brokerage fees for buy and sell orders.
7. Marking to market: Forward contracts are not subject to marking to market. Futures contracts are subject to marking to market in which the loss profit is debited or credited in the margin account on daily basis due to change in price.
8. Margins: Margins are not required in forward contract. In futures contracts every participant is subject to maintain margin as decided by the exchange authorities.
9. Credit Risk: In forward contracts credit risk is borne by each party and, therefore, every party has to bother for the creditworthiness of the counter – party.

In futures contracts the transaction is a two way transaction, hence the parties need not to bother for the creditworthiness of each party.

10. Liability extent: In forward contracts the liability happens to be unlimited because market fluctuation may be wide.

In Futures Contract the extent of loss/profit is known every next day and depending on the risk taking capacity of the party, exposure may be limited.

Question 15 : **May paper**

(a) Zero coupon bonds

(b) Interest swap

(c) Inter-Bank Participation Certificate

(d) Meaning and Advantages of Netting

(e) Nostro, Vostro and Loro Accounts

Ans:

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

(b) A swap is a contractual agreement between two parties to exchange, or "swap," future payment streams based on differences in the returns to different securities or changes in the price of some underlying item. Interest rate swaps constitute the most common type of swap agreement. In an interest rate swap, the parties to the agreement, termed the swap counterparties, agree to exchange payments indexed to two different interest rates. Total payments are determined by the specified notional principal amount of the swap, which is never actually exchanged. Financial intermediaries, such as banks, pension funds, and insurance companies, as well as non-financial firms use interest rate swaps to effectively change the maturity of outstanding debt or that of an interest-bearing asset. Swaps grew out of parallel loan agreements in which firms exchanged loans denominated in different currencies.

(c) The IBPCs are short-term instruments to even-out the short-term liquidity within the banking system. The primary objective is to provide some degree of flexibility in the credit portfolio of banks and to smoothen the consortium arrangements. The IBPC can be issued by scheduled commercial bank and can be subscribed to by any commercial bank. The IBPC is issued against an underlying advance, classified standard and the aggregate amount of participation in any account time issue. During the currency of the participation, the aggregate amount of participation should be covered by the outstanding balance in account.

The participation can be issued in two types, viz. with and without risk to the lender. While the participation without it can be issued for a period not exceeding 90 days. Participation is now with risk for a period between 91 days and 180 days. The interest rate on IBPC is freely determined in the market. The certificates are neither transferable nor

prematurely redeemable by the issuing bank. In the case of the bank issuing IBPC with risk, the aggregate amount of participation would be reduced from the aggregate advance outstanding.

The scheme is beneficial both to the issuing and participating banks. The issuing bank can secure funds against advances without actually diluting its asset-mix. A bank having the highest loans to total asset ratio and liquidity bind can square the situation by issuing IBPCs. To the lender, it provides an opportunity to deploy the short-term surplus funds in a secured and profitable manner.

(d) It is a technique of optimising cash flow movements with the combined efforts of the subsidiaries thereby reducing administrative and transaction costs resulting from currency conversion. There is a co-ordinated international interchange of materials, finished products and parts among the different units of MNC with many subsidiaries buying /selling from/to each other. Netting helps in minimising the total volume of intercompany fund flow.

Advantages derived from netting system includes:

1) Reduces the number of cross-border transactions between subsidiaries thereby decreasing the overall administrative costs of such cash transfers

2) Reduces the need for foreign exchange conversion and hence decreases transaction costs associated with foreign exchange conversion.

3) Improves cash flow forecasting since net cash transfers are made at the end of each period

4) Gives an accurate report and settles accounts through co-ordinated efforts among all subsidiaries.

(e) In interbank transactions, foreign exchange is transferred from one account to another account and from one centre to another centre. Therefore, the banks maintain three types of current accounts in order to facilitate quick transfer of funds in different currencies. These accounts are Nostro, Vostro and Loro accounts meaning “our”, “your” and “their”. A bank’s foreign currency account maintained by the bank in a foreign country and in the home currency of that country is known as Nostro Account or “our account with you”. For example, An Indian bank’s Swiss franc account with a bank in Switzerland. Vostro account is the local currency account maintained by a foreign bank/branch. It is also called “your account with us”. For example, Indian rupee account maintained by a bank in Switzerland with a bank in India. The Loro account is an account wherein a bank remits funds in foreign currency to another bank for credit to an account of a third bank.

Question 16 : **Nov RTP**

Write a short note on

(a) Random Walk Theory

(b) Three forms of Efficient Market Hypothesis

(c) Green Shoe Option

(d) Functions of Merchant Bankers

(e) Sensitivity analysis in Capital Budgeting

Ans:

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

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

(i) Prices of shares in stock market can never be predicted. The reason is that the price trends are not the result of any underlying factors, but that they represent a statistical expression of past data.

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

(b) The EMH theory is concerned with speed with which information effects the prices of securities. As per the study carried out technical analyst it was observed that information is slowly incorporated in the price and it provides an opportunity to earn excess profit. However, once the information is incorporated then investor can not earn this excess profit.

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

Weak form efficiency – Price reflect all information found in the record of past prices and volumes.

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

Strong form efficiency – Price reflect all available information public as well as private.

(c) It is an option that allows the underwriting of an IPO to sell additional shares if the demand is high. It can be understood as an option that allows the underwriter for a new issue to buy and resell additional shares upto a certain pre-determined quantity.

Looking to the exceptional interest of investors in terms of over-subscription of the issue, certain provisions are made to issue additional shares or bonds to underwriters for distribution. The issuer authorises for additional shares or bonds. In common parlance, it is the retention of over-subscription to a certain extent. It is a special feature of euro-issues. In euro-issues the international practices are followed.

In the Indian context, green shoe option has a limited connotation. SEBI guidelines governing public issues contain appropriate provisions for accepting over-subscriptions, subject to a ceiling, say, 15 per cent of the offer made to public. In certain situations, the green-shoe option can even be more than 15 per cent.

Examples:

- IDBI had come–up earlier with their Flexi bonds (Series 4 and 5). This is a debt instrument. Each of the series was initially floated for ` 750 crores.

  SEBI had permitted IDBI to retain an excess of an equal amount of ` 750 crores.
- ICICI had launched their first tranche of safety bonds through unsecured redeemable debentures of ` 200 crores, with a green shoe option for an identical amount.
- Infosys Technologies has exercised the green shoe option to purchase upto 7,82,000 additional ADSs representing 3,91,000 equity shares. This offer initially involved 5.22 million depository shares, representing 2.61 million domestic equity shares.

(d) The basic function of merchant banker or investment banker is marketing of corporate and other securities. In the process, he performs a number of services concerning various aspects of marketing, viz., origination, underwriting, and distribution, of securities. During the regime of erstwhile Controller of Capital Issues in India, when new issues were priced at a significant discount to their market prices, the merchant banker's job was limited to ensuring press coverage and dispatching subscription forms to every corner of the country. Now, merchant bankers are designing innovative instruments and perform a number of other services both for the issuing companies as well as the investors. The activities or services performed by merchant bankers, in India, today include:

(a) Project promotion services.

(b) Project finance.

(c) Management and marketing of new issues.

(d) Underwriting of new issues.

(e) Syndication of credit.

(f) Leasing services.

(g) Corporate advisory services.

(h) Providing venture capital.

(i) Operating mutual funds and off shore funds.

(j) Investment management or portfolio management services.

(k) Bought out deals.

(l) Providing assistance for technical and financial collaborations and joint ventures.

(m) Management of and dealing in commercial paper.

(n) Investment services for non-resident Indians.

(e) Sensitivity analysis is used in Capital budgeting for more precisely measuring the risk. It helps in assessing information as to how sensitive are the estimated parameters of the project such as cash flows, discount rate, and the project life to the estimation errors. Future being always uncertain and estimations are always subject to error, sensitivity analysis takes care of estimation errors by using a number of possible outcomes in evaluating a project. The methodology adopted in sensitivity analysis is to evaluate a project by using a number of estimated cash flows so as to provide to the decision maker an insight into the variability of outcome. Thus, it is a technique of risk analysis which studies the responsiveness

of a criterion of merit like NPV or IRR to variation in underlying factors like selling price, quantity sold, returns from an investment etc.

Sensitivity analysis answers questions like,

(i) What happens to the present value (or some other criterion of merit) if flows are, say ` 50,000 than the expected ` 80,000?

(ii) What will happen to NPV if the economic life of the project is only 3 years rather than expected 5 years?

Therefore, wherever there is an uncertainty, of whatever type, the sensitivity analysis plays a crucial role. However, it should not be viewed as the method to remove the risk or uncertainty, it is only a tool to analyse and measure the risk and uncertainty. In terms of capital budgeting the possible cash flows are based on three assumptions:

(a) Cash flows may be worst (pessimistic)

(b) Cash flows may be most likely.

