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CA FINAL

ADVANCED FINANCIAL MANAGEMENT

AFM THEORY COMPILER

Covers all Applicable Questions from ICAI Exams, MTPs, RTPs upto May 24 and Selected Questions from ICAI SM & Practice Manual

APPLICABLE MAY 2024 ONWARDS

BENCHMARX
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AFM THEORY - INDEX

IMPORTANT QUESTIONS / TOPICS

AFM THEORY COMPILER

CHAPTER 1 : FINANCIAL POLICY AND CORPORATE STRATEGY

Important Exam Concepts : Linkage / Interface between financial policy and strategic management, How financial goals can be balanced vis-à-vis sustainable growth

Question 1

ICAI November 19 (New) / MTP October 19 (New)

Discuss briefly the key decisions which fall within the scope of financial strategy.

RTP November 20 (New) / RTP November 20(Old) / MTP April 21 (New) / MTP April 21 (Old) / MTP October 21 (Old)

Explain key decisions that fall within the scope of financial strategy.

ICAI January 21 (New) / MTP March 23 (New)

As a financial strategist you will depend on certain key financial decisions. Discuss.

ICAI December 21 (Old)

Key Decisions are imperative in financial strategies. Discuss.

Answer

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

Financing decisions: These decisions deal with the mode of financing or mix of equity capital and debt capital.

Investment decisions: These decisions involve the profitable utilization of firm's funds especially in long-term projects (capital projects). Since the future benefits associated with such projects are not known with certainty, investment decisions necessarily involve risk. The projects are therefore evaluated in relation to their expected return and risk.

Dividend decisions: These decisions determine the division of earnings between payments to shareholders and reinvestment in the company.

Portfolio decisions: These decisions involve evaluation of investments based on their contribution to the aggregate performance of the entire corporation rather than on the isolated characteristics of the investments themselves.

Question 2

ICAI May 18 (New) / ICAI May 18 (Old) / RTP May 18 (Old) / MTP April 19 (Old) / MTP March 18 (Old) / RTP May 19 (Old) / MTP August 18 (Old) / ICAI November 20 (Old)

Linkage / Interface between financial policy and strategic management

Answer

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 i.e. internally and externally mobilized financial base.

Sources of finance and capital structure are the most important dimensions of a strategic plan. The need for fund mobilization to support the expansion activity of firm is very vital for any organization. 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 and debenture to raise borrowed capital.

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. 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 divided into three groups.

One type of proposal will be for 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. Dividend policy is 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 organization.

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. As a result preference and patronage for the company depends significantly on the financial policy framework. 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.

Question 3

ICAI May 19 (Old) / Practice Manual

What makes an organization sustainable? State the specific steps.

MTP March 21 (New)

Explain the specific steps that make an organisation sustainable.

MTP March 21 (Old)

Steps required to make an organization sustainable.

Answer

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.

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.
Sustainable growth models assume that the business wants to:

- maintain a target capital structure without issuing new equity;
- maintain a target dividend payment ratio; and
- 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 4

ICAI November 18 (Old) / Practice Manual

Enumerate 'Strategy' at different levels of hierarchy.

ICAI January 21 (Old)

Explain the different levels of strategy.

Answer

Strategies at different levels hierarchy are the outcomes of different planning needs. There are basically three types of strategies:

1. **Corporate Strategy:** At the corporate level planners decide about the objective or objectives of the firm along with their priorities and based on objectives, decisions are taken on participation of the firm in different product fields. Basically a corporate strategy provides with a framework for attaining the corporate objectives under values and resource constraints, and internal and external realities. It is the corporate strategy that describes the interest in and competitive emphasis to be given to different businesses of the firm. It indicates the overall planning mode and propensity to take risk in the face of environmental uncertainties.
2. **Business Strategy:** It is the managerial plan for achieving the goal of the business unit. However, it should be consistent with the corporate strategy of the firm and should be drawn within the frame-

work provided by the corporate planners. Given the overall competitive emphasis, business strategy specifies the product market power i.e. the way of competing in that particular business activity. It also addresses coordination and alignment issues covering internal functional activities. The two most important internal aspects of a business strategy are the identification of critical resources and the development of distinctive competence for translation into competitive advantage.

3. **Functional Strategy:** It is the low level plan to carry out principal activities of a business. In this sense, functional strategy must be consistent with the business strategy, which in turn must be consistent with the corporate strategy. Thus strategic plans come down in a cascade fashion from the top to the bottom level of planning pyramid and performances of functional strategies trickle up the line to give shape to the business performance and then to the corporate performance.

Question 5

RTP May 20 (New) / MTP April 19 (New) / MTP August 18 (New) / Practice Manual / MTP September 22 (New)

How financial goals can be balanced vis-à-vis sustainable growth?

MTP March 22 (New)

Often, a conflict can arise if growth objectives are not consistent with the value of the organization's sustainable growth. EXPLAIN.

Answer

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.

Question 6

RTP November 19 (Old) / MTP October 19 (Old) / MTP May 20 (Old) / Practice Manual

Processes of Strategic Decision Making

Answer

Capital investment is the springboard for wealth creation. In a world of economic uncertainty, the investors want to maximize their wealth by selecting optimum investment and financial opportunities that will give them maximum expected returns at minimum risk. Since management is ultimately responsible to the investors, the objective of corporate financial management should implement investment and financing decisions which should satisfy the shareholders by placing them all in an equal, optimum financial position. The satisfaction of the interests of the shareholders should be perceived as a means to an end, namely maximization of shareholders' wealth. Since capital is the limiting factor, the problem that the management will face is the strategic allocation of limited funds between alternative uses in such a manner, that the companies have the ability to sustain or increase investor returns through a continual search for investment opportunities that generate funds for their business and are more favorable for the investors. Therefore, all businesses need to have the following three fundamental essential elements:

- A clear and realistic strategy,
- The financial resources, controls and systems to see it through and The right management team and processes to make it happen.

Question 7

RTP May 20 (Old) / RTP November 18 (Old)

Financial Planning

MTP November 21 (New) / MTP November 21 (Old)

Financial Resources, Financial Tools and Financial Goals are outcomes of Financial Planning. Do you agree with this statement?

ICAI May 22 (New) / MTP October 22 (New)

Explain the outcomes of Financial Planning.

Answer

Financial planning is a systematic approach whereby the financial planner helps the customer to maximize his existing financial resources by utilizing financial tools to achieve his financial goals. Financial Resources, Financial Tools and Financial Goals are not the outcomes of Financial Planning rather these are components of Financial Planning.

Outcomes of the financial planning are as follows:

- Financial objectives: Financial objectives are to be decided at the very outset so that rest of the decisions can be taken accordingly. The objectives need to be consistent with the corporate mission and corporate objectives.
- Financial decision making: It helps in analyzing the financial problems that are being faced by the corporate and accordingly deciding the course of action to be taken by it.
- Financial measures: It includes ratio analysis, analysis of cash flow statement etc. to evaluate the performance of the Company. The selection of these measures again depends upon the corporate objectives.

Question 8

ICAI July 21 (New)

State the strategy at different hierarchy levels.

MTP September 23

Explain the term Corporate Level Strategy and what are the three basic questions it answers? ***(Refer Sub-point (1) of the answer)***

ICAI November 23

Describe the main function of corporate level strategy and state which three basic questions it should be able to answer. ***(Refer Subpoint (1) of the answer)***

Answer

Strategies at different levels are the outcomes of different planning needs.

Three levels of Strategy – Corporate level; Business unit level; and Functional or departmental level.

(1) **Corporate Level Strategy:** Corporate level strategy fundamentally is concerned with selection of businesses in which a company should compete and with the development and coordination of that portfolio of businesses.

Corporate level strategy should be able to answer three basic questions:

- Suitability : Whether the strategy would work for the accomplishment of common objective of the company.
- Feasibility : Determines the kind and number of resources required to formulate and implement the strategy.
- Acceptability : It is concerned with the stakeholders' satisfaction and can be financial and non-financial.

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

(3) **Functional Level Strategy:** The functional level is the level of the operating divisions and departments. The strategic issues at this level are related to functional business processes and value chain. Functional level strategies in R&D, operations, manufacturing, marketing, finance, and human resources involve the development and coordination of resources through which business unit level strategies can be executed effectively and efficiently. Functional units of an organization are involved in higher level strategies by providing input to the business unit level and corporate level strategy, such as providing information on customer feedback or on resources and capabilities on which the higher level strategies can be based. Once the higher - level strategy is developed, the functional units translate them into discrete action plans that each department or division must accomplish for the strategy to succeed.

Among the different functional activities viz production, marketing, finance, human resources and research and development, finance assumes highest importance during the top down and bottom up interaction of planning. Corporate strategy deals with deployment of resources and financial strategy is mainly concerned with mobilization and effective utilization of money, the most critical resource that a business firm likes to have under its command. Truly speaking, other resources can be easily mobilized if the firm has adequate monetary base. To go into the details of this interface between financial strategy and corporate strategy and financial planning and corporate planning let us examine the basic issues addressed under financial planning

Question 9

RTP May 21 (New)

Explain the traits that an organisation should have to make itself financially sustainable.

RTP May 21 (Old)

Traits required to make an organization financially sustainable.

MTP April 22 (New) / ICAI May 23

EXPLAIN what makes an organization financially sustainable.

MTP October 23

What makes an organization sustainable as well as financially sustainable.

Answer

To be financially sustainable, an organization must have following traits:

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

Question 10

MTP October 20 (New)

"Sustainable growth is important to enterprise long-term development". Explain this statement in context of planning healthy corporate growth.

MTP October 20 (Old)

Importance of Sustainable growth in context of planning healthy corporate growth.

MTP March 24

Explain the concept of Sustainable Growth Rate and also state assumptions of Sustainable growth rate.

Answer

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) 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 × (1- Dividend payment ratio)

Sustainable growth models assume that the business wants to:

- maintain a target capital structure without issuing new equity;
- maintain a target dividend payment ratio; and
- increase sales as rapidly as market conditions allow.

Question 11

ICAI November 22 (New)

(i) What is sustainable growth rate?

(ii) What makes an Organization Sustainable?

MTP April 23

Explain the various requirements that makes an organization sustainable. ***(Refer Subpoint (ii) of the answer)***

MTP October 23

What makes an organization sustainable as well as financially sustainable.

Answer

(i) 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.

(ii) In order to be sustainable, an organisation must:

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

Question 12

RTP May 24

In the current scenario of globalization and growth in information and communication technologies etc. the responsibilities of CFOs have been drastically expanded. Explain.

Answer

Traditionally, the main role of CFO was concentrated to wealth maximisation for shareholders by taking care of financial health of an organization and overseeing and implementing adequate financial controls.

However, in recent time because of globalization, growth in information and communications, pandemic situation etc. their range of responsibilities has been drastically expanded, driven by complexity, and changing expectations.

Now a days in addition to fulfilling traditional role relating to governance, compliances and controls, and business ethics as a part of the leadership of role CFOs are also expected to contribute their support in strategic and operational decision making.

In post-pandemic time their role has been advanced in the following areas in addition to traditional role:

a. **Risk Management:** Now a days the CFOs are expected to look after the overall functioning of the framework of Risk Management system of an organisation.

b. **Supply Chain:** Post pandemic supply chain management system has been posing the challenge for the company to maintain the sustainable growth. Since CFOs are care takers of finance of the company, considering the financial viability of the Supply Chain Management their role has now become more critical.

c. **Mergers, acquisitions, and Corporate Restructuring:** Since in recent period to maintain the growth and capture the market share there has been a spate of Mergers and Acquisitions and hence the role of CFOs has become more crucial because these are strategic decision and any error in them can lead to collapse of the whole business.

d. **Environmental, Social and Governance (ESG) Financing:** With the evolving of the concept of ESG their role has been shifted from traditional financing to sustainability financing.

Thus, from above discussion it can be concluded that in today's time CFOs are taking a leadership role in Value Creation for the organisation and that too on sustainable basis for a longer period.

CHAPTER 2 : RISK MANAGEMENT

Important Exam Concepts: Value at Risk, Financial Risk

Question 1

ICAI May 19 (New) / RTP May 18 (New) / ICAI November 22 (New)

List the main applications of Value at Risk (VaR).

MTP March 24

List out the areas where the concept of Value at Risk (VAR) can be applied?

Answer

Application of VaR

VaR can be applied

(i) to measure the maximum possible loss on any portfolio or a trading position.

(ii) as a benchmark for performance measurement of any operation or trading.

(iii) to fix limits for individuals dealing in front office of a treasury department.

(iv) to enable the management to decide the trading strategies.

(v) as a tool for Asset and Liability Management especially in banks

Question 2

RTP May 20 (New) / RTP May 18 (New) / MTP August 18 (New) / MTP April 18 (New) / MTP April 18 (New)

What is Value at Risk? Identify its main features.

ICAI July 21 (New) / MTP March 22 (New) / MTP March 23 (New)

Describe the features of Value-at-Risk (VaR).

Answer

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

(i) What is worst case scenario?

(ii) What will be loss?

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

Following are main features of VAR

(i) Components of Calculations: VAR calculation is based on following three components:
   (a) Time Period
   (b) Confidence Level – Generally 95% and 99%
   (c) Loss in percentage or in amount
(ii) Statistical Method: It is a type of statistical tool based on Standard Deviation.
(iii) Time Horizon: VAR can be applied for different time horizons say one day, one week, one month and so on.
(iv) Probability: Assuming the values are normally attributed, probability of maximum loss can be predicted.
(v) Control Risk: Risk can be controlled by selling limits for maximum loss.
(vi) Z Score: Z Score indicates how many standard Deviations is away from Mean value of a population. When it is multiplied with Standard Deviation it provides VAR.

Question 3

ICAI November 18 (New)

How different stakeholders view the financial risk?

MTP May 20 (New)

Explain how Financial Risk can be viewed from different viewpoints.

MTP March 18 (New)

Explain Financial Risk from the point of view of Stakeholder, Company and the Government.

MTP October 18 (New)

"The Financial Risk can be viewed from different perspective". Explain this statement.

RTP November 20 (New)

What is Financial Risk? How it can be evaluated from point of views.

MTP March 21 (New)

Identify how different stakeholders view the financial risk?

MTP October 21 (New) / MTP September 23

Whether Financial Risk can be evaluated from different point of views. If yes, then please explain them briefly.

MTP September 22 (New)

EXPLAIN the main financial risk can be viewed from different perspective.

Answer

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

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

(a) From shareholder's and lender's point of view : Major stakeholders of a business are equity shareholders and they view financial gearing i.e. ratio of debt in capital structure of company as risk since in event of winding up of a company they will be least prioritized.
Even for a lender, existing gearing is also a risk since company having high gearing faces more risk in default of payment of interest and principal repayment.

(b) From Company's point of view: From company's point of view if a company borrows excessively or lend to someone who defaults, then it can be forced to go into liquidation.

(c) From Government's point of view: From Government's point of view, the financial risk can be viewed as failure of any bank or (like Lehman Brothers) down grading of any financial institution leading to spread of distrust among society at large. Even this risk also includes willful defaulters. This can also be extended to sovereign debt crisis.

Question 4

RTP November 19 (New) / RTP November 18 (New)

Explain briefly the parameters to identify the currency risk. ***(Refer Subpoint (b) of the answer)***

MTP October 19 (New) / MTP October 22 (New) / MTP April 23

Explain some of the parameters to identify the currency risk. ***(Refer Subpoint (b) of the answer)***

ICAI November 23

List out the four methods for Identification and Management of Financial Risk. What are the parameters to identify the currency risk?

Answer

(a) Following are the four methods for identification and management of financial risk:

- Counter Party risk
- Political risk
- Interest Rate Risk
- Currency Risk

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

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

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

(iii) Inflation Rate: Purchasing power parity theory impact the value of currency.

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

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

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

Question 5

MTP October 19 (New)

Briefly explain Counter Party Risk and the various techniques to manage this risk.

ICAI December 21 (New)

Which type of risk covers the default by the counterparty? List out the ways to manage this type of risk.

Answer

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

The various techniques to manage this type of risk are as follows:

(1) Carrying out Due Diligence before dealing with any third party.

(2) Do not over commit to a single entity or group or connected entities.

(3) Know your exposure limits.

(4) Review the limits and procedure for credit approval regularly.

(5) Rapid action in the event of any likelihood of defaults.

(6) Use of performance guarantee, insurance or other instruments.

Question 6

ICAI January 21 (New)

Risks are inherent and integral part of the market. Discuss.

Answer

Yes, Risk is an integral part of market and this is a type of systematic risk that affects prices of any particular share move up or down consistently for some time periods in line with other shares in the market. A general rise in share prices is referred to as a bullish trend, whereas a general fall in share prices is referred to as a bearish trend. In other words, the share market moves between the bullish phase and the bearish phase. The market movements can be easily seen in the movement of share price indices such as the BSE Sensitive Index, BSE National Index, NSE Index etc.

Question 7

RTP May 21 (New)

Explain how an organization interested in making investment in foreign country can assess Country Risk and mitigate this risk.

Answer

Organisation can assess country risk

(1) By referring political ranking published by different business magazines.
(2) By evaluating country's macro-economic conditions.
(3) By analyzing the popularity of current government and assess their stability.
(4) By taking advises from the embassies of the home country in the host countries.

Further, following techniques can be used to mitigate this risk.

(i) Local sourcing of raw materials and labour.
(ii) Entering into joint ventures
(iii) Local financing
(iv) Prior negotiations

Question 8

MTP October 20 (New)

TRC Cables Ltd. (an Indian Company) is in the business of manufacturing Electrical Cables and Data Cables including Fiber Optics cables. While mainly it exports the manufactured cables to other countries it has also established its production facilities at some African countries' due availability of raw material and cheap labour there. Some of the major raw material such as copper, aluminum and other non-ferrous metals are also imported from foreign countries. Hence overall TRC has frequent receipts and expenditure items denominated in Non - INR currencies.

Though TRC make use of Long-Term Debts and Equity to meet its long term fund requirements but to finance its operations it make use of short-term financial instruments such as Commercial Papers, Bank Credit and Term Loans from the banks etc. If any surplus cash is left with TRC it is invested in interest yielding securities. Recently due to stiff competition from its competitors TRC has relaxed its policy for granting credit and to manage receivables it has formed a separate credit division.

Further to hedge itself against the various risk it has entered into various OTC Derivatives Contracts settled outside the Exchange.

Required:

Evaluate the major risks to which TRC Ltd. is exposed to.

Answer

(i) Following are main categories of risks to which TRC Cables is exposed to:

   (1) Financial Risks : TRC is exposed to following financial risks:
   (2) Currency Risk : Since most of the Receipts and Payments of TRC are denominated in Non-INR currencies it is exposed to Currency Risk.
   (3) Commodity Risk : As major constituents of production of TRC are commodities such copper, aluminum etc. it is subject to Commodity Risk.
   (4) Interest Rate Risk : As TRC borrows and invest money in short-term instruments it is exposed to Interest Rate Risk.

(5) Counter Party Risk : Due to relaxation of norms for granting credits certainly the receivable amount must have increased resulting in increased in Credit Risk.

(6) Liquidity Risk : Since for short-term funding requirements TRC is using Commercial Papers etc. they are exposed to Liquidity Risk as in time of need if funds are not available from these sources then securities shall be sold at discounted price.

(7) Political Risk : As TRC is operating in various other countries it is also exposed to Political Risks such as Restriction on Conversion of local earnings into foreign currency, restrictions on remittance etc.

(ii) Settlement Risk : The use of OTC Derivatives by TRC also expose it to the settlement risk as the parties with whom it has entered into the contract may not honor the same.

Question 9

MTP April 21 (Old)

Reinvestment risk & default risk

Answer

Re-investment Risk: This risk is again akin to all those securities, which generate intermittent cash flows in the form of periodic coupons. The most prevalent tool deployed to measure returns over a period of time is the Yield-to-Maturity (YTM) method. The YTM calculation assumes that the cash flows generated during the life of a security is reinvested at the rate of YTM. The risk here is that the rate at which the interim cash flows are reinvested may fall thereby affecting the returns.

Thus, reinvestment risk is the risk that future coupons from a bond will not be reinvested at the prevailing interest rate when the bond was initially purchased.

Default Risk: The event in which companies or individuals will be unable to make the required payments on their debt obligations. Lenders and investors are exposed to default risk in virtually all forms of credit extensions. To mitigate the impact of default risk, lenders often charge rates of return that correspond the debtor's level of default risk. The higher the risk, the higher the required return, and vice versa. This type of risk in the context of a Government security is always zero.

Question 10

MTP November 21 (New)

Explain the term 'Cyber Risk'.

Answer

Cyber Risk can be defined as the risk of damages due to lawsuits / compensation on account of being a victim of cyber-attack, due to which data of customers, vendors or any other counter- party can be leaked to an unauthorised, malevolent entity.

Question 11

ICAI May 22 (New)

Briefly explain:

(a) Compliance risk and

(b) Operational risk

Answer

(a) **Compliance Risk:** Every business needs to comply with rules and regulations. For example, with the advent of Companies Act, 2013, and continuous updating of SEBI guidelines, each business organization has to comply with plethora of rules, regulations and guidelines. Noncompliance leads to penalties in the form of fine and imprisonment.

However, when a company ventures into a new business line or a new geographical area, the real problem then occurs. For example, a company pursuing cement business likely to venture into sugar business in a different state but laws applicable to the sugar mills in that state are different. So, that poses a compliance risk. If the company fails to comply with laws related to a new area or industry or sector, it will pose a serious threat to its survival.

(b) **Operational Risk:** This type of risk relates to internal risk. It also relates to failure on the part of the company to cope with day-to-day operational problems. Operational risk relates to 'people' as well as 'process'. We will take an example to illustrate this.

For example, an employee paying out Rs 1,00,000 from the account of the company instead of Rs 10,000.

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

Question 12

MTP October 22 (New)

EXPLAIN the main risk that can be faced by an overseas investor.

Answer

Mainly Political Risk is faced by an overseas investors, as the adverse action by the government of host country may lead to huge loses. This can be on any of the following form.

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

Question 13

MTP October 23

What do you mean by term "Counter Party Risk". Explain various hints that may provide an indicator of the same risk.

Answer

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

(a) The various hints that may provide counter party risk are as follows:

(b) Failure to obtain necessary resources to complete the project or transaction undertaken.

(c) Any regulatory restrictions from the Government.

(d) Hostile action of foreign government.

(e) Let down by third party.

(f) Have become insolvent.

CHAPTER 3 : ADVANCED CAPITAL BUDGETING DECISIONS

Question 1

Write short note on Certainty Equivalent Approach.

Answer

This approach recognizes risk in capital budgeting analysis by adjusting estimated cash flows and employs risk free rate to discount the adjusted cash-flows. Under this method, the expected cash flows of the project are converted to equivalent riskless amounts. The greater the risk of an expected cash flow, the smaller the certainty equivalent values for receipts and longer the CE value for payment. This approach is superior to the risk adjusted discounted approach as it can measure risk more accurately.

This is yet another approach for dealing with risk in capital budgeting to reduce the forecasts of cash flows to some conservative levels. In certainty Equivalent approach we incorporate risk to adjust the cash flows of a proposal so as to reflect the risk element. The certainty Equivalent approach adjusts future cash flows rather than discount rates. This approach explicitly recognizes risk, but the procedure for reducing the forecasts of cash flows is implicit and likely to be inconsistent from one investment to another.

Question 2

What is the sensitivity analysis in Capital Budgeting?

Answer

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 3

Write a note on project appraisal under inflationary conditions.

Answer

Project Appraisal normally involves feasibility evaluation from technical, commercial, economic and financial aspects. It is generally an exercise in measurement and analysis of cash flows expected to occur over the life of the project. The project cash outflows usually occur initially and inflows come in the future.

During inflationary conditions, the project cost increases on all heads viz. labour, raw material, fixed assets such as equipments, plant and machinery, building material, remuneration of technicians and managerial personnel etc. Beside this, inflationary conditions erode purchasing power of consumers and affect the demand pattern. Thus, not only cost of production but also the projected statement of profitability and cash flows are affected by the change in demand pattern. Even financial institutions and banks may revise their lending rates resulting in escalation in financing cost during inflationary conditions. Under such circumstances, project appraisal has to be done generally keeping in view the following guidelines which are usually followed by government agencies, banks and financial institutions.

(i) It is always advisable to make provisions for cost escalation on all heads of cost, keeping in view the rate of inflation during likely period of delay in project implementation.
(ii) The various sources of finance should be carefully scrutinized with reference to probable revision in the rate of interest by the lenders and the revision which could be affected in the interest-bearing securities to be issued. All these factors will push up the cost of funds for the organization.
(iii) Adjustments should be made in profitability and cash flow projections to take care of the inflationary pressures affecting future projections.
(iv) It is also advisable to examine the financial viability of the project at the revised rates and assess the same with reference to economic justification of the project. The appropriate measure for this aspect is the economic rate of return for the project which will equate the present value of capital expenditures to net cash flows over the life of the projects. The rate of return should be acceptable which also accommodates the rate of inflation per annum.
(v) In an inflationary situation, projects having early payback periods should be preferred because projects with long payback period are riskier.

Under conditions of inflation, the project cost estimates that are relevant for a future date will suffer escalation. Inflationary conditions will tend to initiate the measurement of future cash flows. Either of the following two approaches may be used while appraising projects under such conditions:

(a) Adjust each year's cash flows to an inflation index, recognizing selling price increases and cost increases annually; or

(b) Adjust the 'Acceptance Rate' (cut-off) suitably retaining cash flow projections at current price levels.

An example of approach (ii) above can be as follows:

Normal Acceptance Rate : 15.0% Expected Annual Inflation : 5.0%

Adjusted Discount Rate : 15.0 × 1.05 or 15.75%

It must be noted that measurement of inflation has no standard approach nor is easy. This makes the job of appraisal a difficult one under such conditions.

Question 4

Explain the steps involved in Simulation Analysis.

Answer

Steps for Simulation Analysis:

1. Modelling the project: The model shows the relationship of NPV with parameters and exogenous variables. (Parameters are input variables specified by decision maker and held constant over all simulation runs. Exogenous variables are input variables, which are stochastic in nature and outside the control of the decision maker).
2. Specify values of parameters and probability distributions of exogenous variables.
3. Select a value at random from probability distribution of each of the exogenous variables.
4. Determine NPV corresponding to the randomly generated value of exogenous variables and pre-specified parameter variables.
5. Repeat steps (3) & (4) a large number of times to get a large number of simulated NPVs.
6. Plot probability distribution of NPVs and compute a mean and Standard Deviation of returns to gauge the project's level of risk.

CHAPTER 4 : SECURITY ANALYSIS

Important Exam Concepts: Economic Analysis, Efficient Market Hypothesis

Question 1

RTP May 20 (New) / RTP May 20 (Old)

Explain the factors affecting economic analysis.

Answer

Some of the factors affecting economic analysis 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 2

MTP October 19 (New) / MTP April 19 (New) / MTP October 19 (Old) / MTP August 18 (Old) / Practice Manual

Mention the various techniques used in economic analysis.

Answer

Some of the techniques used for economic analysis are:

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

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

(1) *Leading Indicators:* They lead the economic activity in terms of their outcome. They relate to the time series data of the variables that reach high/low points in advance of economic activity.

(2) *Roughly Coincidental Indicators*: They reach their peaks and troughs at approximately the same in the economy.

(3) *Lagging Indicators:* They are time series data of variables that lag behind in their consequences vis-a-vis the economy. They reach their turning points after the economy has reached its own already.

All these approaches suggest direction of change in the aggregate economic activity but nothing about its magnitude.

(iii) Economic Model Building Approach: In this approach, a precise and clear relationship between dependent and independent variables is determined. GNP model building or sectoral analysis is used in practice through the use of national accounting framework.

Question 3

RTP May 19 (New) / MTP October 18 (Old)

Describe the factors affecting Industry Analysis.

Answer

The following factors may particularly be kept in mind while assessing the factors relating to an industry.

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

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

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

(iv) Government Attitude: The attitude of the government towards an industry is a crucial determinant of its prospects.

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

(vi) Cost Conditions and Profitability: The price of a share depends on its return, which in turn depends on profitability of the firm. Profitability depends on the state of competition in the industry, cost control measures adopted by its units and growth in demand for its products.

(vii) Technology and Research: They play a vital role in the growth and survival of a particular industry. Technology is subject to change very fast leading to obsolescence. Industries which update themselves have a competitive advantage over others in terms of quality, price etc

Question 4

RTP May 19 (New) / RTP May 19 (Old)

Explain Co-location/Proximity Hosting.

Answer

The co-location or proximity hosting is a facility which is offered by the stock exchanges to stock brokers and data vendors whereby their trading or data-vending systems are allowed to be located within or at close proximity to the premises of the stock exchanges, and are allowed to connect to the trading platform of stock exchanges through direct and private network.

Moreover, pursuant to the recommendations of the Technical Advisory Committee (TAC) of SEBI, stock exchanges are advised to allow direct connectivity between co-location facility of one recognized stock exchange and the colocation facility of other recognized stock exchanges. Stock exchanges are also advised to allow direct connectivity between servers of a stock broker placed in colocation facility of a recognized stock exchange and servers of the same stock broker placed in colocation facility of a different recognized stock exchange. This facility should be available to all the co-located brokers, who are desirous to avail such connectivity, in a fair and equitable manner.

Further, in light of the public comments received and in consultation with Technical Advisory Committee (TAC) of SEBI and Secondary Market Advisory Committee (SMAC) of SEBI and in order to facilitate small and medium sized Members, who otherwise find it difficult to avail colocation facility, due to various reasons including but not limited to high cost, lack of expertise in maintenance and troubleshooting, etc. to avail co-location facility, SEBI has directed the stock exchanges to introduce

'Managed Co-location Services'. Under this facility, space/rack in co-location facility shall be allotted to eligible vendors by the stock exchange along with provision for receiving market data for further dissemination of the same to their client members and the facility.

Question 5

RTP November 18 (New) / MTP May 20 (New) / MTP May 20 (New) / Practice Manual

Explain the challenges to Efficient Market Theory.

Answer

Challenges to the Efficient Market Theory

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

(ii) Limited information processing capabilities – Human information processing capabilities are sharply limited. According to Herbert Simon every human organism lives in an environment which generates millions of new bits of information every second but the bottle necks of the perceptual apparatus does not admit more than thousand bits per seconds and possibly much less.

David Dreman maintained that under conditions of anxiety and uncertainty, with a vast interacting information grid, the market can become a giant.

(iii) Irrational Behaviour – It is generally believed that investors' rationality will ensure a close correspondence between market prices and intrinsic values. But in practice this is not true. J.M. Keynes argued that all sorts of consideration enter into the market valuation which is in no way relevant to the prospective yield. This was confirmed by

L. C. Gupta who found that the market evaluation processes work haphazardly almost like a blind man firing a gun. The market seems to function largely on hit or miss tactics rather than on the basis of informed beliefs about the long term prospects of individual enterprises.

(iv) Monopolistic Influence – A market is regarded as highly competitive. No single buyer or seller is supposed to have undue influence over prices. In practice, powerful institutions and big operators wield grate influence over the market. The monopolistic power enjoyed by them diminishes the competitiveness of the market.

Question 6

MTP March 19 (New)

Describe the concept of 'Evaluation of Technical Analysis'.

ICAI November 20 (New)

In an efficient market, technical analysis may not work perfectly. However, with imperfections, inefficiencies and irrationalities, which characterises the real world, technical analysis may be helpful.

Critically analyse the statement.

ICAI November 23

In a rational, well ordered and efficient market, technical analysis may not work very well". Is it true? List out the reasons for this statement regarding Technical Analysis.

Answer

Evaluation of Technical Analysis

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

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

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

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

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

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

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

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

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

In a nutshell, it may be concluded that in a rational, well ordered and efficient market, technical analysis may not work very well. However with imperfection, inefficiency and irrationalities that characterizes the real world market, technical analysis may be helpful. If technical analysis is used in conjunction with fundamental analysis, it might be useful in providing proper guidance to investment decision makers.