(c) Cash flows may be most optimistic.

Sensitivity analysis involves three steps

(1) Identification of all those variables having an influence on the project's NPV or IRR.

(2) Definition of the underlying quantitative relationship among the variables.

(3) Analysis of the impact of the changes in each of the variables on the NPV of the project.

The decision maker, in sensitivity analysis always asks himself the question – what if?

Question 17 : **Nov Paper**

Write short notes on of the followings:

(a) Capital Rationing

(b) Embedded derivatives

(c) Depository participant

(d) Money market mutual fund

(e) Leading and lagging

(f) Take over by reverse bid

Ans:

(a) Capital Rationing: When there is a scarcity of funds, capital rationing is resorted to. Capital rationing means the utilization of existing funds in most profitable manner by selecting the acceptable projects in the descending order or ranking with limited available funds. The firm must be able to maximize the profits by combining the most profitable proposals. Capital rationing may arise due to (i) external factors such as high borrowing rate or non-availability of loan funds due to constraints of Debt-Equity Ratio; and (ii) Internal Constraints Imposed by management. Project should be accepted as a whole or rejected. It cannot be accepted and executed in piecemeal.

IRR or NPV are the best basis of evaluation even under Capital Rationing situations. The objective is to select those projects which have maximum and positive NPV. Preference should be given to interdependent projects. Projects are to be ranked in the order of NPV. Where there is multi-period Capital Rationing, Linear Programming Technique should be used to maximize NPV. In times of Capital Rationing, the investment policy of the company may not be the optimal one.

(b) A derivative is defined as a contract that has all the following characteristics: Its value changes in response to a specified underlying, e.g. an exchange rate, interest rate or share price;

It requires little or no initial net investment;

It is settled at a future date;

The most common derivatives are currency forwards, futures, options, interest rate swaps etc.

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

An embedded derivative can arise from deliberate financial engineering and intentional shifting of certain risks between parties. Many embedded derivatives, however, arise inadvertently through market practices and common contracting arrangements. Even purchase and sale contracts that qualify for executory contract treatment may contain embedded derivatives. An embedded derivative causes modification to a contract's cash flow, based on changes in a specified variable.

(c) **Depository Participants:** Under this system, the securities (shares, debentures, bonds, Government Securities, MF units etc.) are held in electronic form just like cash in a bank account. To speed up the transfer mechanism of securities from sale, purchase, transmission, SEBI introduced Depository Services also known as Dematerialization of listed securities. It is the process by which certificates held by investors in physical form are converted to an equivalent number of securities in electronic form. The securities are credited to the investor's account maintained through an intermediary called Depository Participant (DP). Shares/Securities once dematerialized lose their independent identities. Separate numbers are allotted for such dematerialized securities. Organization holding securities of investors in electronic form and which renders services related to transactions in securities is called a Depository. A depository holds securities in an account, transfers securities from one account holder to another without the investors having to handle these in their physical form. The depository is a safe keeper of securities for and on behalf of the investors. All corporate benefits such as Dividends, Bonus, Rights etc. are issued to security holders as were used to be issued in case of physical form.

(d) An important part of financial market is Money market. It is a market for short-term money. It plays a crucial role in maintaining the equilibrium between the short-term demand and supply of money. Such schemes invest in safe highly liquid instruments included in commercial papers certificates of deposits and government securities.

Accordingly, the Money Market Mutual Fund (MMMF) schemes generally provide high returns and highest safety to the ordinary investors. MMMF schemes are active players of the money market. They channallize the idle short funds, particularly of corporate world, to those who require such funds. This process helps those who have idle funds to earn some income without taking any risk and with surety that whenever they will need their funds, they will get (generally in maximum three hours of time) the same. Short-term/emergency requirements of various firms are met by such Mutual Funds. Participation of such Mutual Funds provide a boost to money market and help in controlling the volatility.

(e) Leading means advancing a payment i.e. making a payment before it is due. Lagging involves postponing a payment i.e. delaying payment beyond its due date. In forex market Leading and lagging are used for two purposes:-

(1) Hedging foreign exchange risk: A company can lead payments required to be made in a currency that is likely to appreciate. For example, a company has to pay $100000 after one month from today. The company

apprehends the USD to appreciate. It can make the payment now. Leading involves a finance cost i.e. one month's interest cost of money used for purchasing $100000.

A company may lag the payment that it needs to make in a currency that it is likely to depreciate, provided the receiving party agrees for this proposition. The receiving party may demand interest for this delay and that would be the cost of lagging.

Decision regarding leading and lagging should be made after considering (i) likely movement in exchange rate (ii) interest cost and (iii) discount (if any).

(2) Shifting the liquidity by modifying the credit terms between inter-group entities: For example, A Holding Company sells goods to its 100% Subsidiary. Normal credit term is 90 days. Suppose cost of funds is 12% for Holding and 15% for Subsidiary. In this case the Holding may grant credit for longer period to Subsidiary to get the best advantage for the group as a whole. If cost of funds is 15% for Holding and 12% for Subsidiary, the Subsidiary may lead the payment for the best advantage of the group as a whole. The decision regarding leading and lagging should be taken on the basis of cost of funds to both paying entity and receiving entity. If paying and receiving entities have different home currencies, likely movements in exchange rate should also be considered.

(f) Generally, a big company takes over a small company. When the smaller company gains control of a larger one then it is called "Take-over by reverse bid". In case of reverse take-over, a small company takes over a big company. This concept has been successfully followed for revival of sick industries.

The acquired company is said to be big if any one of the following conditions is satisfied:

(i) The assets of the transferor company are greater than the transferee company;

(ii) Equity capital to be issued by the transferee company pursuant to the acquisition exceeds its original issued capital, and

(iii) The change of control in the transferee company will be through the introduction of minority holder or group of holders.

Reverse takeover takes place in the following cases:

(1) When the acquired company (big company) is a financially weak company

(2) When the acquirer (the small company) already holds a significant proportion of shares of the acquired company (small company)

(3) When the people holding top management positions in the acquirer company want to be relived off of their responsibilities.

The concept of take-over by reverse bid, or of reverse merger, is thus not the usual case of amalgamation of a sick unit which is non-viable with a healthy or prosperous unit but is a case whereby the entire undertaking of the healthy and prosperous company is to be merged and vested in the sick company which is non-viable.

2012

Question 18 : **May RTP**

Write a short note on

(a) Financial Lease

(b) Difference between Stock Index Future and Equity Option

(c) Embedded Derivatives

(d) 100% Book Building Process

(e) Factors affecting Economic Analysis

Ans:

(a) Financial Lease: Financial lease agreement is a long-term arrangement, which is irrevocable during the primary lease period which is generally the full economic life of the leased asset. Under this arrangement lessor is assured to realize the cost of purchasing the leased asset, cost of financing it and other administrative expenses as well as his profit by way of lease rent during the initial (primary) period of leasing itself. Financial lease involves transferring almost all the risks incidental to ownership and benefits arising there from except the legal title to the lessee against his irrevocable undertaking to make unconditional payments to the lessor as per agreed schedule. This is a closed end arrangement with no option to lessee to terminate the lease agreement subsequently. In such lease, the lessee has to bear insurance, maintenance and other related costs. The choice of asset and its supplier is generally left to the lessee in such transactions. The variants under financial lease are as under:

- Lease with purchase option-where the lessee has the right to purchase the leased assets after the expiry of initial lease period at an agreed price.
- Lease with lessee having residual benefits-where the lessee has the right to share the sale proceeds of the asset after expiry of initial lease period and/or to renew the lease agreement at a lower rental.

(b) Difference between Stock Index Future and Equity Option: Investing in stock futures differs from investing in equity options contracts in several ways:

- In a long options position, the investor has the right but not the obligation to purchase or deliver stock. In a long future position, the investor is obligated to deliver the stock.
- Options traders use a mathematical factor, the delta that measures the relationship between the options premium and the price of the underlying stock. At times, an options contract's value may fluctuate independently of the stock price. By contrast, the future contract will much more closely follow the movement of the underlying stock.

(c) Embedded Derivatives: An embedded derivative is a derivative instrument that is embedded in another contract – the host contract. The host contract might be a debt or equity instrument, a lease, an insurance contract or a sale or purchase contract.

Derivatives require to be marked-to-market through the income statement, other than qualifying hedging instruments. This requirement on embedded derivatives are designed to ensure that mark-to-market through the income statement cannot be avoided by including - embedding - a derivative in another contract or financial instrument that is not marked-to market through the income statement.

An embedded derivative can arise from deliberate financial engineering and intentional shifting of certain risks between parties. Many embedded derivatives, however, arise inadvertently through market practices and common contracting arrangements. Even purchase and sale contracts that qualify for executory contract treatment may contain embedded derivatives. An embedded derivative causes modification to a contract's cash flow, based on changes in a specified variable.

(d) 100% Book Building Process: In an issue of securities to the public through a prospectus, the option for 100% book building is available to any issuer company. The issue of capital should be ` 25 crore and above.

Reservation for firm allotment to the extent of the percentage specified in the relevant SEBI guidelines can be made only to promoters, 'permanent employees of the issuer company and in the case of new company to the permanent employees of the promoting company'. It can also be made to shareholders of the promoting companies, in the case of new company and shareholders of group companies in the case of existing company either on a competitive basis or on a firm allotment basis.

(e) Factors affecting Economic Analysis: Some of the economy wide factors are discussed as under:

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

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

(iii) Inflation: Inflation is measured in terms of either wholesale prices (the Wholesale Price Index or WPI) or retail prices (Consumer Price Index or CPI). The demand in some industries, particularly the consumer products industries, is significantly influenced by the inflation rate.

Therefore, firms in these industries make continuous assessment about inflation rates likely to prevail in the near future so as to fine-tune their pricing, distribution and promotion policies to the anticipated impact of inflation on demand for their products.

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

Question 19 : **May paper**

Write short notes on any four of the following:

(a) Zero coupon bonds

(b) Interest swap

(c) Inter-Bank Participation Certificate

(d) Meaning and Advantages of Netting

(e) Nostro, Vostro and Loro Accounts

Ans:

(a) As name indicates these bonds do not pay interest during the life of the bonds. Instead, zero coupon bonds are issued at discounted price to their face value, which is the amount a bond will be worth when it matures or comes due. When a z matures, the investor will receive one lump sum (face value) equal to the initial investment plus interest that has been accrued on the investment made. The maturity dates on zero coupon bonds are usually long term. These maturity dates allow an investor for a long range planning. Zero coupon bonds issued by banks, government

and private sector companies. However, bonds issued by corporate sector carry a potentially higher degree of risk, depending on the financial strength of the issuer and longer maturity period, but they also provide an opportunity to achieve a higher return.

(b) A swap is a contractual agreement between two parties to exchange, or "swap," future payment streams based on differences in the returns to different securities or changes in the price of some underlying item. Interest rate swaps constitute the most common type of swap agreement. In an interest rate swap, the parties to the agreement, termed the swap counterparties, agree to exchange payments indexed to two different interest rates. Total payments are determined by the specified notional principal amount of the swap, which is never actually exchanged. Financial intermediaries, such as banks, pension funds, and insurance companies, as well as non-financial firms use interest rate swaps to effectively change the maturity of outstanding debt or that of an interest-bearing asset. Swaps grew out of parallel loan agreements in which firms exchanged loans denominated in different currencies.

(c) The IBPCs are short-term instruments to even-out the short-term liquidity within the banking system. The primary objective is to provide some degree of flexibility in the credit portfolio of banks and to smoothen the consortium arrangements. The IBPC can be issued by scheduled commercial bank and can be subscribed to by any commercial bank. The IBPC is issued against an underlying advance, classified standard and the aggregate amount of participation in any account time issue. During the currency of the participation, the aggregate amount of participation should be covered by the outstanding balance in account.

The participation can be issued in two types, viz. with and without risk to the lender. While the participation without it can be issued for a period not exceeding 90 days. Participation is now with risk for a period between 91 days and 180 days.

The interest rate on IBPC is freely determined in the market. The certificates are neither transferable nor prematurely redeemable by the issuing bank. In the case of the bank issuing IBPC with risk, the aggregate amount of participation would be reduced from the aggregate advance outstanding.

The scheme is beneficial both to the issuing and participating banks. The issuing bank can secure funds against advances without actually diluting its asset-mix. A bank having the highest loans to total asset ratio and liquidity bind can square the situation by issuing IBPCs. To the lender, it provides an opportunity to deploy the short-term surplus funds in a secured and profitable manner.

(d) It is a technique of optimising cash flow movements with the combined efforts of the subsidiaries thereby reducing administrative and transaction costs resulting from currency conversion. There is a co-ordinated international interchange of materials, finished products and parts among the different units of MNC with many subsidiaries buying /selling from/to each other. Netting helps in minimising the total volume of intercompany fund flow.

Advantages derived from netting system includes:

1) Reduces the number of cross-border transactions between subsidiaries thereby decreasing the overall administrative costs of such cash transfers.

2) Reduces the need for foreign exchange conversion and hence decreases transaction costs associated with foreign exchange conversion.

3) Improves cash flow forecasting since net cash transfers are made at the end of each period.

4) Gives an accurate report and settles accounts through co-ordinated efforts among all subsidiaries.

(e) In interbank transactions, foreign exchange is transferred from one account to another account and from one centre to another centre. Therefore, the banks maintain three types of current accounts in order to facilitate quick transfer of funds in different currencies. These accounts are Nostro, Vostro and Loro accounts meaning "our", "your" and "their". A bank's foreign currency account maintained by the bank in a foreign country and in the home currency of that country is known as Nostro Account or "our account with you". For example, An Indian bank's Swiss franc account with a bank in Switzerland. Vostro account is the local currency account maintained by a foreign bank/branch. It is also called "your account with us". For example, Indian rupee account maintained by a bank in Switzerland with a bank in India. The Loro account is an account wherein a bank remits funds in foreign currency to another bank for credit to an account of a third bankero coupon bond.

Question 20 : **Nov RTP**

Write a short note on

(a) Link between Financial Policy and Strategic Management

(b) Zero Date of a Project in Project Management

(c) Timing of Investment Decisions on the basis of Dow Jones Theory

(d) Main Functions of Investment Banking

(e) Distinction between Capital and Money Market

Ans:

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

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

(i) Manner of raising capital as source of finance and capital structure are the most important dimensions of strategic plan.

(ii) Cut-off rate (opportunity cost of capital) for acceptance of investment

decisions.

(iii) Investment and fund allocation is another important dimension of interface of strategic management and financial policy.

(iv) Foreign Exchange exposure and risk management.

(v) Liquidity management

(vi) A dividend policy decision deals with the extent of earnings to be distributed and a close interface is needed to frame the policy so that the policy should be beneficial for all.

(vii) Issue of bonus share is another dimension involving the strategic decision.

Thus from above discussions it can be said that financial policy of a company cannot be worked out in isolation to other functional policies. It has a wider appeal and closer link with the overall organizational performance and direction of growth.

(b) Zero Date of a Project means a date is fixed from which implementation of the project begins. It is a starting point of incurring cost. The project completion period is counted from the zero date. Pre-project activities should be completed before zero date. The pre-project activities should be completed before zero date. The pre-project activities are:

a. Identification of project/product

b. Determination of plant capacity

c. Selection of technical help/collaboration

d. Selection of site.

e. Selection of survey of soil/plot etc.

f. Manpower planning and recruiting key personnel

g. Cost and finance scheduling.

(c) Ideally speaking, the investment manager would like to purchase shares at a time when they have reached the lowest trough and sell them at a time when they reach the highest peak.

However, in practice, this seldom happens. Even the most astute investment manager can never know when the highest peak or the lowest trough has been reached. Therefore, he has to time his decision in such a manner that he buys the shares when they are on the rise and sells them when they are on the fall. It means that he should be able to identify exactly when the falling or the rising trend has begun.

This is technically known as identification of the turn in the share market prices. Identification of this turn is difficult in practice because of the fact that, even in a rising market, prices keep on falling as a part of the secondary movement. Similarly even in a falling market prices keep on rising temporarily. How to be certain that the rise in prices or fall in the same is due to a real turn in prices from a bullish to a bearish phase or vice versa or that it is due only to short-run speculative trends?

Dow Jones theory identifies the turn in the market prices by seeing whether the successive peaks and troughs are higher or lower than earlier. Consider the following graph:

According to the theory, the investment manager should purchase investments when the prices are at T1. At this point, he can ascertain that the bull trend has started, since T2 is higher than T1 and P2 is higher than P1.

Similarly, when prices reach P7 he should make sales. At this point he can ascertain that the bearish trend has started, since P9 is lower than P8 and T8 is lower than T7.

(d) The following are, briefly, a summary of investment banking functions:

- Managing an IPO (Initial Public Offering): This includes hiring managers to the issue, due diligence and marketing the issue.
- Issue of debt: When a company requires capital, it sometimes chooses to issue public debt instead of equity.
- Mergers and Acquisitions: Acting as intermediary between Acquirer and target company

- Private Placement: A private placement differs little from a public offering aside from the fact that a private placement involves a firm selling stock or equity to private investors rather than to public investors.
- Financial Restructuring: When a company cannot pay its cash obligations – it goes bankrupt. In this situation, a company can, of course, choose to simply shut down operations and walk away or, it can also restructure and remain in business.