Question 7

MTP April 18 (New) / MTP April 18 (Old) / Practice Manual

Explain Random Walk theory.

Answer

Random Walk Theory

Random Walk hypothesis 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. Basic premises of the theory are as follows:

- 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.
- 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).

Question 8

MTP March 18 (New) / MTP October 18 (New) / MTP October 22 (New)

Explain Dow Jones theory.

Answer

The Dow Theory is one of the oldest and most famous technical theories. It was originated by Charles Dow, the founder of Dow Jones Company in late nineteenth century. It is a helpful tool for determining the relative strength of the stock market. It can also be used as a barometer of business.

The Dow Theory is based upon the movements of two indices, constructed by Charles Dow, Dow Jones Industrial Average (DJIA) and Dow Jones Transportation Average (DJTA). These averages reflect the aggregate impact of all kinds of information on the market. The movements of the market are divided into three classifications, all going at the same time; the primary movement, the secondary movement, and the daily fluctuations. The primary movement is the main trend of the market, which lasts from one year to 36 months or longer. This trend is commonly called bear or bull market. The secondary movement of the market is shorter in duration than the primary movement, and is opposite in direction. It lasts from two weeks to a month or more. The daily fluctuations are the narrow movements from day-to-day. These fluctuations are not part of the Dow Theory interpretation of the stock market. However, daily movements must be carefully studied, along with primary and secondary movements, as they go to make up the longer movement in the market.

Thus, the Dow Theory's purpose is to determine where the market is and where is it going, although not how far or high. The theory, in practice, states that if the cyclical swings of the stock market averages are successively higher and the successive lows are higher, then the market trend is up and a bullish market exists. Contrarily, if the successive highs and successive lows are lower, then the direction of the market is down and a bearish market exists.

Question 9

Practice Manual

Explain the Elliot Wave Theory of technical analysis?

Answer

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

As per this theory, waves can be classified into two parts:-

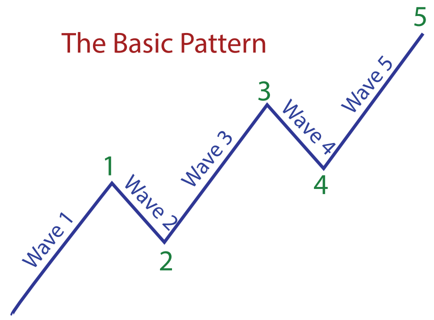
- Impulsive patterns
- Corrective patters

Let us discuss each of these patterns.

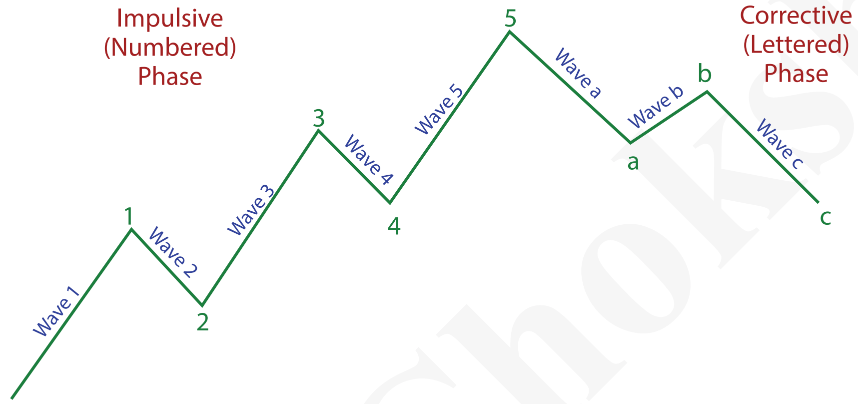
(a) Impulsive Patterns-(Basic Waves) - In this pattern there will be 3 or 5 waves in a given direction (going upward or downward). These waves shall move in the direction of the basic movement. This movement can indicate bull phase or bear phase.

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

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



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



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

Question 10

RTP November 20 (New) / MTP October 20 (New)

Explain various "Market Indicators".

RTP November 20 (Old)

Market Indicators for Technical Analysis

Answer

The various market indicators are as follows:

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

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

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

(iv) **Relative Strength Analysis:** The relative strength concept suggests that the prices of some securities rise relatively faster in a bull market or decline more slowly in a bear market than other securities i.e. some securities exhibit relative strength. Investors will earn higher returns by investing in securities which have demonstrated relative strength in the past because the relative strength of a security tends to remain undiminished over time.

Relative strength can be measured in several ways. Calculating rates of return and classifying those securities with historically high average returns as securities with high relative strength is one of them. Even ratios like security relative to its industry and security relative to the entire market can also be used to detect relative strength in a security or an industry.

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

Question 11

ICAI December 21 (New)

Describe briefly on which principles Technical Analysis is based.

Answer

Technical analysis is based on the following three principals:

(1) **The Market Discounts Everything:** Although many experts criticize technical analysis because it only considers price movements and ignores fundamental factors but the Efficient Market Hypothesis (discussed later in detail) contradicts it according to which a company's share price already reflects everything that has or could affect a company and it includes fundamental factors. So, technical analysts generally have the view that a company's share price includes everything including the fundamentals of a company.

(2) Price Moves in Trends: Technical analysts believe that prices move in trends. In other words, a stock price is more likely to continue a past trend than move in a different direction.
History Tends to Repeat Itself : Technical analysts believe that history tends to repeat itself. Technical analysis uses chart patterns to analyze subsequent market movements to understand trends. While many form of technical analysis have been used for many years, they are still considered to be significant because they illustrate patterns in price movements that often repeat themselves.

Question 12

ICAI SM

Explain the Efficient Market Theory in and what is major misconception about this theory?

Answer

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

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

Misconception about Efficient Market Theory

Efficient Market Theory implies that market prices factor in all available information and as such it is not possible for any investor to earn consistent long term returns from market operations.

Although price tends to fluctuate they cannot reflect fair value. This is because the future is uncertain. The market springs surprises continually and as prices reflect the surprises they fluctuate.

Inability of institutional portfolio managers to achieve superior investment performance implies that they lack competence in an efficient market. It is not possible to achieve superior investment performance since market efficiency exists due to portfolio mangers doing this job well in a competitive setting.

The random movement of stock prices suggests that stock market is irrational. Randomness and irrationality are two different things, if investors are rational and competitive, price changes are bound to be random.

CHAPTER 5 : SECURITY VALUATION

Important Exam Concepts: Reverse Stock Split

Question 1

RTP November 19 (New) / RTP November 19 (Old) / MTP April 19 (New) / MTP April 19 (Old)

Explain the reasons of Reverse Stock Split.

Answer

'Reverse Stock Split' is a process whereby a company decreases the number of shares outstanding by combining current shares into fewer or lesser number of shares. For example, in a 5:1 reverse split, a company would take back 5 shares and will replace them with one share.

Although, reverse stock split does not result in change in Market value or Market Capitalisation of the company but it results in increase in price per share.

Considering above mentioned ratio, if company has 100 million shares outstanding before split up, the number of shares would be equal to 20 million after the reverse split up.

Reasons for Reverse Split Up

Generally, company carries out reverse split up due to following reasons:

- **(i) Avoiding delisting from stock exchange:** Sometimes as per the stock exchange regulation if the price of shares of a company goes below a limit it can be delisted. To avoid such delisting company may resort to reverse stock split up.
- **(ii) Avoiding removal from constituents of Index:** If company's share its one of the constituents of market index then to avoid their removal of scrip from this list, the company may take reverse split up route.
- **(iii) To avoid the tag of "Penny Stock":** If the price of shares of a company goes below a limit it may be called "Penny Stock". In order to improve the image of the company and avoiding this stage, the company may go for Reverse Stock Split.
- **(iv) To attract Institutional Investors and Mutual Funds:** It might be possible that institutional investors may be shying away from acquiring low value shares to attract these investors the company may adopt the route of "Reverse Stock Split" to increase the price per share

Question 2

RTP November 21 (New)

Can a company with no commercial operations raise capital via an IPO? Discuss.

RTP November 21 (Old)

Special Purpose Acquisition Companies (SPACs)

Answer

Although the statement "a company with no commercial operation can launch an IPO" appears to be absurd but this is a fact that even if company does not have any business, it can float an IPO. In recent time the concept of Special Purpose Acquisition Companies (SPACs) has come into existence wherein an entity is set up with the objective to raise funds through an IPO to finance a merger or acquisition of an unidentified target within a specific time period. It is commonly known as a blank cheque company.

The main objective of SPAC is to raise money, despite having any operations or revenues. The money raised from the public is kept in an escrow account, which can be accessed while making the acquisition. However, in case the acquisition is not made within stipulated period of time of the IPO, the SPAC is delisted and the money is returned to the investors. Shareholders have the option to redeem their shares if they are not interested in participating in the proposed merger. Finally, if the merger is approved by shareholders, it is executed, and the target private company or companies become public entities. Once a formal merger agreement has been executed the SPAC target is usually publicly announced.

New investment opportunities in Indian companies have resurfaced and have set up new platform for SPAC transactions. The implementation of SPACs might face certain challenges since India does not have a specific regulatory framework guarding these transactions.

The current regulatory framework in India does not support the SPAC transactions. Further as per the Companies Act, 2013, the Registrar of Companies is authorized to strike-off the name of companies that do not commence operation within one year of incorporation. SPACs generally take 2 to 3 years to identify a target and performing due diligence and before it could get operationalized its name can be stricken off and hence enabling provisions relating to SPAC need to be inserted in the Companies Act in order to make it functional in India.

Though, SPACs do not find acceptance under the Securities and Exchange Board of India (SEBI) Act as it does not meet the eligibility criteria for public listing however SEBI is planning to come out with a framework for SPACs.

The International Financial Services Centres Authority (IFSCA), being the regulatory authority for development and regulation of financial services, financial products and financial institutions in the Gujarat International Finance Tec-City, has recently released a consultation paper defining critical parameters such as offer size to public, compulsory sponsor holding, minimum application size, minimum subscription of the offer size, etc.

SPAC approach offers several advantages over traditional IPO, such as providing companies access to capital, even when market volatility and other conditions limit liquidity. SPACs help to lower the transaction fees as well as expedite the timeline in becoming a public company. Raising money through a SPAC is easier as compared to traditional IPO since the SPAC has already raised money through an IPO. This implies the company in question only has to negotiate with a single entity, as opposed to thousands of individual investors. This makes the process of fundraising a lot easier and quicker than through an IPO. The involvement of skilled professionals in identifying the target makes the investment a well thought and a well governed process.

However, the merger of a SPAC with a target company presents several challenges, such as complex accounting and financial reporting/registration requirements, to meet a public company readiness timeline and being ready to operate as a public company within a period of three to five months of signing a letter of intent.

It is typically more expensive for a company to raise money through a SPAC than an IPO. Investors' money invested in a SPAC trust to earn a suitable return for up to two years, could be put to better use elsewhere.

Question 3

MTP April 21 (New) / MTP April 21 (Old)

The idea of Quant Fund is stock-picking free from human intervention. Discuss.

Answer

The given statement is true to a certain extent in reference to Mutual Funds where the concept of Quant Fund is becoming popular day by day.

Quant Fund follows a data-driven approach for stock selection or investment decisions based on a pre-determined rules or parameters using statistics or mathematics based models.

Contrary to an active fund Manager who selects the quantum and timing of investments i.e. entry or exit, this fund completely rely on an automated programme for making decision for quantum of investment as well as its timings.

It does not mean that there is no human intervention at all, the Fund Manager usually focuses on the robustness of the Models in use and also monitors their performance or some modification is required.

Sometime a Quant Fund manager is confused with Index Fund Manager but it is not so as the Index Fund Manager may entirely hands off the investment decision purely based on Index, while Quant Fund Manager often designs and monitors models that throw up the choices.

The main advantage of Quant Fund is that it eliminates the human biasness and subjectivity. Further using model based approach also ensures consistency in strategy across the market conditions.

Also since the Quant Fund normally follows passive strategy, the exposure ratio tends to be lower.

Since Quant Fund uses highly sophisticated strategies investors who well understand Stock Valuation methods, different stock picking styles, the market sentiments and derivatives etc. should invest in the same. Further since Quant Fund are tested on the basis of historical data and past trends though cannot altogether be ignore but also cannot be used blindly as good indicators.

Thus, overall it can be said that whether it is human or a machine it is not easy to beat the market.

Question 4

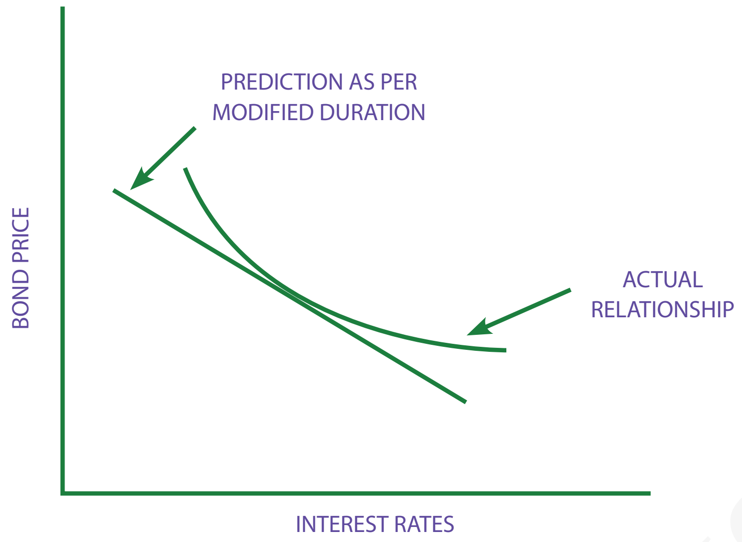
MTP April 21 (New)

Modified Duration is a proxy not an accurate measure of change in price of a Bond due to change interest rate. Discuss.

Answer

Although Modified Duration is a measure of volatility or change in the price of a Bond consequent upon change in the yield or interest rates as it assumes a linear relationship between the Modified Duration and the price of a Bond but is not accurate measure because of Convexity.

Accordingly the relationship between change in the interest rate and bond value is non-linear i.e. convex curve to the origin as shown below:



From the above diagram it is clear that the actual effect of change in interest rate on Bond Price is different from the predicted linear relationship.

Question 5

MTP March 21 (Old)

Money Market and its features

Answer

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 borrower
- 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.

Question 6

MTP October 21 (Old)

Are Sustainable Growth Rate and Internal Growth Rate being same concepts? Explain.

Answer

Although both concepts appear to be same but there are some differences between them. The Internal Growth Rate can be defined as the maximum growth that a firm can achieve from using internal sources of fund i.e. without resorting to external funding. The Sustainable Growth Rate 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.

Question 7

ICAI December 21 (Old)

Repo and Reverse Repo are important tools in the hands of Reserve Bank of India to manage liquidity. Discuss.

Answer

The term Repurchase Agreement (Repo) and Reverse Repurchase Agreement (Reverse Repo) refer to a type of transaction in which money market participant raises funds by selling securities and simultaneously agreeing to repurchase the same after a specified time generally at a specified price, which typically includes interest at an agreed upon rate. Such a transaction is called a Repo when viewed from the perspective of the seller of securities (the party acquiring funds) and Reverse Repo when described from the point of view of the supplier of funds.

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 8

ICAI SM

Why should the duration of a coupon carrying bond always be less than the time to its maturity?

Answer

Duration of a bond represents the time taken to recover the value of the bond through its internal cash flows. In case of a coupon bearing bond the cash flows will be recovered during the tenure of the bond and as a result the duration (similar to average due date / payback period) would be shorter than the maximum maturity since the amount is not entirely recovered on maturity but a part of it is even recovered before maturity.

Question 9

ICAI SM

Write short notes on Zero Coupon Bonds.

Answer

As name indicates these bonds do not pay any coupon during the life of the bonds. Instead, Zero Coupon Bonds (ZCBs) 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 ZCB 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 ZCBs are usually long term. These maturity dates allow an investor for a long-range planning. ZCBs 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.