(e) The capital market deals in financial assets. Financial assets comprises of shares, debentures, mutual funds etc. The capital market is also known as stock market. Stock market and money market are two basic components of Indian financial system. Capital market deals with long and medium term instruments of financing while money market deals with short term instruments.

Question 21 : **Nov Paper**

Answer any four from the following- :

(a) Interface of Financial Policy and Strategic Management

(b) Commercial Paper

(c) American Depository Receipt

(c) Advantages of holding securities in 'Demat' form

(e) Synergy in the context of Mergers and Acquisitions

Ans:

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

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

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

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

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

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

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

(b) A commercial paper is an unsecured money market instrument issued in the form of a promissory note. Since the CP represents an unsecured borrowing in the money market, the regulation of CP comes under the purview of the Reserve Bank of India which issued guidelines in 1990 on the basis of the recommendations of the Vaghul Working Group. These guidelines were aimed at:

(i) Enabling the highly rated corporate borrowers to diversify their sources of short term borrowings, and

(ii) To provide an additional instrument to the short term investors.

It can be issued for maturities between 7 days and a maximum upto one year from the date of issue. These can be issued in denominations of ` 5 lakh

or multiples therefore. All eligible issuers are required to get the credit rating from credit rating agencies.

Eligibility criteria for issuer of commercial paper

The companies satisfying the following conditions are eligible to issue commercial paper.

- The tangible net worth of the company is ` 5 crores or more as per audited balance sheet of the company.
- The fund base working capital limit is not less than ` 5 crores.
- The company is required to obtain the necessary credit rating from the rating agencies such as CRISIL, ICRA etc.
- The issuers should ensure that the credit rating at the time of applying to RBI should not be more than two months old.
- The minimum current ratio should be 1.33:1 based on classification of current assets and liabilities.
- For public sector companies there are no listing requirement but for companies other than public sector, the same should be listed on one or more stock exchanges.
- All issue expenses shall be borne by the company issuing commercial paper.

(c) A depository receipt is basically a negotiable certificate denominated in US dollars that represent a non- US Company's publicly traded local currency (INR) equity shares/securities. While the term refer to them is global depository receipts however, when such receipts are issued outside the US, but issued for trading in the US they are called ADRs.

An ADR is generally created by depositing the securities of an Indian company with a custodian bank. In arrangement with the custodian bank, a depository in the US issues the ADRs. The ADR subscriber/holder in the US is entitled to trade the ADR and generally enjoy rights as owner of the underlying Indian security. ADRs with special/unique features have been developed over a period of time and the practice of issuing ADRs by Indian Companies is catching up.

Only such Indian companies that can stake a claim for international recognition can avail the opportunity to issue ADRs. The listing requirements in US and the US GAAP requirements are fairly severe and will have to be adhered. However if such conditions are met ADR becomes an excellent sources of capital bringing in foreign exchange.

These are depository receipts issued by a company in USA and are governed by the provisions of Securities and Exchange Commission of USA. As the regulations are severe, Indian companies tap the American market through private debt placement of GDRS listed in London and Luxemburg stock exchanges.

Apart from legal impediments, ADRS are costlier than Global Depository Receipts (GDRS). Legal fees are considerably high for US listing. Registration fee in USA is also substantial. Hence, ADRS are less popular than GDRS.

(d) From an individual investor point of view, the following are important advantages of holding securities in demat form:

- It is speedier and avoids delay in transfers.
- It avoids lot of paper work.
- It saves on stamp duty.

From the issuer-company point of view also, there are significant advantages due to dematting, some of which are:

- Savings in printing certificates, postage expenses.
- Stamp duty waiver.
- Easy monitoring of buying/selling patterns in securities, increasing ability to spot takeover attempts and attempts at price rigging.

(e) Synergy May be defined as follows:

$V(AB) > V(A) + V(B)$.

In other words the combined value of two firms or companies shall be more than their individual value. This may be result of complimentary services economics of scale or both.

A good example of complimentary activities can a company may have a good networking of branches and other company may have efficient production system. Thus the merged companies will be more efficient than individual companies.

On Similar lines, economics of large scale is also one of the reason for synergy benefits. The main reason is that, the large scale production results in lower average cost of production e.g. reduction in overhead costs on account of sharing of central services such as accounting and finances, Office executives, top level management, legal, sales promotion and advertisement etc.

These economics can be "real" arising out of reduction in factor input per unit of output, whereas pecuniary economics are realized from paying lower prices for factor inputs to bulk transactions.

2013

Question 22 : May RTP- similar to questions already discussed

Question 23 : May paper

Write short notes on any four of the following:

(a) Credit Rating

(b) Asset Securitization

(c) Call Money

(d) Euro Convertible Bonds

(e) Financial Restructuring (4 x 4 =16 Marks)

Answer

(a) Credit rating: Credit rating is a symbolic indication of the current opinion regarding the relative capability of a corporate entity to service its debt obligations in time with reference to the instrument being rated. It enables the investor to differentiate between instruments on the basis of their underlying credit quality. To facilitate simple and easy understanding, credit rating is expressed in alphabetical or alphanumerical symbols.

Thus Credit Rating is:

1) An expression of opinion of a rating agency.

2) The opinion is in regard to a debt instrument.

3) The opinion is as on a specific date.

4) The opinion is dependent on risk evaluation.

5) The opinion depends on the probability of interest and principal obligations being met timely.

Credit rating aims to

(i) provide superior information to the investors at a low cost;

(ii) provide a sound basis for proper risk-return structure;

(iii) subject borrowers to a healthy discipline and

(iv) assist in the framing of public policy guidelines on institutional investment.

In India the rating coverage is of fairly recent origin, beginning 1988 when the first rating agency CRISIL was established. At present there are few other rating agencies like:

(i) Credit Rating Information Services of India Ltd. (CRISIL).

(ii) Investment Information and Credit Rating Agency of India (ICRA).

(iii) Credit Analysis and Research Limited (CARE).

(iv) Duff & Phelps Credit Rating India Pvt. Ltd. (DCRI)

(v) ONICRA Credit Rating Agency of India Ltd.

(vi) Fitch Ratings India (P) Ltd.

(b) Asset Securitisation: It is a method of recycling of funds. It is especially beneficial to financial intermediaries to support the lending volumes. Assets generating steady cash flows are packaged together and against this assets pool market securities can be issued. The process can be classified in the following three functions.

1. The origination function: A borrower seeks a loan from finance company, bank or housing company. On the basis of credit worthiness repayment schedule is structured over the life of the loan.
2. The pooling function: Similar loans or receivables are clubbed together to create an underlying pool of assets. This pool is transferred in favour of a SPV (Special Purpose Vehicle), which acts as a trustee for the investor. Once, the assets are transferred they are held in the organizers portfolios.
3. The securitisation function: It is the SPV's job to structure and issue the securities on the basis of asset pool. The securities carry coupon and an expected maturity, which can be asset based or mortgage based. These are generally sold to investors through merchant bankers. The investors interested in this type of securities are generally institutional investors like mutual fund, insurance companies etc. The originator usually keeps the spread.

Generally, the process of securitisation is without recourse i.e. the investor bears the credit risk of default and the issuer is under an obligation to pay to investors only if the cash flows are received by issuer from the collateral.

(c) 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-to-day 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).

(d) Euro Convertible Bonds: They are bonds issued by Indian companies in foreign market with the option to convert them into pre-determined number of equity shares of the company. Usually price of equity shares at the time of conversion will fetch premium. The Bonds carry fixed rate of interest.

The issue of bonds may carry two options:

Call option: Under this the issuer can call the bonds for redemption before the date of maturity. Where the issuer's share price has appreciated substantially, i.e., far in excess of the redemption value of bonds, the issuer company can exercise the option. This call option forces the investors to convert the bonds into equity. Usually, such a case arises when the share prices reach a stage near 130% to 150% of the conversion price. Put option: It enables the buyer of the bond a right to sell his bonds to the issuer company at a pre-determined price and date. The payment of interest and the redemption of the bonds will be made by the issuer-company in US dollars.

(e) Financial restructuring: It is carried out internally in the firm with the consent of its various stakeholders. Financial restructuring is a suitable mode of restructuring of corporate firms that have incurred accumulated sizable losses for / over a number of years. As a sequel, the share capital of such firms, in many cases, gets substantially eroded / lost; in fact, in some cases, accumulated losses over the years may be

more than share capital, causing negative net worth. Given such a dismal state of financial affairs, a vast majority of such firms are likely to have a dubious potential for liquidation. Can some of these Firms be revived? Financial restructuring is one such a measure for the revival of only those firms that hold promise/prospects for better financial performance in the years to come. To achieve the desired objective, 'such firms warrant / merit a restart with a fresh balance sheet, which does not contain past accumulated losses and fictitious assets and shows share capital at its real/true worth.

Question 24 : Nov RTP- similar to questions already discussed

Question 25

Write notes on any four of the following:

(a) Explain the concept, 'Zero date of a Project' in project management.

(b) XYZ Bank, Amsterdam, wants to purchase ` 25 million against £ for funding their Nostro account and they have credited LORO account with Bank of London, London.

Calculate the amount of £'s credited. Ongoing inter-bank rates are per $, ` 61.3625/3700 & per £, $ 1.5260/70.

(c) What is an Exchange Traded Fund? What are its key features?

(d) What is an equity curve out? How does it differ from a spin off?

(e) What is money market? What are its features? What kind of inefficiencies it is suffering from? (4 x 4 =16 Marks)

Answer

(a) Zero Date of a Project means a date is fixed from which implementation of the project begins. It is a starting point of incurring cost. The project completion period is counted from the zero date. Pre-project activities should be completed before zero date. The pre-project activities should be completed before zero date. The pre-project activities are:

(1) Identification of project/product

(2) Determination of plant capacity

(3) Selection of technical help/collaboration

(4) Selection of site.

(5) Selection of survey of soil/plot etc.

(6) Manpower planning and recruiting key personnel

(7) Cost and finance scheduling.

(b) To purchase Rupee, XYZ Bank shall first sell £ and purchase $ and then sell $ to purchase Rupee. Accordingly, following rate shall be used:

(£/`) ask

The available rates are as follows:

($/£) bid = $1.5260

($/£) ask = $1.5270

(`/$) bid = ` 61.3625

(`/$) ask = ` 61.3700

From above available rates we can compute required rate as follows:

(£/`) ask = (£/$)ask x ($/`)ask

= (1/1.5260) x (1/61.3625)

= £ 0.01068 or £ 0.0107

Thus amount of £ to be credited

= ` 25,000,000 x £ 0.0107

= £ 267,500

(c) Exchange Traded Funds (ETFs) were introduced in US in 1993 and came to India around 2002. ETF is a hybrid product that combines the features of an index mutual fund and stock and hence, is also called index shares. These funds are listed on the stock exchanges and their prices are linked to the underlying index. The authorized participants act as market makers for ETFs.

ETF can be bought and sold like any other stock on stock exchange. In other words, they can be bought or sold any time during the market hours at prices that are expected to be closer to the NAV at the end of the day. NAV of an ETF is the value of the underlying component of the benchmark index held by the ETF plus all accrued dividends less accrued management fees.

There is no paper work involved for investing in an ETF. These can be bought like any other stock by just placing an order with a broker.

Some other important features of ETF are as follows:

1. It gives an investor the benefit of investing in a commodity without physically purchasing the commodity like gold, silver, sugar etc.
2. It is launched by an asset management company or other entity.

3. The investor does not need to physically store the commodity or bear the costs of upkeep which is part of the administrative costs of the fund.
4. An ETF combines the valuation feature of a mutual fund or unit investment trust, which can be bought or sold at the end of each trading day for its net asset value, with the tradability feature of a closed-end fund, which trades throughout the trading day at prices that may be more or less than its net asset value.

(d) Equity Curve out can be defined as partial spin off in which a company creates its own new subsidiary and subsequently bring out its IPO. It should be however noted that parent company retains its control and only a part of new shares are issued to public.

On the other hand in Spin off parent company does not receive any cash as shares of subsidiary company are issued to existing shareholder in the form of dividend. Thus, shareholders in new company remain the same but not in case of Equity curve out.

(e) In a wider spectrum, a money market can be defined as a market for short-term money and financial assets that are near substitutes for money with minimum transaction cost.

Features:

- The term short-term means generally a period upto one year and near substitutes to money is used to denote any financial asset which can be quickly converted into money.
- Low cost.
- It provides an avenue for equilibrating the short-term surplus funds of lenders and the requirements of borrowers.
- It, thus, provides a reasonable access to the users of short term money to meet their requirements at realistic prices.
- The money market can also be defined as a centre in which financial institutions congregate for the purpose of dealing impersonally in monetary assets.

Inefficiencies:

(i) Markets not integrated,

(ii) High volatility,

(iii) Interest rates not properly aligned,

(iv) Players restricted,

(v) Supply based-sources influence uses,

(vi) Not many instruments,

(vii) Players do not alternate between borrowing and lending,

(viii) Reserve requirements,

(ix) Lack of transparency,

(x) Inefficient Payment Systems,

(xi) Seasonal shortage of funds,

(xii) Commercial transactions are mainly in cash, and

(xiii) Heavy Stamp duty limiting use of exchange bills

2014

Question26 : **May RTP**

Write a short note on

(a) Leading and Lagging

(b) Social Cost Benefit Analysis

(c) Determinants of Dividend Policy

(d) Significance of an underlying in relation to Derivative Instruments

(e) Zero Coupon Bonds

Ans:

(a) Leading means advancing a payment i.e. making a payment before it is due. Lagging involves postponing a payment i.e. delaying payment beyond its due date. In forex market Leading and lagging are used for two purposes:-

(1) Hedging foreign exchange risk: A company can lead payments required to be made in a currency that is likely to appreciate. For example, a company has to pay $100000 after one month from today. The company apprehends the USD to appreciate. It can make the payment now. Leading involves a finance cost i.e. one month's interest cost of money used for purchasing $100000. A company may lag the payment that it needs to make in a currency that it is likely to depreciate, provided the receiving party agrees for this proposition. The receiving party may demand interest for this delay and that would be the cost of lagging. Decision regarding leading and lagging should be made after considering (i) likely movement in exchange rate (ii) interest cost and (iii) discount (if any).

(2) Shifting the liquidity by modifying the credit terms between inter-group entities:

For example, A Holding Company sells goods to its 100% Subsidiary. Normal credit term is 90 days. Suppose cost of funds is 12% for Holding and

15% for Subsidiary. In this case the Holding may grant credit for longer period to Subsidiary to get the best advantage for the group as a whole. If cost of funds is 15% for Holding and 12% for Subsidiary, the Subsidiary may lead the payment for the best advantage of the group as a whole. The decision regarding leading and lagging should be taken on the basis of cost of funds to both paying entity and receiving entity. If paying and receiving entities have different home currencies, likely movements in exchange rate should also be considered.

(b) It is increasingly realised that commercial evaluation of projects is not enough to justify commitment of funds to a project especially when the project belongs to public utility and irrespective of its financial viability it needs to be implemented in the interest of the society as a whole. Huge amount of funds are committed every year to various public projects of all types–industrial, commercial and those providing basic infrastructure facilities. Analysis of such projects has to be done with reference to the social costs and benefits since they cannot be expected to yield an adequate commercial rate of return on the funds employed at least during the short period. A social rate of return is more important. The actual costs or revenues do not necessarily reflect the monetary measurement of costs or benefits to the society. This is because the market price of goods and services are often grossly distorted due to various artificial restrictions and controls from authorities, hence a different yardstick has to be adopted for evaluating a particular project of social importance and its costs and benefits are valued at 'opportunity cost' or shadow prices to judge the real impact of their burden as costs to the society. Thus, social cost benefit analysis conducts a monetary assessment of the total cost and revenues or benefits of a project, paying particular attention to the social costs and benefits which do not normally feature in conventional costing.

United Nations Industrial Development Organisation (UNIDO) and Organisation of Economic Cooperation and Development (OECD) have done much work on Social Cost Benefit analysis. A great deal of importance is attached to the social desirability of projects like employment generation potential, value addition, foreign exchange benefit, living standard improvement etc. UNIDO and OECD approaches need a serious consideration in the calculation of benefits and costs to the society. This technique has got more relevance in the developing countries where public capital needs precedence over private capital.

(c) Many factors determine the dividend policy of a company. Some of the factors determining the dividend policy are:

(i) **Dividend Payout ratio:** A certain share of earnings to be distributed as dividend has to be worked out. This involves the decision to pay out or to retain. The payment of dividends results in the reduction of cash and, therefore, depletion of assets. In order to maintain the desired level of assets as well as to finance the investment opportunities, the company has to decide upon the payout ratio. D/P ratio should be determined with two bold objectives – maximising the wealth of the firms' owners and providing sufficient funds to finance growth.