CHAPTER 6 : PORTFOLIO MANAGEMENT

Important Exam Concepts: Nothing specific

Question 1

MTP August 18 (New) / MTP October 20 (New) / MTP September 22 (New)

Explain Asset Allocation Strategies.

Answer

There are four asset allocation strategies:

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

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

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

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

Question 2

Practice Manual

Write short note on Stock Lending Scheme

Answer

Stock Lending Scheme: Stock lending means transfer of security. The legal title is temporarily transferred from a lender to a borrower. The lender retains all the benefits of ownership, except voting power/rights. The borrower is entitled to utilize the securities as required but is liable to the lender for all benefits such as dividends, rights etc. The basic purpose of stock borrower is to cover the short sales i.e. selling the shares without possessing them. SEBI has introduced scheme for securities lending and borrowing in 1997.

Advantages:

(1) Lenders to get return (as lending charges) from it, instead of keeping it idle.

(2) Borrower uses it to avoid settlement failure and loss due to auction.

(3) From the view-point of market this facilitates timely settlement, increase in settlement, reduce market volatility and improves liquidity.

(4) This prohibits fictitious Bull Run.

The borrower has to deposit the collateral securities, which could be cash, bank guarantees, government securities or certificates of deposits or other securities, with the approved intermediary. In case, the borrower fails to return the securities, he will be declared a defaulter and the approved intermediary will liquidate the collateral deposited with it.

In the event of default, the approved intermediary is liable for making good the loss caused to the lender.

The borrower cannot discharge his liabilities of returning the equivalent securities through payment in cash or kind.

National Securities Clearing Corporation Ltd. (NSCCL), Stock Holding Corporation of India (SHCIL), Deutsche Bank, and Reliance Capital etc. are the registered and approved intermediaries for the purpose of stock lending scheme. NSCCL proposes to offer a number of schemes, including the Automated Lending and Borrowing Mechanism (ALBM), automatic borrowing for settlement failures and case by case borrowing.

Question 3

Practice Manual

How is a stock market index calculated? Indicate any two important stock market indices.

Answer

1. A base year is set alongwith a basket of base shares.
2. The changes in the market price of these shares is calculated on a daily basis.
3. The shares included in the index are those shares which are traded regularly in high volume.
4. In case the trading in any share stops or comes down then it gets excluded and another company's shares replace it.
5. Following steps are involved in calculation of index on a particular date:
   - Calculate market capitalisation of each individual company comprising the index.
   - Calculate the total market capitalisation by adding the individual market capitalisation of all companies in the index.
   - Computing index of next day requires the index value and the total market capitalisation of the previous day and is computed as follows:
   - $\text{Index Value} = \text{Index on Previous Day} \times \dfrac{\text{Total market capitalisation for current day}}{\text{Total market capitalisation for previous day}}$
   - It should also be noted that Indices may also be calculated using the price weighted method. Here the share prices of the constituent companies form the weights. However, almost all equity indices world-wide are calculated using the market capitalisation weighted method.

Each stock exchange has a flagship index like in India Sensex of BSE and Nifty of NSE and outside India is Dow Jones, FTSE etc.

Question 4

Practice Manual

What are P-notes? Why it is preferable route for foreigners to invest in India?

Answer

International access to the Indian Capital Markets is limited to FIIs registered with SEBI. The other investors, interested in investing in India can open their account with any registered FII and the FII gets itself registered with SEBI as its sub-account. There are some investors who do not want to disclose their identity or who do not want to get themselves registered with SEBI.

The foreign investors prefer P-Notes route for the following reasons:

(1) Some investors do not want to reveal their identities. P-Notes serve this purpose.

(2) They can invest in Indian Shares without any formalities like registration with SEBI, submitting various reports etc.

(3) Saving in cost of investing as no office is to be maintained.

(4) No currency conversion.

FII are not allowed to issue P-Notes to Indian nationals, person of Indian origin or overseas corporate bodies.

Question 5

ICAI January 21 (Old) / MTP March 23 (New)

Write any four differences between "Systematic risk" and "Unsystematic risk"

Answer

Differences between Systematic Risk and Unsystematic Risk

S. No.	Systematic Risk	Unsystematic Risk
1.	Refers to the variability of return on stocks or portfolio associated with changes in return on the market as a whole.	Refers to risk unique to a particular company or industry.
2.	It arises due to risk factors that affect the overall market such as changes in the nation's economy, tax reform by the Government or a change in the world energy situation.	It arises due to risk factors that are particular to any company or industry.
3.	Since this affects securities overall and consequently, cannot be diversified away.	This risk can be virtually eliminated from a portfolio through diversification.
4.	Beta is a measure of Systematic Risk.	Standard Deviation is a measure of Systematic Risk.

Question 6

MTP April 21 (New)

Explain the strategy of Portfolio rebalancing under which the value of a portfolio shall not below a specified value in normal market conditions. ***(Refer Subpoint (ii) of the answer)***

ICAI December 21 (New)

Buy and hold is one of the policies of portfolio rebalancing. Briefly explain other policies of portfolio rebalancing.

Answer

While one policy of rebalancing portfolio is Buy and Hold the two policies are as follows:

(i) **Constant Mix Policy:** Contrary to above policy this policy is a 'Do Something Policy'. Under this policy investor maintains an exposure to stock at a constant percentage of total portfolio. This strategy involves periodic rebalancing to required (desired) proportion by purchasing and selling stocks as and when their prices goes down and up respectively. In other words this plan specifies that value of aggressive portfolio to the value of conservative portfolio will be held constant at a pre- determined ratio. However, it is important to this action is taken only there is change in the prices of share at a predetermined percentage.

(ii) **Constant Proportion Insurance Policy:** Under this strategy investor sets a floor below which he does not wish his asset to fall called floor, which is invested in some non-fluctuating assets such as Treasury Bills, Bonds etc. The value of portfolio under this strategy shall not fall below this specified floor under normal market conditions. This strategy performs well especially in bull market as the value of shares purchased as cushion increases. In contrast in bearish market losses are avoided by sale of shares. It should however be noted that this strategy performs very poorly in the market hurt by sharp reversals. The following equation is used to determine equity allocation:

Target Investment in Shares = Multiplier (Portfolio Value – Floor Value)

Multiplier is a fixed constant whose value shall be more than 1.

Question 7

MTP September 23

Explain the key features of Alternative Investments that make them different from other investment avenues.

Answer

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

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

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

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

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

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

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

Question 8

MTP October 23

Explain the advantages and Limitation of Capital Asset Pricing Model (CAPM).

Answer

The advantages of CAPM can be listed as:

(i) **Risk Adjusted Return:** It provides a reasonable basis for estimating the required return on an investment which has risk in built into it. Hence it can be used as Risk Adjusted Discount Rate in Capital Budgeting.

(ii) **No Dividend Company:** It is useful in computing the cost of equity of a company which does not declare dividend.

There are certain limitations of CAPM as well, which are discussed as fo llows:

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

(ii) **Other Risks:** By emphasing on systematic risk only, unsystematic risks are of importance to share holders who do not possess a diversified portfolio.

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

CHAPTER 7 : SECURITIZATION

Important Exam Concepts: Steps, Participants, Benefits, Instruments & Problems of Securitization

Question 1

ICAI November 19 (New) / MTP April 18 (New)

State the main problems faced in Securitization in India?

MTP May 20 (New) / MTP October 19 (New)

Describe the problems faced in the growth of Securitization of instruments especially in Indian context.

RTP November 20 (New)

Discuss briefly the problems faced in the growth of Securitization of Instruments in Indian context.

ICAI July 21 (New)

State the problems faced in growth of securitization instruments in Indian context.

MTP October 20 (New)

Explain the various problems that are faced in growth of Securitization of Instruments in Indian context.

MTP October 21 (New)

List out the reasons for dismal growth of Securitization of instruments in India.

ICAI November 23

"Lack of existence of a well-developed debt market in India, is an obstacle that hinders the growth of the Secondary Market of securitized or asset backed Securities". Is it true?

What are the other problems in Securitization Process? (Any three)

Answer

Yes

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

1. **Stamp Duty:** Stamp Duty is one of the obstacles in India. Under Transfer of Property Act, 1882, a mortgage debt stamp duty which even goes upto 12% in some states of India and this impeded the growth of securitization in India. It should be noted that since pass through certificate does not evidence any debt only able to receivable, they are exempted from stamp duty.
   Moreover, in India, recognizing the special nature of securitized instruments in some states has reduced the stamp duty on them.
2. **Taxation:** Taxation is another area of concern in India. In the absence of any specific provision relating to securitized instruments in Income Tax Act, experts' opinion differs a lot. Some are of opinion

that SPV as a trustee is liable to be taxed in a representative capacity. While, others are of view that instead of SPV, investors will be taxed on their share of income. Clarity is also required on the issues of capital gain implications on passing payments to the investors.

3. **Accounting:** Accounting and reporting of securitized assets in the books of originator is another area of concern. Although securitization is slated to an off -balance sheet instrument but in true sense receivables are removed from originator's balance sheet. Problem arises especially when assets are transferred without recourse.
4. **Lack of standardization:** Every originator following his own format for documentation and administration having lack of standardization is another obstacle in the growth of securitization.
5. **Inadequate Debt Market:** Lack of existence of a well-developed debt market in India is another obstacle that hinders the growth of secondary market of securitized or asset backed securities.
6. **Ineffective Foreclosure laws:** For many years efforts are on for effective foreclosure but still foreclosure laws are not supportive to lending institutions and this makes securitized instruments especially mortgaged backed securities less attractive as lenders face difficulty in transfer of property in event of default by the borrower.

Question 2

ICAI May 18 (New) / ICAI May 19 (New) / RTP May 20 (New) / MTP April 19 (New)

Discuss briefly the steps involved in the Securitization mechanism.

Answer

The steps involved in securitization mechanism are as follows:

1. **Creation of Pool of Assets:** The process of securitization begins with creation of pool of assets by segregation of assets backed by similar type of mortgages in terms of interest rate, risk, maturity and concentration units.
2. **Transfer to SPV:** One assets have been pooled, they are transferred to Special Purpose Vehicle (SPV) especially created for this purpose.
3. **Sale of Securitized Papers:** SPV designs the instruments based on nature of interest, risk, tenure etc. based on pool of assets. These instruments can be Pass Through Security or Pay Through Certificates.
4. **Administration of assets:** The administration of assets in subcontracted back to originator which collects principal and interest from underlying assets and transfer it to SPV, which works as a conduct.
5. **Recourse to Originator:** Performance of securitized papers depends on the performance of underlying assets and unless specified in case of default they go back to originator from SPV.
6. **Repayment of funds:** SPV will repay the funds in form of interest and principal that arises from the assets pooled.
7. **Credit Rating of Instruments:** Sometime before the sale of securitized instruments credit rating can be done to assess the risk of the issuer.

Question 3

ICAI May 18 (New) / ICAI May 22 (New)

Explain the benefits of Securitization from the perspective of both originator as well as the investor.

ICAI November 19 (New) / RTP November 19 (New)

Identify the benefits of Securitization from the angle of Originator.

MTP March 23 (New)

"Securitisation is beneficial from the angle of various parties involved in it". Explain.

MTP April 23

Explain various benefits that accrues to an investor by investing money in the Securitized Instruments. ***(Refer Subpoint (ii) of the answer)***

Answer

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

(i) From the angle of originator: Originator (entity which sells assets collectively to Special Purpose Vehicle) achieves the following benefits from securitization.

- **Off – Balance Sheet Financing:** When loan/receivables are securitized it release a portion of capital tied up in these assets resulting in off Balance Sheet financing leading to improved liquidity position which helps expanding the business of the company.
- **More specialization in main business:** By transferring the assets the entity could concentrate more on core business as servicing of loan is transferred to SPV. Further, in case of non-recourse arrangement even the burden of default is shifted.
- **Helps to improve financial ratios:** Especially in case of Financial Institutions and Banks, it helps to manage Capital –To-Weighted Asset Ratio effectively.
- **Reduced borrowing Cost:** Since securitized papers are rated due to credit enhancement even they can also be issued at reduced rate as of debts and hence the originator earns a spread, resulting in reduced cost of borrowings.

(ii) From the angle of investor: Following benefits accrues to the investors of securitized securities.

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

- **Regulatory requirement:** Acquisition of asset backed belonging to a particular industry say micro industry helps banks to meet regulatory requirement of investment of fund in industry specific.
- **Protection against default:** In case of recourse arrangement if there is any default by any third party then originator shall make good the least amount. Moreover, there can be insurance arrangement for compensation for any such default

Question 4

ICAI May 19 (Old) / RTP May 18 (Old) / MTP October 19 (Old)

Explain briefly Debt/Assets Securitisation, and its process.

RTP November 19 (Old)/ MTP March 19 (Old)/ Practice Manual

Asset Securitization

RTP May 21 (Old)

Debt/ Asset Securitisation

Answer

Debt Securitisation is a method of recycling of funds. This method is mostly used by finance companies to raise funds against financial assets such as loan receivables, mortgage backed receivables, credit card balances, hire purchase debtors, lease receivables, trade debtors, etc. and thus beneficial to such financial intermediaries to support the lending volumes. Thus, assets generating study cash flows are packaged together and against this assets pool market securities can be issued. Investors are usually cash-rich institutional investors like mutual funds and insurance companies.

The process can be classified in the following three functions:

The origination function- A borrower seeks a loan from finance company, bank, housing company or a financial institution. On the basis of credit worthiness repayment schedule is structured over the life of the loan.

The pooling function- Many 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.

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 base on 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 available (i.e. difference) between yield from secured asset and interest paid to investors.

Generally, the process of securitisation is without recourse is. 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.

Question 5

RTP May 18 (New)

Primary participants and secondary participants in securitization

ICAI November 18 (New) / MTP August 18 (New) / MTP March 21 (New)

Discuss about the Primary Participants in the process of Securitization.

ICAI January 21 (New) / MTP March 23 (New)

Participants are required for the success of the securitization process. Discuss their roles

RTP May 21 (New)

Explain the Secondary Participants involved in the process of Securitization of Instruments.

MTP March 22 (New) / MTP September 23

“Besides the primary participants other parties are also involved in the process of Securitisation”. EXPLAIN.

(Refer Subpoint (b) of the answer)

Answer

(a) Distinction between Primary Participants and Secondary Participants in securitization

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

- **(i) Originator:** It is the initiator of deal or can be termed as securitizer. It is an entity which sells the assets lying in its books and receives the funds generated through the sale of such assets.
- **(ii) Special Purpose Vehicle:** Also, called SPV is created for the purpose of executing the deal. Since issuer originator transfers all rights in assets to SPV, it holds the legal title of these assets. It is created especially for the purpose of securitization only and normally could be in form of a company, a firm, a society or a trust.
- **(iii) The Investors:** Investors are the buyers of securitized papers which may be an individual, an institutional investor such as mutual funds, provident funds, insurance companies, mutual funds, Financial Institutions etc.

(b) Secondary Participants

Besides, the primary participants, other parties involved into the securitization process are as follows:

- **(i) Obligors:** Actually they are the main source of the whole securitization process. They are the parties who owe money to the firm and are assets in the Balance Sheet of Originator.
- **(ii) Rating Agency:** Since the securitization is based on the pools of assets rather than the originators, the assets have to be assessed in terms of its credit quality and credit support available and that is where the credit rating agencies come.
- **(iii) Receiving and Paying Agent (RPA):** Also, called Servicer or Administrator, it collects the payment due from obligor(s) and passes it to SPV. It also follow up with defaulting borrower and if required initiate appropriate legal action against them.
- **(iv) Agent or Trustee:** Trustees are appointed to oversee that all parties to the deal perform in the true spirit of terms of agreement. Normally, it takes care of interest of investors who acquires the securities.
- **(v) Credit Enhancer:** Since investors in securitized instruments are directly exposed to performance of the underlying and sometime may have limited or no recourse to the originator, they seek additional comfort in the form of credit enhancement. In other words, they require credit rating of issued securities which also empowers marketability of the securities.