(ii) **Stability of Dividends:** Generally investors favour a stable dividend policy. The policy should be consistent and there should be a certain minimum dividend that should be paid regularly. The liability can take any form, namely, constant dividend per share; stable D/P ratio and constant dividend per share plus something extra. Because this entails – the investor's desire for current income, it contains the information content about the profitability or efficient working of the company; creating interest for institutional investor's etc.

(iii) **Legal, Contractual and Internal Constraints and Restriction:** Legal and Contractual requirements have to be followed. All requirements of Companies Act, SEBI guidelines, capital impairment guidelines, net profit and insolvency etc., have to be kept in mind while declaring dividend. For example, insolvent firm is prohibited from paying dividends; before paying dividend accumulated losses have to be set off, however, the dividends can be paid out of current or previous years' profit. Also there may be some contractual requirements which are to be honoured. Maintenance of certain debt equity ratio may be such requirements. In addition, there may be certain internal constraints which are unique to the firm concerned. There may be growth prospects, financial requirements, availability of funds, earning stability and control etc.

(iv) **Owner's Considerations:** This may include the tax status of shareholders, their opportunities for investment dilution of ownership etc.

(v) **Capital Market Conditions and Inflation:** Capital market conditions and rate of inflation also play a dominant role in determining the dividend policy. The extent to which a firm has access to capital market, also affects the dividend policy. A firm having easy access to capital market will follow a liberal dividend policy as compared to the firm having limited access. Sometime dividends are paid to keep the firms 'eligible' for certain things in the

capital market. In inflation, rising prices eat into the value of money of investors which they are receiving as dividends. Good companies will try to compensate for rate of inflation by paying higher dividends. Replacement decision of the companies also affects the dividend policy.

(d) The underlying may be a share, a commodity or any other asset which has a marketable value which is subject to market risks. The importance of underlying in derivative instruments is as follows:

- All derivative instruments are dependent on an underlying to have value.
- The change in value in a forward contract is broadly equal to the change in value in the underlying.
- In the absence of a valuable underlying asset the derivative instrument will

have no value.

- On maturity, the position of profit/loss is determined by the price of underlying instruments. If the price of the underlying is higher than the contract price the buyer makes a profit. If the price is lower, the buyer suffers a loss.

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

Question27 : **May paper**

(a) Traditional & Walter Approach to Dividend Policy

(b) Factors affecting value of an option

(c) Forward Rate Agreements

(d) American Depository Receipts

(e) Balancing Financial Goals vis-a-vis Sustainable Growth

Ans:

(a) According to the traditional position expounded by Graham and Dodd, the stock market places considerably more weight on dividends than on retained earnings. For them, the stock market is overwhelmingly in favour of liberal dividends as against niggardly dividends. Their view is expressed quantitatively in the following valuation model:

P = m (D + E/3)

Where,

P = Market Price per share

D = Dividend per share

E = Earnings per share

m = a Multiplier.

As per this model, in the valuation of shares the weight attached to dividends is equal to four times the weight attached to retained earnings. In the model prescribed, E is replaced by (D+R) so that

P = m {D + (D+R)/3}

= m (4D/3) + m (R/3)

The weights provided by Graham and Dodd are based on their subjective judgments and not derived from objective empirical analysis. Notwithstanding the subjectivity of these weights, the major contention of the traditional position is that a liberal payout policy has a favourable impact on stock prices.

The formula given by Prof. James E. Walter shows how dividend can be used to maximise the wealth position of equity holders. He argues that in the long run, share prices reflect only the present value of expected dividends. Retentions influence stock prices only through their effect on further dividends. It can envisage different possible market prices in different situations and considers internal rate of return, market capitalisation rate and dividend payout ratio in the determination of market value of shares.

Walter Model focuses on two factors which influences Market Price

(i) Dividend Per Share.

(ii) Relationship between Internal Rate of Return (IRR) on retained earnings and market expectations (cost of capital).

If IRR > Cost of Capital, Share price can be even higher in spite of low dividend. The relationship between dividend and share price on the basis of Walter's formula is shown below:

Vc =

a

c

c

D R (E-D)

R

R

+

Where,

Vc = Market value of the ordinary shares of the company

Ra = Return on internal retention, i.e., the rate company earns on retained profits

Rc = Cost of Capital

E = Earnings per share

D = Dividend per share.

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

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

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

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

to benefit from time decay, especially during that final month when it occurs most rapidly.

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

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

(c) A Forward Rate Agreement (FRA) is an agreement between two parties through which a borrower/ lender protects itself from the unfavourable changes to the interest rate. Unlike futures FRAs are not traded on an exchange thus are called OTC product.

Following are main features of FRA.

- Normally it is used by banks to fix interest costs on anticipated future deposits or interest revenues on variable-rate loans indexed to LIBOR.
- It is an off Balance Sheet instrument.
- It does not involve any transfer of principal. The principal amount of the agreement is termed "notional" because, while it determines the amount of the payment, actual exchange of the principal never takes place.
- It is settled at maturity in cash representing the profit or loss. A bank that sells an FRA agrees to pay the buyer the increased interest cost on some "notional" principal amount if some specified maturity of LIBOR is above a stipulated "forward rate" on the contract maturity or settlement date. Conversely, the buyer agrees to pay the seller any decrease in interest cost if market interest rates fall below the forward rate.
- Final settlement of the amounts owed by the parties to an FRA is determined by the formula

Payment = $\times 100$

$[1 + RR(dtm/DY)]$

$(N)(RR - FR)(dtm/DY)$

Where,

N = the notional principal amount of the agreement;

RR = Reference Rate for the maturity specified by the contract prevailing on the contract settlement date; typically LIBOR or MIBOR

FR = Agreed-upon Forward Rate; and

dtm = maturity of the forward rate, specified in days (FRA Days)

DY = Day count basis applicable to money market transactions which could be 360 or 365 days.

If LIBOR > FR the seller owes the payment to the buyer, and if LIBOR < FR the buyer owes the seller the absolute value of the payment amount determined by the above formula.

- The differential amount is discounted at post change (actual) interest rate as it is settled in the beginning of the period not at the end.

Thus, buying an FRA is comparable to selling, or going short, a Eurodollar or LIBOR futures contract.

(d) American Depository Receipts (ADRs): A depository receipt is basically a negotiable certificate denominated in US dollars that represent a non- US Company's publicly traded local currency (INR) equity shares/securities. While the term refer to them is global depository receipts however, when such receipts are issued outside the US, but issued for trading in the US they are called ADRs.

An ADR is generally created by depositing the securities of an Indian company with a custodian bank. In arrangement with the custodian bank, a depository in the US issues the ADRs. The ADR subscriber/holder in the US is entitled to trade the ADR and generally enjoy rights as owner of the underlying Indian security. ADRs with special/unique features have been developed over a period of time and the practice of issuing ADRs by Indian Companies is catching up.

Only such Indian companies that can stake a claim for international recognition can avail the opportunity to issue ADRs. The listing requirements in US and the US GAAP requirements are fairly severe and will have to be adhered. However if such conditions are met ADR becomes an excellent sources of capital bringing in foreign exchange. These are depository receipts issued by a company in USA and are governed by the provisions of Securities and Exchange Commission of USA. As the regulations are severe, Indian companies tap the American market through private debt placement of GDRs listed in London and Luxemburg stock exchanges.

Apart from legal impediments, ADRs are costlier than Global Depository Receipts (GDRs). Legal fees are considerably high for US listing. Registration fee in USA is also substantial. Hence, ADRs are less popular than GDRs.

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

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

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

SGR = ROE x (1- Dividend payment ratio)

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

Question 28 : **Nov RTP**

Write a short note on

(a) Impact of GDRs on Indian Capital Market

(b) Types of risks foreign exchange dealings are exposed to

(c) Constraints on paying Dividend

(d) Types/ Forms of Factoring

(e) Treasury bills

Ans:

(a) After the globalization of the Indian economy, accessibility to vast amount of resources was available to the domestic corporate sector. One such accessibility was in terms of raising financial resources abroad by internationally prudent companies. Among others, GDRs were the most important source of finance from abroad at competitive cost. Global depository receipts are basically negotiable certificates denominated in US dollars, that represent a non- US company's publicly traded local currency (Indian rupee) equity shares. Companies in India, through the issue of depository receipts, have been able to tap global equity market to raise foreign currency funds by way of equity. Since the inception of GDRs, a remarkable change in Indian capital market has been observed. Some of the changes are as follows:

(i) Indian capital market to some extent is shifting from Bombay to Luxemburg and other foreign financial centres.

(ii) There is arbitrage possibility in GDR issues. Since many Indian companies are actively trading on the London and the New York Exchanges and due to the existence of time differences, market news, sentiments etc. at times the prices of the depository receipts are traded at discounts or premiums to the underlying stock. This

presents an arbitrage opportunity wherein the receipts can be bought abroad and sold in India at a higher price.

(iii) Indian capital market is no longer independent from the rest of the world. This puts additional strain on the investors as they now need to keep updated with worldwide economic events.

(iv) Indian retail investors are completely sidelined. Due to the placements of GDRs with Foreign Institutional Investor's on the basis free pricing, the retail investors can now no longer expect to make easy money on heavily discounted right/public issues.

(v) A considerable amount of foreign investment has found its way in the Indian market which has improved liquidity in the capital market.

(vi) Indian capital market has started to reverberate by world economic changes, good or bad.

(vii) Indian capital market has not only been widened but deepened as well.

(viii) It has now become necessary for Indian capital market to adopt international practices in its working including financial innovations.

(b) A firm dealing with foreign exchange may be exposed to foreign currency exposures. The exposure is the result of possession of assets and liabilities and transactions denominated in foreign currency. When exchange rate fluctuates, assets, liabilities, revenues, expenses that have been expressed in foreign currency will result in either foreign exchange gain or loss. A firm dealing with foreign exchange may be exposed to the following types of risks:

(i) Transaction Exposure: A firm may have some contractually fixed payments and receipts in foreign currency, such as, import payables, export receivables, interest payable on foreign currency loans etc. All such items are to be settled in a foreign currency. Unexpected fluctuation in exchange rate will have favourable or adverse impact on its cash flows. Such exposures are termed as transactions exposures.

(ii) Translation Exposure: The translation exposure is also called accounting exposure or balance sheet exposure. It is basically the exposure on the assets and liabilities shown in the balance sheet and which are not going to be liquidated in the near future. It refers to the probability of loss that the firm may have to face because of decrease in value of assets due to devaluation of a foreign currency

despite the fact that there was no foreign exchange transaction during the year.

(iii) Economic Exposure: Economic exposure measures the probability that fluctuations in foreign exchange rate will affect the value of the firm. The intrinsic value of a firm is calculated by discounting the expected future cash flows with appropriate discounting rate. The risk involved in economic exposure requires measurement of the effect of fluctuations in exchange rate on different future cash flows.

(c) Constraints on paying Dividedends

(i) Legal: Under Section 205(1) of the Companies Act 1956, dividend is to be paid out of current profits or past profits after depreciation. The Central Government can allow a company to pay dividend for any financial year out of profits of the company without providing for depreciation if it is in the public interest.

Dividend is to be paid in cash but a company is allowed to capitalise profits or reserves (retained earnings) for issuing fully paid bonus shares. Capital profit may also be distributed as dividends if articles permit.

(ii) Liquidity: Payment of dividends means outflow of cash. Ability to pay dividends depends on cash and liquidity position of the firm. A mature company does not have much investment opportunities, nor are funds tied up in permanent working capital and, therefore has a sound cash position. For a growth oriented company in spite of good profits, it will need funds for expanding activities and permanent working capital and therefore it is not in a position to declare dividends.

(iii) Access to the Capital Market: By paying large dividends, cash position is affected. If new shares have to be issued to raise funds for financing investment programmes and if the existing shareholders cannot buy additional shares, control is diluted. Payment of dividends may be withheld and earnings are utilised for financing firm's investment opportunities.

(iv) Investment Opportunities: If investment opportunities are inadequate, it is better to pay dividends and raise external funds whenever necessary for such opportunities.

(d) Depending upon the features built into the factoring arrangement to cater to the varying needs of trade/citizens, there can be different kinds of factoring:

Recourse and Non-recourse Factoring: Under a recourse factoring arrangement, the factor has recourse to the client (firm) if the debt purchased/receivable factored turns out to be irrecoverable. In other words, the factor does not assume credit risks associated with the receivables. The factor does not have the right to recourse in the case of non-recourse factoring. The loss arising out of irrecoverable receivables is borne by him, as a compensation for which he charges a higher commission.

Advance and Maturity factoring: The factor paid a pre specified portion, ranging between three-fourths to nine tenths, of the factored receivables in advance, the balance being paid upon collection/on the guaranteed payment date. A drawing limit, as a pre- payment, is made available by the factor to the client as soon as the factored debts are approved/the invoices are accounted for. The client has to pay interest (discount) on the advance/repayment between the date of such payment and the date of actual collection from the customers/or the guaranteed payment date, determined on the basis of the prevailing short-term rate, the financial standing of the client and the volume of the turnover.

Full factoring: This is the most comprehensive form of factoring combining the features of all the factoring services specially those of non-recourse and advance factoring. It is also known as old line factoring.

Disclosed and undisclosed Factoring: In disclosed factoring, the name of the factor is disclosed in the invoice by the supplier-manufacturer of the goods asking the buyer to make payment to the factor, the name of the factor is not disclosed in the invoice in undisclosed factoring although the factor maintains the sales ledger of the supplier-manufacturer. The entire realization of the business transaction is done in the name of the supplier company but all control remains with the factor.

Domestic and export/Cross Border Factoring: If the three parties involved, namely, customer (buyer), client, (seller-supplier) and factor (financial intermediary) are domiciled in the same country then it is known as domestic factoring. There are usually four parties involved to a cross border factoring transaction. They are :

1. Exporter (client)
2. Importer (customer)
3. Export factor
4. Import Factor

It is also known as two-factor system.

(e) Treasury bills are short-term debt instruments of the Central Government, maturing in a period of less than one year. Treasury bills are issued by RBI on behalf of the Government of India for periods ranging from 14 days to 364 days through regular auctions. They are highly liquid instruments and issued to tide over short-term liquidity shortfalls.

Treasury bills are sold through an auction process according to a fixed auction calendar announced by the RBI. Banks and primary dealers are the major bidders in the competitive auction process. Provident Funds and other investors can make non-competitive bids. RBI makes allocation to non-competitive bidders at a weighted average yield arrived at on the basis of the yields quoted by accepted competitive bids. These days the treasury bills are becoming very popular on account of falling interest rates. Treasury bills are issued at a discount and redeemed at par. Hence, the implicit yield on a treasury bill is a function of the size of the discount and the period of maturity. Now, these bills are becoming part of debt market. In India, the largest holders of the treasury bills are commercial banks, trust, mutual funds and provident funds. Although the degree of liquidity of treasury bills are greater than trade bills, they are not self liquidating as the genuine trade bills are. T-bills are claim against the government and do not require any grading or further endorsement or acceptance.

Question 29 Nov Paper :similar to questions already discussed

2015

Question 30 : May RTP

Write a short note on

(a) Arbitrage Pricing Theory

(b) Conglomerate Merger

(c) Takeover Strategies

(d) Factors affecting investment decision in portfolio management

(e) Role of Investment Banks in Private Placement

Ans:

(a) Unlike the CAPM which is a single factor model, the APT is a multi factor model having a whole set of Beta Values – one for each factor. Arbitrage Pricing Theory states that the expected return on an investment is dependent upon how that investment reacts to a set of individual macro-economic factors (degree of reaction measured by the Betas) and the risk premium associated with each of those macro – economic factors. The

APT developed by Ross (1976) holds that there are four factors which explain the risk premium relationship of a particular security. Several factors being identified e.g. inflation and money supply, interest rate, industrial production and personal consumption have aspects of being inter-related.

According to CAPM, E (Ri) = Rf + λβi

Where, λ is the average risk premium [E (Rm) – Rf]

In APT, E (Ri) = Rf + λ 1βi1 λ2 βi2 λ3βi3 λ4 βi4 + + +

Where, λ1, λ2 , λ3 , λ4 are average risk premium for each of the four factors in the model and βi1 βi2 βi3 βi4 , , , are measures of sensitivity of the particular security i to each of the four factors.

(b) Such mergers involve firms engaged in unrelated type of business operations. In other words, the business activities of acquirer and the target are neither related to each other horizontally (i.e., producing the same or competiting products) nor vertically (having relationship of buyer and supplier).In a pure conglomerate merger, there are no important common factors between the companies in production, marketing, research and development and technology. There may however be some degree of overlapping in one or more of these common factors. Such mergers are in fact, unification of different kinds of businesses under one flagship company. The purpose of merger remains utilization of financial resources, enlarged debt capacity and also synergy of managerial functions.

(c) Normally acquisitions are made friendly, however when the process of acquisition is unfriendly (i.e., hostile) such acquisition is referred to as 'takeover'). Hostile takeover arises when the Board of Directors of the acquiring company decide to approach the shareholders of the target company directly through a Public Announcement (Tender Offer) to buy their shares consequent to the rejection of the offer made to the Board of Directors of the target company.