  Originator itself or a third party say a bank may provide an additional comfort called Credit Enhancer. While originator provides his comfort in the form of over collateralization or cash collateral, the third party provides it in form of letter of credit or surety bonds.
- **(vi) Structurer:** It brings together the originator, investors, credit enhancers and other parties to the deal of securitization. Normally, these are investment bankers also called arranger of the deal. It ensures that deal meets all legal, regulatory, accounting and tax laws requirements.

Question 6

MTP April 19 (New) / MTP September 22 (New)

Explain briefly the various types of securitized instruments.

MTP March 18 (New)

Describe various securitization instruments.

MTP March 19 (New)

Describe the concept of 'Stripped Securities'.

MTP October 18 (New) / ICAI November 20 (New)

Differentiate between PTS and PTC.

MTP April 21 (New)

Distinguish between Pass Through Certificates (PTCs) and Pay Through Securities (PTSs).

Answer

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

(i) **Pass Through Certificates (PTCs):** As the title suggests originator (seller of the assets) transfers the entire receipt of cash in form of interest or principal repayment from the assets sold. Thus, these securities represent direct claim of the investors on all the assets that has been securitized through SPV. Since all cash flows are transferred the investors carry proportional beneficial interest in the asset held in the trust by SPV.

It should be noted that since it is a direct route any prepayment of principal is also proportionately distributed among the securities holders. Further, due to these characteristics on completion of securitization by the final payment of assets, all the securities are terminated simultaneously.

Skewness of cash flows occurs in early stage if principals are repaid before the scheduled time.

(ii) **Pay Through Security (PTS):** As mentioned earlier, since, in PTCs all cash flows are passed to the performance of the securitized assets. To overcome this limitation and limitation to single mature there is another structure i.e. PTS.

In contrast to PTC in PTS, SPV debt securities backed by the assets and hence it can restructure different tranches from varying maturities of receivables.

In other words, this structure permits desynchronization of servicing of securities issued from cash flow generating from the asset. Further, this structure also permits the SPV to reinvest surplus funds for short term as per their requirement.

Since, in Pass Through, all cash flow immediately in PTS in case of early retirement of receivables plus cash can be used for short term yield. This structure also provides the freedom to issue several debt trances with varying maturities.

(iii) **Stripped Securities:** Stripped Securities are created by dividing the cash flows associated with underlying securities into two or more new securities. Those two securities are as follows:

- Interest Only (IO) Securities

- Principle Only (PO) Securities

As each investor receives a combination of principal and interest, it can be stripped into two portions of Interest and Principle. Accordingly, the holder of IO securities receives only interest while PO security holder receives only principal. Being highly volatile in nature these securities are less preferred by investors.

In case yield to maturity in market rises, PO price tends to fall as borrower prefers to postpone the payment on cheaper loans. Whereas if interest rate in market falls, the borrower tends to repay the loans as they prefer to borrow fresh at lower rate of interest.

In contrast, value of IO's securities increases when interest rate goes up in the market as more interest is calculated on borrowings.

However, when interest rate due to prepayments of principals, IO's tends to fall.

Thus, from the above, it is clear that it is mainly perception of investors that determines the prices of IOs and POs.

Question 7

MTP March 19 (New) / ICAI December 21 (New) / RTP November 23

Explain the pricing of the securitized Instruments.

MTP November 21 (New)

"While pricing the securitized instruments, it is important that it should be acceptable to both originators as well as to the investors". Explain.

Answer

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

From Originator's Angle

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

From Investor's Angle

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

Question 8

MTP October 18 (New)

Explain securitisation in India.

Answer

It is the Citi Bank who pioneered the concept of securitization in India by bundling of auto loans in securitized instruments. Thereafter many organizations securitized their receivables. Although started with securitization of auto loans it moved to other types of receivables such as sales tax deferrals, aircraft receivable etc.

In order to encourage securitization, the Government has come out with Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002, to tackle menace of Non-Performing Assets (NPAs) without approaching to Court. With growing sophistication of financial products in Indian Capital Market, securitization has occupied an important place.

As mentioned above, though, initially started with auto loan receivables, it has become an important source of funding for micro finance companies and NBFCs and even now a days commercial mortgage backed securities are also emerging.The important highlight of the scenario of securitization in Indian Market is that it is dominated by a few players e.g. ICICI Bank, HDFC Bank, NHB etc.

As per a report of CRISIL, securitization transactions in India scored to the highest level of approximately Rs. 70,000 crores, in Financial Year 2016. (Business Line, 15th June, 2016) In order to further enhance the investor base in securitized debts, SEBI allowed FPIs to invest in securitized debt of unlisted companies upto a certain limit.

Question 9

MTP August 18 (New) / ICAI November 22 (New) / MTP April 23

Explain the features of 'Securitization'.

ICAI January 21 (New) / RTP May 23 (New)

"The process of securitisation can be viewed as a process of creation of additional financial product of securities in the market backed by collaterals." What are the other features? Describe.

MTP September 22 (New) / MTP April 22 (New)

"Securitisation is the process of repackaging or rebundling of illiquid assets into marketable securities". EXPLAIN.

MTP September 23

Not only Bundling and Unbundling is only feature of Securitisation, there are other features too of the same. Explain. ***(Refer Subpoint (ii) to (vi) of the answer)***

Answer

The securitization has the following features:

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

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

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

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

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

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

Question 10

RTP November 20 (Old)

Manner of purchase of Assets by Asset Reconstruction Companies

Answer

The Asset Reconstruction Companies purchase assets in the following manner and the whole process is closely monitored by the banking regulator:

(i) Raising Funds - Asset Reconstruction Companies are allowed to raise funds from Qualified Institutional Buyers only in order to make pay ment to buy discounted debts from banks. They raise fund through the issue of security receipts to QIB's. The security receipt gives the QIB a right, title or interest in the financial asset that is brought by the ARC. ARC's also issues debt instruments or even sells equity to raise funds. Further, they have to take a special precaution that retail investors are excluded from it. The reason is that ARC's are highly risky and only QIB's are able to withstand such risk in case of a loss.

(ii) Partnership Method - Many times, ARC's do not directly buy debts from the banks. They remain on the banks books. And, the bank hires the ARC to do the debt recovery process. Whatever revenue generated is divided between banks and ARC in a predetermined manner.

Question 11

ICAI May 23

'Pay through securities' are in the nature of participation certificates that enable the investors to take a direct exposure on the performance of the securitized assets. 'Pass Through Certificates', on the other hand, gives investors only a charge against the securitized assets. Do you agree with the statement? Justify your stand.

Answer

Not agreed with the statement.

In Pass Through Certificate originator (seller of the assets) transfers the entire receipt of cash in the form of interest or principal repayment from the assets sold. Thus, these securities represent direct claim of the investors on all the assets that has been securitized through SPV.

Since all cash flows are transferred the investors carry proportional beneficial interest in the asset held in the trust by SPV.

It should be noted that since it is a direct route any prepayment of principal is also proportionately distributed among the securities holders.

In contrast to Pass Through Certificate in Pay Through Security, SPV debt securities are backed by the assets and hence it can restructure different tranches from varying maturities of receivables. In other words, this structure permits de-synchronization of servicing of securities issued from cash flow generating from the asset. Further, this structure also permits the SPV to reinvest surplus funds for short term as per their requirement.

Question 12

MTP March 24

Tokenization to some extent resembles the process of Securitization. Explain the term "Tokenization" and also illustrate the similarities between Tokenization and Securitization.

Answer

Tokenization is a process of converting tangible and intangible assets into blockchain tokens. Digitally representing anything has recently acquired a lot of traction. It can be effective in conventional industries like real estate, artwork etc.

Tokenization and Securitization

Since tokenization of illiquid assets attempts to convert illiquid assets into a product that is liquid and tradable and hence to some extent it resembles the process of Securitization. Hence, following are some similarities between Tokenization and Securitization:

(i) **Liquidity:** First and foremost both Securitization and Tokenization inject liquidity in the market for the assets which are otherwise illiquid assets.

(ii) **Diversification:** Both help investors to diversify their portfolio thus managing risk and optimizing returns.

(iii) **Trading:** Both are tradable hence helps to generate wealth.

(iv) **New Opportunities:** Both provide opportunities for financial institutions and related agencies to earn income through collection of fees.

CHAPTER 8 : MUTUAL FUNDS

Important Exam Concepts: Nothing specific

Question 1

ICAI November 19 (Old) / MTP March 18 (Old) / MTP March 21 (New) / MTP October 21 (New)

Explain the different methods for evaluating the performance of a mutual fund.

Answer

The different methods of evaluating the performance of a Mutual Fund are as follows :

1. Sharpe Ratio: The excess return earned over the risk free return on portfolio to the portfolio's total risk measured by the standard deviation. This formula uses the volatility of portfolio return. The Sharpe ratio is often used to rank the risk-adjusted performance of various portfolios over the same time. The higher a Sharpe ratio, the better a portfolio's returns have been relative to the amount of investment risk the investor has taken.

$$S = \frac{\text{(Return of portfolio - Return of risk free investment)}}{\text{(Standard Deviation of Portfolio)}}$$

2. Treynor Ratio: This ratio is similar to the Sharpe Ratio except it uses Beta of portfolio instead of standard deviation. Treynor ratio evaluates the performance of a portfolio based on the systematic risk of a fund. Treynor ratio is based on the premise that unsystematic or specific risk can be diversified and hence, only incorporates the systematic risk (beta) to gauge the portfolio's performance.

$$T = \frac{\text{(Return of portfolio - Return of risk free investment)}}{\text{(Standard Deviation of Portfolio)}}$$

3. Jensen's Alpha: The comparison of actual return of the fund with the benchmark portfolio of the same risk. Normally, for the comparison of portfolios of mutual funds this ratio is applied and compared with market return. It shows the comparative risk and reward from the said portfolio. Alpha is the excess of actual return compared with expected return.

Question 2

RTP November 19 (New) / Practice Manual

Briefly explain the concept of Exchange Traded Fund.

Answer

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.

Question 3

RTP May 19 (New) / RTP May 19 (Old)

EXPLAIN the concept of side pocketing in mutual funds.

ICAI November 20 (New)

Side Pocketing enhances the value of Mutual Fund. Do you agree? Briefly explain the process of side pocketing.

Answer

In simple words, a Side Pocketing in Mutual Funds leads to separation of risky assets from other investments and cash holdings. The purpose is to make sure that money invested in a mutual fund, which is linked to stressed assets, gets locked, until the fund recovers the money from the company or could avoid distress selling of illiquid securities.

The modus operandi is simple. Whenever, the rating of a mutual fund decreases, the fund shifts the illiquid assets into a side pocket so that current shareholders can be benefitted from the liquid assets. Consequently, the Net Asset Value (NAV) of the fund will then reflect the actual value of the liquid assets.

Side Pocketing is beneficial for those investors who wish to hold on to the units of the main funds for long term. Therefore, the process of Side Pocketing ensures that liquidity is not the problem even in the circumstances of frequent allotments and redemptions.

Side Pocketing is quite common internationally. However, Side Pocketing has also been resorted to bereft the investors of genuine returns.

In India recent fiasco in the Infrastructure Leasing and Financial Services (IL&FS) has led to many discussions on the concept of side pocketing as IL&FS and its subsidiaries have failed to fulfill its repayments obligations due to severe liquidity crisis.

The Mutual Funds have given negative returns because they have completely written off their exposure to IL&FS instruments.

Question 4

RTP November 19 (Old) / Practice Manual

Money Market Mutual Fund

Answer

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 channelize 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.

Question 5

MTP April 19 (New)

Explain about Direct Plan in Mutual Fund.

Answer

Asset management companies (AMC) have been permitted to make direct investments in mutual fund schemes even before 2011. But, there were no separate plans for these investments. These investments were made in distributor plan itself and were tracked with single NAV - one of the distributor plans. Therefore, an investor was forced to buy mutual funds based on the NAV of the distributor plans. However, things changed with introduction of direct plans by SEBI on January 1, 2013.

Mutual fund direct plans are those plan where Asset Management Companies or mutual fund Houses do not charge distributor expenses, trail fees and transaction charges. NAV of the direct plan are generally higher in comparison to a regular plan. Studies have shown that the 'Direct Plans' have performed better than the 'Regular Plans' for almost all the mutual fund schemes.

Question 6

Practice Manual

Explain how to establish a Mutual Fund.

Answer

Establishment of a Mutual Fund: A mutual fund is required to be registered with the Securities and Exchange Board of India (SEBI) before it can collect funds from the public. All mutual funds are governed by the same set of regulations and are subject to monitoring and inspections by the SEBI. The Mutual Fund has to be established through the medium of a sponsor. A sponsor means any body corporate who, acting alone or in combination with another body corporate, establishes a mutual fund after completing the formalities prescribed in the SEBI's Mutual Fund Regulations.

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

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

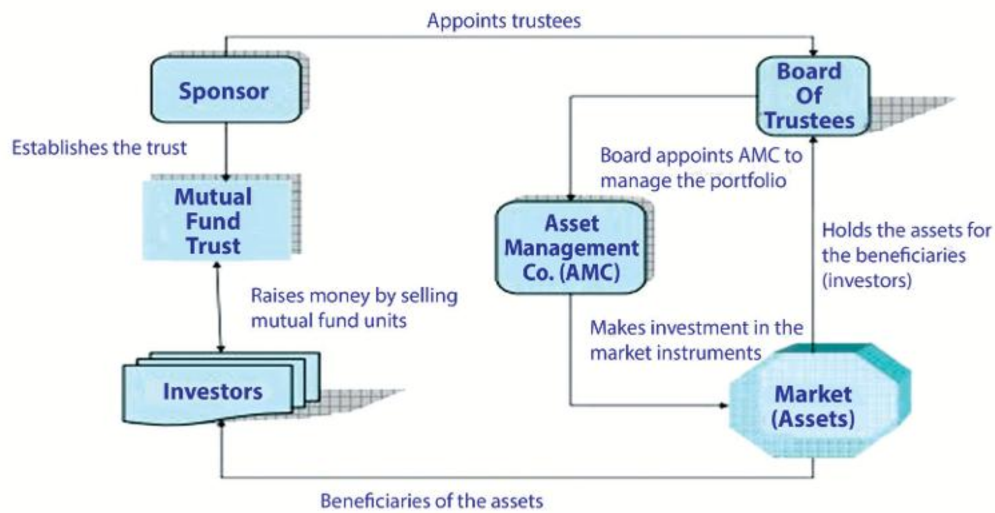
An Asset Management Company, who holds an approval from SEBI, is to be appointed to manage the affairs of the Mutual Fund and it should operate the schemes of such fund. The Asset Management Company is set up as a limited liability company, with a minimum net worth of Rs 10 crores.

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

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

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

The Mutual fund also appoints a custodian, holding valid certificate of registration issued by SEBI, to have custody of securities held by the mutual fund under different schemes. In case of dematerialized securities, this is done by Depository Participant. The custodian must be independent of the sponsor and the AMC.



Question 7

Practice Manual

Distinguish between Open-ended and Close-ended Schemes.

Answer

Open Ended Scheme do not have maturity period. These schemes are available for subscription and re-purchase 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.

The points of difference between the two types of funds can be explained as under

Parameter	Open Ended Fund	Closed Ended Fund
Fund Size	Flexible	Fixed
Liquidity Provider	Fund itself	Stock Market
Sale Price	At NAV plus load, if any	Significant Premium/ Discount to NAV
Availability	Fund itself	Through Exchange where listed
Intra-Day Trading	Not possible	Expensive

Question 8

ICAI July 21 (New)

Describe Tracking error. List the reasons for it.

MTP April 22 (New)

EXPLAIN how to measure divergence or deviation of return of a Mutual Fund Scheme that replicates any benchmark Index.

Answer

Tracking error can be defined as the divergence or deviation of a fund's return from the benchmarks return it is following.

The passive fund managers closely follow or track the benchmark index. Although they design their investment strategy on the same index but often it may not exactly replicate the index return. In such situation, there is possibility of deviation between the returns.