Take Over Strategies: Other than Tender Offer the acquiring company can also use the following techniques:

- Street Sweep: This refers to the technique where the acquiring company accumulates larger number of shares in a target before making an open offer. The advantage is that the target company is left with no choice but to agree to the proposal of acquirer for takeover.
- Bear Hug: When the acquirer threatens the target to make an open offer, the board of target company agrees to a settlement with the acquirer for change of control.

- Strategic Alliance: This involves disarming the acquirer by offering a partnership rather than a buyout. The acquirer should assert control from within and takeover the target company.
- Brand Power: This refers to entering into an alliance with powerful brands to displace the target's brands and as a result, buyout the weakened company.

(d) Factors affecting Investment Decisions in Portfolio Management

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

(ii) Selection of investment

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

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

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

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

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

(e) The investment banker's work involved in a private placement is quite similar to sellside M&A representation. The bankers attempt to find a buyer by writing the private Placement Memorandum (PPM) and then contacting potential strategic or financial buyers of the client.

Because private placements involve selling equity and debt to a single buyer, the investor and the seller (the company) typically negotiate the terms of the deal. Investment bankers function as negotiators for the company, helping to convince the investor of the value of the firm. Fees

involved in private placements work like those in public offerings. Usually they are a fixed percentage of the size of the transaction.

Question 31 : **May paper**

(a) Explain the meaning of the following relating to Swap transactions:

(i) Plain Vanila Swaps

(ii) Basis Rate Swaps

(iii) Asset Swaps

(iv) Amortising Swaps

(b) Distinction between Open ended schemes and Closed ended schemes

(c) State any four assumptions of Black Scholes Model

(d) Give the meaning of Caps, Floors and Collar options with respect to Interest.

(e) Global depository receipts

Ans:

(a) (i) Plain Vanilla Swap: Also called generic swap and it involves the exchange of a fixed rate loan to a floating rate loan. Floating rate basis can be LIBOR, MIBOR, Prime Lending Rate etc.

(ii) Basis Rate Swap: Similar to plain vanilla swap with the difference payments based on the difference between two different variable rates. For example one rate may be 1 month LIBOR and other may be 3-month LIBOR. In other words two legs of swap are floating but measured against different benchmarks.

(iii) Asset Swap: Similar to plain vanilla swaps with the difference that it is the exchange fixed rate investments such as bonds which pay a guaranteed coupon rate with floating rate investments such as an index.

(iv) Amortising Swap: An interest rate swap in which the notional principal for the interest payments declines during the life of the swap. They are particularly useful for borrowers who have issued redeemable bonds or debentures. It enables them to interest rate hedging with redemption profile of bonds or debentures.

(b) Open Ended Scheme do not have maturity period. These schemes are available for subscription and repurchase on a continuous basis. Investor can conveniently buy and sell unit. The price is calculated and declared on daily basis. The calculated price is termed as NAV. The buying price and selling price is calculated with certain adjustment to NAV. The key future of the scheme is liquidity.

Close Ended Scheme has a stipulated maturity period normally 5 to 10 years. The Scheme is open for subscription only during the specified period at the time of launch of the scheme. Investor can invest at the time

of initial issue and thereafter they can buy or sell from stock exchange where the scheme is listed. To provide an exit rout some close-ended schemes give an option of selling bank (repurchase) on the basis of NAV. The NAV is generally declared on weekly basis.

(c) The model is based on a normal distribution of underlying asset returns. The following assumptions accompany the model:

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

(d) Cap Option: It is a series of call options on interest rate covering a medium-to-long term floating rate liability. Purchase of a Cap enables the a borrowers to fix in advance a maximum borrowing rate for a specified amount and for a specified duration, while allowing him to avail benefit of a fall in rates. The buyer of Cap pays a premium to the seller of Cap.

Floor Option: It is a put option on interest rate. Purchase of a Floor enables a lender to fix in advance, a minimal rate for placing a specified amount for a specified duration, while allowing him to avail benefit of a rise in rates. The buyer of the floor pays the premium to the seller.

Collars Option: It is a combination of a Cap and Floor. The purchaser of a Collar buys a Cap and simultaneously sells a Floor. A Collar has the effect of locking its purchases into a floating rate of interest that is bound on both high side and the low side.

(e) Global Depository Receipt: It is an instrument in the form of a depository receipt or certificate created by the Overseas Depository Bank outside India denominated in dollar and issued to non-resident investors against the issue of ordinary shares or FCCBs of the issuing company. It is traded in stock exchange in Europe or USA or both. A GDR usually represents one or more shares or convertible bonds of the issuing company. A holder of a GDR is given an option to convert it into number of shares/bonds that it represents after 45 days from the date of allotment. The shares or bonds which a holder of GDR is entitled to get are traded in Indian Stock Exchanges. Till conversion, the GDR does not carry any voting right. There is no lock-in-period for GDR.

Question 32 : **Nov RTP**

Write a short note on

(a) Nostro, Vostro and Loro Accounts

(b) Characteristics of Financial Leasing

(c) Marking to Market

(d) Relevant assumptions of CAPM

(e) Exchange Traded Funds

Ans:

(a) In interbank transactions, foreign exchange is transferred from one account to another account and from one centre to another centre. Therefore, the banks maintain three types of current accounts in order to facilitate quick transfer of funds in different currencies. These accounts are Nostro, Vostro and Loro accounts meaning "our", "your" and "their". A bank's foreign currency account maintained by the bank in a foreign country and in the home currency of that country is known as Nostro Account or "our account with you". For example, An Indian bank's Swiss franc account with a bank in Switzerland. Vostro account is the local currency account maintained by a foreign bank/branch. It is also called "your account with us". For example, Indian rupee account maintained by a bank in Switzerland with a bank in India. The Loro account is an account wherein a bank remits funds in foreign currency to another bank for credit to an account of a third bank.

(b) Salient features of Financial Lease

(i) It is an intermediate term to long-term arrangement.

(ii) During the primary lease period, the lease cannot be cancelled.

(iii) The lease is more or less fully amortized during the primary lease period.

(iv) The costs of maintenance, taxes, insurance etc., are to be incurred by the lessee unless the contract provides otherwise.

(v) The lessee is required to take the risk of obsolescence.

(vi) The lessor is only the Financier and is not interested in the asset.

(c) It implies the process of recording the investments in traded securities (shares, debt-instruments, etc.) at a value, which reflects the market value of securities on the reporting date. In the context of derivatives trading, the futures contracts are marked to market on periodic (or daily) basis. Marking to market essentially means that at the end of a trading session, all outstanding contracts are repriced at the settlement price of

that session. Unlike the forward contracts, the future contracts are repriced every day. Any loss or profit resulting from repricing would be debited or credited to the margin account of the broker. It, therefore, provides an opportunity to calculate the extent of liability on the basis of repricing. Thus, the futures contracts provide better risk management measure as compared to forward contracts.

Suppose on 1st day we take a long position, say at a price of ` 100 to be matured on 7th day. Now on 2nd day if the price goes up to ` 105, the contract will be repriced at ` 105 at the end of the trading session and profit of ` 5 will be credited to the account of the buyer. This profit of ` 5 may be drawn and thus cash flow also increases. This marking to market will result in three things – one, you will get a cash profit of ` 5; second, the existing contract at a price of ` 100 would stand cancelled; and third you will receive a new futures contract at ` 105. In essence, the marking to market feature implies that the value of the futures contract is set to zero at the end of each trading day.

(d) Relevant Assumptions of CAPM

(i) The investor's objective is to maximize the utility of terminal wealth;
(ii) Investors make choices on the basis of risk and return;
(iii) Investors have identical time horizon;
(iv) Investors have homogeneous expectations of risk and return;
(v) Information is freely and simultaneously available to investors;
(vi) There is risk-free asset, and investor can borrow and lend unlimited amounts at the risk-free rate;
(vii) There are no taxes, transaction costs, restrictions on short rates or other market imperfections;
(viii) Total asset quantity is fixed, and all assets are marketable and divisible.

(e) Exchange Traded Funds (ETFs) were introduced in US in 1993 and came to India around 2002. ETF is a hybrid product that combines the features of an index mutual fund and stock and hence, is also called index shares. These funds are listed on the stock exchanges and their prices are linked to the underlying index. The authorized participants act as market makers for ETFs.

ETF can be bought and sold like any other stock on stock exchange. In other words, they can be bought or sold any time during the market hours at prices that are expected to be closer to the NAV at the end of the day. NAV of an ETF is the value of the underlying component of the

benchmark index held by the ETF plus all accrued dividends less accrued management fees.

There is no paper work involved for investing in an ETF. These can be bought like any other stock by just placing an order with a broker. Some other important features of ETF are as follows:

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

Nov Paper

Question 33 similar to questions already discussed

❑ ❑ ❑