The tracking error can be calculated on the basis of corresponding benchmark return vis a vis quarterly or monthly average NAVs.

Reasons of Tracking Error :

Higher the tracking error higher is the risk profile of the fund. Whether the funds outperform or underperform their benchmark indices; it clearly indicates that fund managers are not following the benchmark indices properly. In addition to the same other reasons for tracking error are as follows:

- Transaction cost
- Fees charged by AMCs
- Fund expenses
- Cash holdings
- Sampling biasness

Thus, from above it can be said that to replicate the return to any benchmark index the tracking error should be near to zero.

The Tracking Error is calculated as follows:

$$TE = \sqrt{\frac{\Sigma(d-\bar{d})^2}{n-1}}$$

d = Differential return

$\bar{d}$ = Average differential return

n = No. of observation

Question 9

ICAI May 23

Index Funds is one of the Special Funds. What are other funds in Special Funds category?

Answer

The other funds in Special Fund category are as follows:

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

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

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

(d) **Money Market Funds:** These are predominantly debt-oriented schemes, whose main objective is preservation of capital, easy liquidity and moderate income. To achieve this objective, liquid funds invest predominantly in safer short-term instruments like Commercial Papers, Certificate of Deposits, Treasury Bills, G-Secs etc.

(e) **Fund of Funds:** Fund of Funds (FoF) as the name suggests are schemes which invest in other mutual fund schemes. The concept is popular in markets where there are number of mutual fund offerings and choosing a suitable scheme according to one's objective is tough. Just as a mutual fund scheme invests in a portfolio of securities such as equity, debt etc., the underlying investments for a FoF is the units of other mutual fund schemes, either from the same fund family or from other fund houses.

(f) **Capital Protection Oriented Fund:** The term 'capital protection oriented scheme' means a mutual fund scheme which is designated as such and which endeavours to protect the capital invested therein through suitable orientation of its portfolio structure. The orientation towards protection of capital originates from the portfolio structure of the scheme and not from any bank guarantee, insurance cover etc.

(g) **Gold Funds:** The objective of these funds is to track the performance of Gold. The units represent the value of gold or gold related instruments held in the scheme. Gold Funds which are generally in the form of an Exchange Traded Fund (ETF) are listed on the stock exchange and offers investors an opportunity to participate in the bullion market without having to take physical delivery of gold.

(h) **Quant Funds:** Quant Fund works on a data-driven approach for stock selection and investment decisions based on a pre-determined rules or parameters using statistics or mathematics-based models.

Question 10

ICAI SM

What are the advantages of investing in Mutual Funds?

Answer

Advantages of Mutual Fund

(a) **Professional Management:** The funds are managed by skilled and professionally experienced managers backed by a team of Research Analysts.

(b) **Diversification:** Mutual Funds invest into many securities and offer diversification which reduces the concentration risk.

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

(d) **Higher Returns:** Over a medium to long-term investment horizon, investors get higher returns in Mutual Funds as compared to other avenues of investment. However, investors are cautioned that such very high returns during the exceptional bull phase of the market like IT boom or Infrastructure boom should not be considered as regular returns and therefore one should look at the average returns provided by the Mutual Funds particularly in the equity schemes over a long period of time.

(e) **Low Cost of Management:** SEBI has prescribed maximum limit of charging 2.50% for Equity Mutual Funds. No Mutual Fund can increase the cost beyond prescribed limits of 2.5% maximum and any extra cost of management is to be borne by the AMC.

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

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

(h) **Other Benefits:** Mutual Funds provide systematic withdrawal and systematic investment plans according to the need of the investors. The investors can also switch from one scheme to another without any restrictions except in case of Tax Savings Fund which restricts switch out for first 3 years of its investments.

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

(j) Economies of scale: The way mutual funds are structured gives it a natural advantage. The "pooled" money from numerous investors ensures that mutual funds enjoy economies of scale; it is cheaper compared to investing directly in the capital markets which involves higher charges. This also allows retail investors access to participation in the Capital Market which otherwise is difficult for them go directly.

(k) Flexibility: One of the biggest advantages of a Mutual Fund Scheme is its flexibility. An investor can opt for Systematic Investment Plan (SIP), Systematic Withdrawal Plan etc. to plan his cash flow requirements as per his convenience. The wide range of schemes being launched in India by different mutual funds also provides an added flexibility to the investor to plan his portfolio accordingly.

(l) Convenience: It is very convenient & easy to invest & disinvest from Mutual Fund Schemes specially through digital transaction portals.

CHAPTER 9 : DERIVATIVES ANALYSIS AND VALUATION

Important Exam Concepts: Nothing specific

Question 1

ICAI May 18 (New) / Practice Manual

Discuss what you understand about Embedded Derivatives.

Answer

Embedded Derivatives: 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.

Question 2

ICAI November 18 (Old)

Distinguish between future contract and option contract.

Answer

Obligation Vs. Choice or Right: Future contract involves the Obligation and has to be performed irrespective of the actual price on the maturity date. On the other hand, the buyer of the option has a choice or right to perform or not to perform the contract.

Margin Vs. Premium: Since option contract is a type of Insurance it involves the payment of some premium. On the other hand, Future does not involve any kind of premium although it involves depositing of some Margin money but that too for the settlement purpose only.

Limited Vs. Unlimited Gain or Loss: In Future Contract the actual gain or loss to the parties involved may be unlimited as it depends on the actual price on the settlement date. Whereas in the Option contract for the option buyer the loss may be limited to the actual premium paid.

Longer Vs. Shorter Duration: In general, the duration of Option Contract is lesser than Future Contract.

Question 3

ICAI May 18 (Old) / Practice Manual

Straddles and Strangles.

Answer

Straddles

An options strategy with which the investor holds a position in both a call and put with the same strike price and expiration date. Straddles are a good strategy to pursue if an investor believes that a stock's price will move significantly, but is unsure as to which direction. The stock price must move significantly if the investor is to make a profit. However, should only a small movement in price occur in either direction, the investor will experience a loss. As a result, a straddle is extremely risky to perform. Additionally, on stocks that are expected to jump, the market tends to price options at a higher premium, which ultimately reduces the expected payoff should the stock move significantly. This is a good strategy if speculators think there will be a large price movement in the near future but is unsure of which way that price movement will be. It has one common strike price.

Strangles

The strategy involves buying an out-of-the-money call and an out-of-the-money put option. A strangle is generally less expensive than a straddle as the contracts are purchased out of the money. Strangle is an unlimited profit, limited risk strategy that is taken when the options trader thinks that the underlying stock will experience significant volatility in the near term. It has two different strike prices.

Question 4

RTP May 19 (New)

Explain cash settlement and physical settlement in derivative contracts and their relative advantages and disadvantages.

Answer

The physical settlement in case of derivative contracts means that underlying assets are actually delivered on the specified delivery date. In other words, traders will have to take delivery of the shares against position taken in the derivative contract.

In case of cash settlement, the seller of the derivative contract does not deliver the underlying asset but transfers the Cash. It is similar to Index Futures where the purchaser, who wants to settle the contract in cash, will have to pay or receive the difference between the Spot price of the contract on the settlement date and the Futures price decided beforehand since it is impossible to effect the physical ownership of the underlying securities.

The main advantage of cash settlement in derivative contract is high liquidity because of more derivative volume in cash segment. Moreover, the underlying stocks in derivative contracts has constricted bid-ask spreads. And, trading in such stocks can be effected at lower impact cost. If the stock is liquid, the impact cost of bigger trades will be lower.

Further, an adverse move can be hedged. For example, the investors can take a covered short derivative position by selling the future while still holding the underlying security.

Also, a liquid derivative market facilitates the traders to do speculation. The speculative trading may worry the regulators but it is also true that without speculative trading, it will not be possible for the derivative market to stay liquid.

So, this leads to some arguments in favour of physical settlement in derivative contract. One advantage of physical settlement is that it is not subject to manipulation by both the parties to the derivative contract. This is so because the entire activity is monitored by the broker and the clearing exchange.

However, one main disadvantage of physical delivery is that it is almost impossible to short sell a stock in the Indian Market.

Therefore, in the end, it can be concluded that, though, physical settlement in derivative contract does curb manipulation it also affects the liquidity in the derivative segment.

Question 5

MTP April 19 (Old) / Practice Manual

Marking to market

Answer

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 Rs. 100 to be matured on 7th day. Now on 2nd day if the price goes up to Rs. 105, the contract will be repriced at Rs. 105 at the end of the trading session and profit of Rs. 5 will be credited to the account of the buyer. This profit of Rs. 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 Rs. 5; second, the existing contract at a price of Rs. 100 would stand cancelled; and third you will receive a new futures contract at Rs. 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

Question 6

Practice Manual

State any four assumptions of Black Scholes Model

ICAI January 21 (Old)

State the assumptions of Black-Scholes model.

Answer

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.

Question 7

RTP November 20 (New) / RTP November 20 (Old)

Explain the difference between Forward and Future Contract.

Answer

Difference between forward and future contract is as follows:

S. No.	Features	Forward	Futures
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 standardized size	Futures contracts are standardized in terms of quantity or amount as the case may be
3.	Organized exchanges	Forward contracts are traded in an over the counter market.	Futures contracts are traded on organized 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 on 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 participants is subject to maintain margin as decided by the exchange authorities
9.	Credit risk	In forward contract, credit risk is born by each party and, therefore, every party has to bother for the creditworthiness.	In futures contracts the transaction is a two way transaction, hence the parties need not to bother for the risk.

Question 8

MTP March 22 (New)

"Commodity swaps are characterized by some peculiarities". EXPLAIN.

Answer

Yes, commodity swaps are characterized by some peculiarities as following are some factors that we must account for:

(i) The cost of hedging;

(ii) The institutional structure of the particular commodity market in question;

(iii) The liquidity of the underlying commodity market;

(iv) Seasonality and its effects on the underlying commodity market;

(v) The variability of the futures bid/offer spread;

(vi) Brokerage fees; and

(vii) Credit risk, capital costs and administrative costs.

Some of these factors must be extended to the pricing and hedging of interest rate swaps, currency swaps and equity swaps as well. The idiosyncratic nature of the commodity markets refers more to the often limited number of participants in these markets (naturally begging questions of liquidity and market information), the unique factors driving these markets, the inter - relations with cognate markets and the individual participants in these markets.

Question 9

MTP September 22 (New)

EXPLAIN necessary conditions of Commodity Derivatives.

ICAI May 23

"The commodity characteristic approach defines feasible commodities for derivatives trading based on an extensive list of required commodity attributes." What are the required attributes?

Answer

The commodity characteristic approach defines feasible commodities for derivatives trading based on an extensive list of required commodity attributes. It focuses on the technical aspects of the underlying commodity. The following attributes are considered crucial for qualifying for the derivatives trade:

(1) a commodity should be durable and it should be possible to store it;

(2) units must be homogeneous;

(3) the commodity must be subject to frequent price fluctuations with wide amplitude; supply and demand must be large;

(4) supply must flow naturally to market and there must be breakdowns in an existing pattern of forward contracting.

Question 10

MTP March 23 (New)

"Investing in Stock Futures differs from investing in Equity Options in several ways". Explain.

Answer

Investing in stock futures differs from investing in equity options contracts in several ways:

- Nature: In options, the buyer of the options has the right but not the obligation to purchase or sell the stock. However while going in for a long futures position, the investor is obligated to square off his position at or before the expiry date of the futures contract.
- Movement of the Market: 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. In contrast, the future contract will much more closely follow the movement of the underlying stock.
- The Price of Investing: When an options investor takes a long position, he or she pays a premium for the contract. The premium is often called a sunk cost. At expiration, unless the options contract is in the money, the contract is worthless and the investor has lost the entire premium. Stock future contracts require an initial margin deposit and a specific maintenance level of cash for mark to market margin.

Question 11

MTP April 23 / MTP October 23

Explain briefly the various factors that affect the value of an Option.

Answer

Factors affecting the value of an option are:

(a) **Price Movement 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 till expiry:** 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 in Stock Prices:** Volatility can be understood via 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.
But to give you an accurate fair value for an option, option pricing models require you to put in what the future volatility of the stock will be during the life of the option. Naturally, option traders don't know what that will be, so they have to try to guess. To do this, they wor k the options pricing model "backwards" (to put it in simple terms). After all, you already know the price at which the option is trading; you can also find the other variables (stock price, interest rates, dividends, and the time left in the option) with just a bit of research. So, the only missing number is future volatility, which you can calculate from the equation.

(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 are less.

Question 12

MTP September 23

"Investors can use Stock Index Futures to perform myriad tasks". Explain.

Answer

Investors can use stock index futures to perform myriad tasks. Some common uses are:

(1) Investors commonly use stock index futures to change the weightings or risk exposures of their investment portfolios.

(2) Stock index futures also allow investors to separate market timing from market selection decisions.

(3) Investors can also make money from stock index futures through index arbitrage, also referred to as program trading as it is carried out through use of computers.

(4) Investors often use stock index futures to hedge the value of their portfolios. Provide hedging or insurance protection for a stock portfolio in a falling market. To implement a hedge, the instruments in the cash and futures markets should have similar price movements. Also, the amount of money invested in the cash and futures markets should be the same.

(5) Stock index futures add flexibility to his or her portfolio as a hedging and trading instrument.

(6) Create the possibility of speculative gains using leverage. Because a relatively small amount of margin money controls a large amount of capital represented in a stock index contract, a small change in the index level might produce a profitable return on one's investment if he or she is right about the market's direction.

(7) Maintain one's stock portfolio during stock market corrections. One may not need "insurance" for all the time, but there are certain times when one would like less exposure to stocks. Yet, one doesn't want to sell off part of a stock portfolio that has taken him or her a long time to put together and looks like a sound, long-term investment program.

(8) One of the major advantages of futures markets, in general, is that one can sell contracts as readily as he or she can buy them and the amount of margin required is the same. Mutual funds do not specialize in bear market approaches by short selling stocks but, and also it is not possible for individuals to short sell stocks in a falling market to make money.

Question 13

ICAI November 23

VEGA and RHO in OPTION VALUE.

Answer

Vega: Sensitivity of option value to change in volatility. Vega indicates an absolute change in option value for a one percent change in volatility.

For example, a Vega of 0.09 indicates an absolute change in the option's theoretical value will increase by 0.09 if the volatility percentage is increased by 1.0 or decreased by 0.09 if the volatility percentage is decreased by 1.0. Results may not be exact due to rounding. It can also be stated as the change in option price given a one percentage point change in volatility. Like delta and gamma, Vega is also used for hedging.

Rho: Rho is the change in option price given a one percentage point change in the risk free interest rate. It is the sensitivity of the option value to change in interest rate. Rho indicates an absolute change in option value for a one percentage change in the interest rate.

For example, a Rho of 0.06 indicates the option's theoretical value will increase by 0.06 if the interest rate is decreased by 1.0.

Question 14

MTP March 24

While in securitization the securities issued by SPV are backed by the loans and receivables the CDOs are backed by pool of bonds, asset backed securities, REITs, and other CDOs. Describe the main types of risk associated with investment in CDOs.

Answer

The main types of risk associated with investment in CDOs are as follows:

(i) Default Risk: Also called 'credit risk', it emanates from the default of underlying party to the instruments. The prime sufferers of these types of risks are equity or junior tranche in the waterfall.

(ii) Interest Rate Risk: Also called Basis risk and mainly arises due to different basis of interest rates. For example, asset may be based on floating interest rate but the liability may be based on fixed interest rates. Though this type of risk is quite difficult to manage fully but commonly used techniques such as swaps, caps, floors, collars etc. can be used to mitigate the interest rate risk.

(iii) Liquidity Risk: Another major type of risk by which CDOs are affected is liquidity risks as there may be mismatch in coupon receipts and payments.

(iv) Prepayment Risk: This risk results from unscheduled or unexpected repayment of principal amount underlying the security. Generally, this risk arises in case assets are subject to fixed rate of interest and the debtors have a call option. Since, in case of falling interest rates they may pay back the money.

(v) Reinvestment Risk: This risk is generic in nature as the CDO manager may not find adequate opportunity to reinvest the proceeds when allowed for substitutions.

(v) Foreign Exchange Risk: Sometimes CDOs are comprised of debts and loans from countries other than the country of issue. In such a case, in addition to above mentioned risks, CDOs are also subject to the foreign exchange rate risk.

Question 15

ICAI SM

What are the reasons for stock index futures becoming more popular financial derivatives over stock futures segment in India?

Answer

Stock index futures is most popular financial derivatives over stock futures due to following reasons:

1. It adds flexibility to one's investment portfolio. Institutional investors and other large equity holders prefer this instrument the most in terms of portfolio hedging purpose. The stock systems do not provide this flexibility and hedging.
2. It creates the possibility of speculative gains using leverage. Because a relatively small amount of margin money controls a large amount of capital represented in a stock index contract, a small change in the index level might produce a profitable return on one's investment if one is right about the direction of the market. Speculative gains in stock futures are limited but liabilities are greater.
3. Stock index futures are the most cost-efficient hedging device whereas hedging through individual stock futures is costlier.
4. Stock index futures cannot be easily manipulated whereas individual stock price can be exploited more easily.
5. Since, stock index futures consists of many securities, so being an average stock, is much less volatile than individual stock price. Further, it implies much lower capital adequacy and margin requirements in comparison of individual stock futures. Risk diversification is possible under stock index future than in stock futures.

6. One can sell contracts as readily as one buys them and the amount of margin required is the same.
7. In case of individual stocks the outstanding positions are settled normally against physical delivery of shares. In case of stock index futures they are settled in cash all over the world on the premise that index value is safely accepted as the settlement price.
8. It is also seen that regulatory complexity is much less in the case of stock index futures in comparison to stock futures.
9. It provides hedging or insurance protection for a stock portfolio in a falling market.

Question 16

ICAI SM

Define the term Greeks with respect to options.

Answer

The Greeks are a collection of statistical values (expressed as percentages) that give the investor a better overall view of how a stock has been performing. These statistical values can be helpful in deciding what options strategies are best to use. The investor should remember that statistics show trends based on past performance. It is not guaranteed that the future performance of the stock will behave according to the historical numbers. These trends can change drastically based on new stock performance.

Before we discuss these statistical measures let us discuss the factors that affects the value of option as these statistical measures are related to changes in the in these factors.

CHAPTER 10 : FOREIGN EXCHANGE EXPOSURE AND RISK MANAGEMENT

Important Exam Concepts: Nothing specific

Question 1

ICAI May 19 (Old) / RTP May 19 (Old) / Practice Manual

Write short note on Exposure Netting

Answer

Exposure Netting refers to offsetting exposures in one currency with Exposures in the same or another currency, where exchange rates are expected to move in such a way that loses or gains on the first exposed position should be offset by gains or losses on the second currency.

The objective of the exercise is to offset the likely loss in one exposure by likely gain in another. This is a manner of hedging foreign exchange exposure though different from forward and option contracts.

This method is similar to portfolio approach in handling systematic risk.

Despite the difficulties in managing currency risk, corporate can now take some concrete steps towards implementing risk mitigating measures, which will reduce both actual and future exposures. For years now, banking transactions have been based on the principle of netting, where only the difference of the summed transactions between the parties is actually transferred. This is called settlement netting. Strictly speaking in banking terms, this is known as settlement risk. Exposure netting occurs where outstanding positions are netted against one another in the event of counter party default.

Question 2

ICAI May 18 (Old) / Practice Manual / ICAI November 20 (Old)

Nostro, Vostro and Loro Accounts

Answer

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 3

RTP November 19 (New) / Practice Manual

Briefly discuss the concept of Purchasing Power Parity.

Answer

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

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

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

The formula for computing the forward rate using the inflation rates in domestic and foreign countries is as follows:

$$F = S\frac{(1 + i_D)}{(1 + i_D)}$$

Where F= Forward Rate of Foreign Currency and S= Spot Rate

iD = Domestic Inflation Rate and iF= Inflation Rate in foreign country

Thus PPP theory states that the exchange rate between two countries reflects the relative purchasing power of the two countries i.e. the price at which a basket of goods can be bought in the two countries.

Question 4

RTP November 18 (Old) / Practice Manual

Leading and Lagging in context of forex market

Answer

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.

Question 5

MTP March 18 (Old) / Practice Manual

Operations in foreign exchange market are exposed to a number of risks.

Answer

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.

Question 6

Practice Manual

What is the meaning of: Interest Rate Parity

Answer

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

The Covered Interest Rate Parity equation is given by:

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

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

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

Question 7

MTP November 21 (New) / MTP November 21 (Old)

All dealings in Foreign Exchange effect the Exchange Position whether delivery has taken place or not, but Cash Position is effected only when actual delivery has taken place. Explain.

Answer

Yes, this statement is correct because while Exchange Position is referred to total of purchases or sale of commitment of a bank to purchase or sale foreign exchange whether actual delivery has taken place or not. In other words, all transactions for which bank has agreed with counter party are entered into exchange position on the date of the contract.

While Cash Position is outstanding balance (debit or credit) in bank's Nostro account. Since all foreign exchange dealings of bank are routed through Nostro account it is credited for all purchases and debited for sale by bank.

Therefore, all transactions effecting Cash position will affect Exchange Position not vice versa.

Question 8

ICAI November 22 (New)

Write a short note on Money Market Hedging.

Answer

At its simplest, a money market hedge is an agreement to exchange a certain amount of one currency for a fixed amount of another currency, at a particular date. For example, suppose a business owner in India expects to receive 1 Million USD in six months. This Owner could create an agreement now (today) to exchange 1 Million USD for INR at roughly the current exchange rate. Thus, if the USD dropped in value by the time the business owner got the payment, he would still be able to exchange the payment for the original quantity of U.S. dollars specified.

Advantages of Money Market Hedging

(i) Fixes the future rate, thus eliminating downside risk exposure.

(ii) Flexibility with regard to the amount to be covered.

(iii) Money market hedges may be feasible as a way of hedging for currencies where forward contracts are not available.

Disadvantages of Money Market Hedging

(i) More complicated to organize than a forward contract.

(ii) Fixes the future rate - no opportunity to benefit from favorable movements in exchange rates.

CHAPTER 11 : INTERNATIONAL FINANCIAL MANAGEMENT

Important Exam Concepts: Instruments of International finance

Question 1

ICAI November 19 (New)

List the main objectives of International Cash Management

Answer

The main objectives of an effective system of international cash management are:

(1) To minimise currency exposure risk.

(2) To minimise overall cash requirements of the company as a whole without disturbing smooth operations of the subsidiary or its affiliate.

(3) To minimise transaction costs.

(4) To minimise country's political risk.

(5) To take advantage of economies of scale as well as reap benefits of superior knowledge.

The objectives are conflicting in nature as minimising of transaction costs require cash balance to be kept in the currency in which they are received thereby contradicting both currency and political exposure requirements.

International Cash Management has two basic objectives:

1. Optimising Cash Flow movements.
2. Investing excess cash.

As no single strategy of international cash management can help in achieving both these objectives together, its task on such aspects becomes very challenging.

Question 2

ICAI May 18 (Old) / RTP May 20 (Old) / MTP Nov 18 (Old) / Practice Manual

Instruments of International finance.

Answer

The various financial instruments dealt with in the international market are briefly described below :

1. **Euro Bonds:** A Eurobond is an international bond that is denominated in a currency not native to the

country where it is issued. Also called external bond e.g. A Yen floated in Germany; a yen bond issued in France.

2. **Foreign Bonds:** These are debt instruments denominated in a currency which is foreign to the borrower and is denominated in a currency that is native to the country where it is issued. A British firm placing $ denominated bonds in USA is said to be selling foreign bonds.
3. **Fully Hedged Bonds:** In foreign bonds, the risk of currency fluctuations exists. Fully hedged bonds eliminate that risk by selling in forward markets the entire stream of interest and principal payments.
4. **Floating Rate Notes:** These are debt instruments issued upto 7 years maturity. Interest rates are adjusted to reflect the prevailing exchange rates. They provide cheaper money than fixed rate debt instruments; however, they suffer from inherent interest rate volatility risk.
5. **Euro Commercial Papers:** Euro Commercial Papers (ECPs) are short-term money market instruments. They are for maturities for less than a year. They are usually designated in US dollars.

Question 3

RTP November 19 (Old) / Practice Manual

External Commercial Borrowings

ICAI December 21 (Old)

External Commercial Borrowings (ECBs) are becoming an important source of financing. Discuss briefly its different aspects.

Answer

ECB includes bank loans, supplier credit, securitized instruments, credit from export credit agencies and borrowings from multilateral financial institutions. These securitized instruments may be FRNs, FRBs etc. Indian corporate sector is permitted to raise finance through ECBs within the framework of the policies and procedures prescribed by the Central Government. Multilateral financial institutions like IFC, ADB, AFIC, CDC are providing such facilities while the ECB policy provides flexibility in borrowing consistent with maintenance of prudential limits for total external borrowings, its guiding principles are to keep borrowing maturities long, costs low and encourage infrastructure/core and export sector financing which are crucial for overall growth of the economy. The government of India, from time to time changes the guidelines and limits for which the ECB alternative as a source of finance is pursued by the corporate sector. During past decade the government has streamlined the ECB policy and procedure to enable the Indian companies to have their better access to the international financial markets.

The government permits the ECB route for variety of purposes namely expansion of existing capacity as well as for fresh investment. But ECB can be raised through internationally recognized sources. There are caps and ceilings on ECBs so that macro economy goals are better achieved. Units in SEZ are permitted to use ECBs under a special window.

Question 4

MTP May 20 (New)

Explain complexities involved in International Capital Budgeting.

Answer

Multinational Capital Budgeting has to take into consideration the different factors and variables which affect a foreign project and are complex in nature than domestic projects. The factors crucial in such a situation are:

(a) Cash flows from foreign projects have to be converted into the currency of the parent organization.

(b) Parent cash flows are quite different from project cash flows

(c) Profits remitted to the parent firm are subject to tax in the home country as well as the host country

(d) Effect of foreign exchange risk on the parent firm's cash flow

(e) Changes in rates of inflation causing a shift in the competitive environment and thereby affecting cash flows over a specific time period

(f) Restrictions imposed on cash flow distribution generated from foreign projects by the host country

(g) Initial investment in the host country to benefit from the release of blocked funds

(h) Political risk in the form of changed political events reduce the possibility of expected cash flows

(i) Concessions/benefits provided by the host country ensures the upsurge in the profitability position of the foreign project

(j) Estimation of the terminal value in multinational capital budgeting is difficult since the buyers in the parent company have divergent views on acquisition of the project.

Question 5

MTP April 19 (Old) / Practice Manual

Debt route for foreign exchange funds

Answer

Debt route for foreign exchange funds:

The following are some of the instruments used for borrowing of funds from the international market:

(i) Syndicated bank loans: The borrower should obtain a good credit rating from the rating agencies. Large loans can be obtained in a reasonably short period with few formalities. Duration of the loan is generally 5 to 10 years. Interest rate is based on LIBOR plus spread depending upon the rating. Some covenants are laid down by the lending institutions like maintenance of key financial ratios.

(ii) Euro bonds: These are basically debt instruments denominated in a currency issued outside the country of the currency. For example, Yen bond floated in France. Primary attraction of these bonds is the shelter from tax and regulations which provide Scope for arbitraging yields. These are usually bearer bonds and can take the form of (i) traditional fixed rate bonds (ii) floating rate notes (FRN's) (iii) Convertible bonds.

(iii) Foreign bonds: Foreign bonds are foreign currency bonds and sold at the country of that currency and are subject to the restrictions as placed by that country on the foreigners' funds.

(iv) Euro Commercial Papers: These are short term money market securities usually issued at a discount, for maturity in less than one year.

(v) External Commercial Borrowings (ECB's): These include commercial bank loans, buyer's credit and supplier's credit, securitised instruments such as floating rate notes and fixed rate bonds, credit from official export credit agencies and commercial borrowings from multi - lateral financial institutions like IFCI, ADB etc. External Commercial borrowings have been a popular source of financing for most of capital goods imports. They are gaining importance due to liberalization of restrictions. ECB's are subject to overall ceilings with sub-ceilings fixed by the government from time to time.

(vi) All other loans are approved by the government.

Question 6

MTP March 19 (Old) / Practice Manual

Impact of GDRs on Indian Capital Market

Answer

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

ICAI November 20 (Old)

Explain briefly the salient features of Foreign Currency Convertibles Bonds (FCCBs).

RTP May 21 (New)

Describe the salient features of Foreign Currency Convertible Bonds.

RTP May 21 (Old)

Salient features of Foreign Currency Convertible Bonds

Answer

FCCBs are important source of raising funds from abroad. Their salient features are –

1. FCCB is a bond denominated in a foreign currency issued by an Indian company which can be converted into shares of the Indian Company denominated in Indian Rupees.
2. Prior permission of the Department of Economic Affairs, Government of India, Ministry of Finance is required for their issue
3. There will be a domestic and a foreign custodian bank involved in the issue
4. FCCB shall be issued subject to all applicable Laws relating to issue of capital by a company.
5. Tax on FCCB shall be as per provisions of Indian Taxation Laws and Tax will be deducted at source.
6. Conversion of bond to FCCB will not give rise to any capital gains tax in India.

Question 8

ICAI January 21 (Old)

Write a short note on Euro Convertible Bonds

Answer

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.

Question 9

RTP November 21 (Old)

Project appraisal in inflationary conditions

Answer

Project Appraisal normally involves feasibility evaluation from technical, commercial, economic and financial aspects. It is generally an exercise in measurement and analysis of cash flows expected to occur over the life of the project. The project cash outflows usually occur initially and inflows come in the future.

During inflationary conditions, the project cost increases on all heads viz. labour, raw material, fixed assets such as equipments, plant and machinery, building material, remuneration of technicians and managerial personnel etc. Beside this, inflationary conditions erode purchasing power of consumers and affect the demand pattern. Thus, not only cost of production but also the projected statement of profitability and cash flows are affected by the change in demand pattern. Even financial institutions and banks may revise their lending rates resulting in escalation in financing cost during inflationary conditions. Under such circumstances, project appraisal has to be done generally keeping in view the following guidelines which are usually followed by government agencies, banks and financial institutions.

(i) It is always advisable to make provisions for cost escalation on all heads of cost, keeping in view the rate of inflation during likely period of delay in project implementation.

(ii) The various sources of finance should be carefully scruitinised with reference to probable revision in the rate of interest by the lenders and the revision which could be effected in the interest bearing securities to be issued. All these factors will push up the cost of funds for the organization.

(iii) Adjustments should be made in profitability and cash flow projections to take care of the inflationary pressures affecting future projections.

(iv) It is also advisable to examine the financial viability of the project at the revised rates and assess the same with reference to economic justification of the project. The appropriate measure for this aspect is the economic rate of return for the project which will equate the present value of capital expenditures to net cash flows over the life of the projects. The rate of return should be acceptable which also accommodates the rate of inflation per annum.

(v) In an inflationary situation, projects having early payback periods should be preferred because projects with long payback period are more risky.

Under conditions of inflation, the project cost estimates that are relevant for a future date will suffer escalation. Inflationary conditions will tend to initiate the measurement of future cash flows. Either of the following two approaches may be used while appraising projects under such conditions:

(1) Adjust each year's cash flows to an inflation index, recognising selling price increases and cost increases annually; or

(2) Adjust the 'Acceptance Rate' (cut-off) suitably retaining cash flow projections at current price levels.

An example of approach (2) above can be as follows :

Normal Acceptance Rate	:	15.0%
Expected Annual Inflation	:	5.0%
Adjusted Discount Rate	:	15.0×1.05 or 15.75%

It must be noted that measurement of inflation has no standard approach nor is easy. This makes the job of appraisal a difficult one under such conditions.

Question 10

ICAI July 21 (Old) / RTP May 22 (New)

There exists a vast difference between Project and Parent cash flow? What are these factors? Briefly discuss.

MTP October 22 (New)

There exists a vast difference between Project and Parent cash flow. EXPLAIN.

Answer

There exists a big difference between the project and parent cash flows due to tax rules, exchange controls.

Management and royalty payments are returns to the parent firm. The basis on which a project shall be evaluated depend on one's own cash flows, cash flows accruing to the parent firm or both.

Evaluation of a project on the basis of own cash flows entails that the project should compete favourably with domestic firms and earn a return higher than the local competitors. If not, the shareholders and management of the parent company shall invest in the equity/government bonds of domestic firms. A comparison cannot be made since foreign projects replace imports and are not competitors with existing local firms. Project evaluation based on local cash flows avoid currency conversion and eliminates problems associated with fluctuating exchange rate.

For evaluation of foreign project from the parent firm's angle, both operating and financial cash flows actually remitted to it form the yardstick for the firm's performance and the basis for distribution of dividends to the shareholders and repayment of debt/interest to lenders. An investment has to be evaluated on the basis of net after tax operating cash flows generated by the project. As both types of cash flows (operating and financial) are clubbed together, it is essential to see that financial cash flows are not mixed up with operating cash flows.

Question 11

MTP October 20 (New)

Explain the problems that are faced in International Capital Budgeting Decision and how these can be overcome.

MTP October 20 (Old)

Problems that are faced in International Capital Budgeting Decision and how these can be overcome.

Answer

The various types of problems faced in International Capital Budgeting analysis are as follows :

(1) Multinational companies investing elsewhere are subjected to foreign exchange risk in the sense that currency appreciates/ depreciates over a span of time. To include foreign exchange risk in the cash flow estimates of any project, it is necessary to forecast the inflation rate in the host country during the lifetime of the project. Adjustments for inflation are made in the cash flows depicted in

local currency. The cash flows are converted in parent country's currency at the spot exchange rate multiplied by the expected depreciation rate obtained from purchasing power parity.

(2) Due to restrictions imposed on transfer of profits, depreciation charges and technical differences exist between project cash flows and cash flows obtained by the parent organization. Such restriction can be diluted by the application of techniques viz internal transfer prices, overhead payments. Adjustment for blocked funds depends on its opportunity cost, a vital issue in capital budgeting process.

(3) In multinational capital budgeting, after tax cash flows need to be considered for project evaluation. The presence of two tax regimes along with other factors such as remittances to the parent firm in the form of royalties, dividends, management fees etc., tax provisions with held in the host country, presence of tax treaties, tax discrimination pursued by the host country between transfer of realized profits vis-à-vis local re-investment of such profits cause serious impediments to multinational capital budgeting process. MNCs are in a position to reduce overall tax burden through the system of transfer pricing.

For computation of actual after tax cash flows accruing to the parent firm, higher of home/ host country tax rate is used. If the project becomes feasible then it is acceptable under a more favourable tax regime. If not feasible, then, other tax saving aspects need to be incorporated in order to find out whether the project crosses the hurdle rate.

Question 12

ICAI December 21 (Old)

The technique of optimizing cash flow movements and minimizing the total volume of inter-company fund flow with the combined efforts of the subsidiaries is the need of the hour. Discuss.

MTP March 22 (New) / MTP April 22 (New)

"Netting helps in minimizing the total value of intercompany fund flows". EXPLAIN.

Answer

Yes, to some extent this statement is correct especially in case of MNCs by optimizing 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. This technique is called 'Netting' and it helps in minimising the total volume of inter-company fund flow.

Further 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

Question 13

ICAI May 22 (New)

What are Foreign Currency Convertible Bonds? What are their advantages?

Answer

A type of convertible bond issued in a currency different than the issuer's domestic currency. In other words, the money being raised by the issuing company is in the form of a foreign currency. A convertible bond is a mix between a debt and equity instrument. It acts like a bond by making regular coupon and principal payments, but these bonds also give the bondholder the option to convert the bond into stock.

Advantages of FCCBs

(i) The convertible bond gives the investor the flexibility to convert the bond into equity at a price or redeem the bond at the end of a specified period, normally three years if the price of the share has not met his expectations.

(ii) Companies prefer bonds as it leads to delayed dilution of equity and allows company to avoid any current dilution in earnings per share that a further issuance of equity would cause.

(iii) FCCBs are easily marketable as investors enjoys option of conversion into equity if resulting to capital appreciation. Further investor is assured of a minimum fixed interest earnings.

Question 14

RTP November 22 (New)

Briefly explain how a Centralized Cash Management system helps MNCs in their treasury management.

Answer

A Centralized Cash Management system helps MNCs in their treasury management as follows:

(a) To maintain minimum cash balance during the year.

(b) To manage judiciously liquidity requirements of the centre.

(c) To optimally use various hedging strategies so that MNC's foreign exchange exposure is minimised.

(d) To aid the centre to generate maximum returns by investing all cash resources optimally.

(e) To aid the centre to take advantage of multinational netting so that transaction costs and currency exposure are minimised.

(f) To make maximum utilization of transfer pricing mechanism so that the firm enhances its profitability and growth.

(g) To exploit currency movement correlations:

- (i) Payables & receivables in different currencies having positive correlations.
- (ii) Payables of different currencies having negative correlations.
- (iii) Pooling of funds allows for reduced holding – the variance of the total cash flows for the entire group will be smaller than the sum of the individual variances.

CHAPTER 12 : INTEREST RATE RISK MANAGEMENT

Important Exam Concepts: Nothing specific

Question 1

MTP May 20 (New)

What do you mean by the term 'Cheapest to Deliver' in context of Interest Rate Futures?

Answer

The CTD is the bond that minimizes difference between the quoted Spot Price of bond and the Futures Settlement Price (adjusted by the conversion factor). It is called CTD bond because it is the least expensive bond in the basket of deliverable bonds.

CTD bond is determined by the difference between cost of acquiring the bonds for delivery and the price received by delivering the acquired bond. This difference gives the profit / loss of the seller of the futures.

Profit of seller of futures = (Futures Settlement Price x Conversion factor) – Quoted Spot Price of Deliverable Bond Loss of Seller of futures = Quoted Spot Price of deliverable bond – (Futures Settlement Price x Conversion factor) That bond is chosen as CTD bond which either maximizes the profit or minimizes the loss.

Question 2

MTP August 18 (New)

Discuss the types of Commodity Swaps.

Answer

There are two types of commodity swaps: fixed-floating or commodity-for-interest.

(a) **Fixed-Floating Swaps:** They are just like the fixed-floating swaps in the interest rate swap market with the exception that both indices are commodity based indices.
General market indices in the international commodities market with which many people would be familiar include the S&P Goldman Sachs Commodities Index (S&PGSCI) and the Commodities Research Board Index (CRB). These two indices place different weights on the various commodities so they will be used according to the swap agent's requirements.

(b) **Commodity-for-Interest Swaps:** They are similar to the equity swap in which a total return on the commodity in question is exchanged for some money market rate (plus or minus a spread).

Question 3

Practice Manual

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

Answer

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.

Question 4

Practice Manual

What do you know about swaptions and their uses?

ICAI May 23

Swaptions can be applied for speculation purposes or to hedge a portion of their swap books. What are the other areas of its application? ***(Refer Subpoint (2) of the answer)***

Answer

(1)

(a) Swaptions are combination of the features of two derivative instruments, i.e., option and swap.

(b) A swaption is an option on an interest rate swap. It gives the buyer of the swaption the right but not obligation to enter into an interest rate swap of specified parameters (maturity of the option, notional principal, strike rate, and period of swap). Swaptions are traded over the counter, for both short and long maturity expiry dates, and for wide range of swap maturities.

(c) The price of a swaption depends on the strike rate, maturity of the option, and expectations about the future volatility of swap rates.

(d) The swaption premium is expressed as basis points

(2) Uses of swaptions:

(a) Swaptions can be used as an effective tool to swap into or out of fixed rate or floating rate interest obligations, according to a treasurer's expectation on interest rates. Swaptions can also be used for protection if a particular view on the future direction of interest rates turned out to be incorrect.

(b) Swaptions can be applied in a variety of ways for both active traders as well as for corporate treasures. Swap traders can use them for speculation purposes or to hedge a portion of their swap books. It is a valuable tool when a borrower has decided to do a swap but is not sure of the timing.

(c) Swaptions have become useful tools for hedging embedded option which is common in the natural course of many businesses.

(d) Swaptions are useful for borrowers targeting an acceptable borrowing rate. By paying an upfront premium, a holder of a payer's swaption can guarantee to pay a maximum fixed rate on a swap, thereby hedging his floating rate borrowings.

(e) Swaptions are also useful to those businesses tendering for contracts. A business, would certainly find it useful to bid on a project with full knowledge of the borrowing rate should the contract be won

Question 5

Practice Manual

Explain the significance of LIBOR in international financial transactions.

Answer

LIBOR stands for London Inter Bank Offered Rate. Other features of LIBOR are as follows :

- It is the base rate of exchange with respect to which most international financial transactions are priced.
- It is used as the base rate for a large number of financial products such as options and swaps.
- Banks also use the LIBOR as the base rate when setting the interest rate on loans, savings and mortgages.
- It is monitored by a large number of professionals and private individuals world-wide.

Question 6

ICAI July 21

Define Interest Rate Swaption. State its principal features.

Answer

An interest rate swaption is simply an option on an interest rate swap. It gives the holder the right but not the obligation to enter into an interest rate swap at a specific date in the future, at a particular fixed rate and for a specified term.

There are two types of swaption contracts: -

- A fixed rate payer swaption (also called Call Swaption).
- A fixed rate receiver swaption (also called Put Swaption).

Principal Features of Swaptions

A. A swaption is effectively an option on a forward-start IRS, where exact terms such as the fixed rate of interest, the floating reference interest rate and the tenor of the IRS are established upon conclusion of the swaption contract.

B. A 3-month into 5-year swaption would therefore be seen as an option to enter into a 5-year IRS, 3 months from now.

C. The 'option period' refers to the time which elapses between the transaction date and the expiry date.

D. The swaption premium is expressed as basis points.

E. Swaptions can be cash-settled; therefore, at expiry they are marked to market off the applicable forward curve at that time and the difference is settled in cash.

Question 7

ICAI December 21 (New)

What are the main features of Forward Rate Agreements (FRA)?

Answer

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 Benchmark Interest Rate
  e.g. LIBOR, MIBOR etc.
- 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 Reference Rate of some specified maturity is above a stipulated "Forward Interest Rate" on the contract maturity or settlement date. Conversely, the buyer agrees to pay the seller any decrease in interest cost if Reference Rate fall below the forward rate.
- Final settlement of the amounts owed by the parties to an FRA is determined by the formula

  $$\text{Payment} = \frac{(N)(RR - FR)(dtm/DY)}{[1 + RR(dtm/DY)]} \times 100$$

  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 Reference Rate > FR the seller owes the payment to the buyer, and if Reference Rate < 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.

Question 8

ICAI May 22 (New)

What is Net interest position risk and Price risk?

Answer

Net Interest Position Risk: The size of non-paying liabilities is one of the significant factors contributing towards profitability of banks. Where banks have more earning assets than paying liabilities, interest rate risk arises when the market interest rates adjust downwards. Thus, banks with positive net interest positions will experience a reduction in NII as the market interest rate declines and increases when interest rate rises. Thus, large float is a natural hedge against the variations in interest rates.

Price Risk: Price risk occurs when assets are sold before their stated maturities. In the financial market, bond prices and yields are inversely related. The price risk is closely associated with the trading book, which is created for making profit out of short -term movements in interest rates.

Banks which have an active trading book should, therefore, formulate policies to limit the portfolio size, holding period, duration, defeasance period, stop loss limits, marking to market, etc.

Question 9

ICAI November 22 (New)

Briefly explain Asset and Liability Management (ALM).

Answer

Asset-Liability Management (ALM) is one of the important tools of risk management in commercial banks of India. Indian banking industry is exposed to a number of risks prevailing in the market such as market risk, financial risk, interest rate risk etc. The net income of the banks is very sensitive to these factors or risks.

ALM is a comprehensive and dynamic framework for measuring, monitoring and managing the market risk of a bank. It is the management of structure of Balance Sheet (liabilities and assets) in such a way that the net earnings from interest are maximized within the overall risk preference (present and future) of the institutions. The ALM functions extend to liquidly risk management, management of market risk, trading risk management, funding and capital planning and profit planning and growth projection.

Banks and other financial institutions provide services which expose them to various kinds of risks like credit risk, interest risk, and liquidity risk. Asset liability management is an approach that provides institutions with protection that makes such risk acceptable. Asset-liability management models enable institutions to measure and monitor risk, and provide suitable strategies for their management.

It is therefore appropriate for institutions (banks, finance companies, leasing companies, insurance companies, and others) to focus on asset-liability management when they face financial risks of different types.

Asset-liability management includes not only a formalization of this understanding, but also a way to quantify and manage these risks.

In a sense, the various aspects of balance sheet management deal with planning as well as direction and control of the levels, changes and mixes of assets, liabilities, and capital.

Question 10

ICAI November 22 (New)

Explain various methods of hedging of interest rate risk.

Answer

Methods of Hedging of Interest Rate Risk can be broadly divided into following two categories:

(A) Traditional Methods: These methods can further be classified in following categories:

- **(i) Asset and Liability Management (ALM):** ALM is a comprehensive and dynamic framework for measuring, monitoring and managing the market risk of a bank. It is the management of structure of Balance Sheet (liabilities and assets) in such a way that the net earnings from interest are maximized within the overall risk preference (present and future) of the institutions.
- **(ii) Forward Rate Agreement (FRA):** Normally it is used by banks to fix interest costs on anticipated future deposits or interest revenues on variable-rate loans indexed to Benchmark Interest Rate e.g. LIBOR, MIBOR etc. A bank that sells an FRA agrees to pay the buyer the increased interest cost on some "notional" principal amount if Reference Rate of some specified maturity is above a stipulated "Forward Interest Rate" on the contract maturity or settlement date. Conversely, the buyer agrees to pay the seller any decrease in interest cost if Reference Rate fall below the forward rate.

(B) Modern Methods: These methods can further be classified in following categories:

- **(i) Interest Rate Futures (IRF):** An interest rate future is a contract between the buyer and seller agreeing to the future delivery of any interest-bearing asset. The interest rate future allows the buyer and seller to lock in the price of the interest-bearing asset for a future date.
- **(ii) Interest Rate Options (IRO):** Also known as Interest Rate Guarantee (IRG) as option is a right not an obligation and acts as insurance by allowing businesses to protect themselves against adverse interest rate movements while allowing them to benefit from favourable movements.
  It should be noted that the IRO is basically a series of FRAs which are exercisable at predetermined bench marked interest rates on each period say 3 months, 6 months etc.
- **(iii) Interest Rate Swaps:** 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.
- **(iv) Swaptions:** An interest rate swaption is simply an option on an interest rate swap. It gives the holder the right but not the obligation to enter into an interest rate swap at a specific date in the future, at a particular fixed rate and for a specified term.

Question 11

ICAI November 23

Conversion factor in Interest Rate Futures.

Answer

Conversion factor: All the deliverable bonds have different maturities and coupon rates. To make them comparable to each other, and also with the notional bond, RBI introduced Conversion Factor. Conversion factor for each deliverable bond and for each expiry at the time of introduction of the contract is being published by NSE.

(Conversion Factor) x (futures price) = actual delivery price for a given deliverable bond.

CHAPTER 13 : BUSINESS VALUATION

Important Exam Concepts: Nothing specific

Question 1

ICAI November 19 (Old) / Practice Manual

Write a note on buy-back of shares by companies and what is the impact on P/E Ratio upon buy-back of shares?

Answer

Till 1998, buyback of equity shares was not permitted in India. But now they are permitted after suitably amending the Companies Act, 1956. However, the buyback of shares in India are permitted under certain guidelines issued by the Government as well as by the SEBI. Several companies have opted for such buyback including Reliance, Bajaj, and Ashok Leyland to name a few. In India, the corporate sector generally chooses to buyback by the tender method or the open market purchase method. The company, under the tender method, offers to buy back shares at a specific price during a specified period which is usually one month. Under the open market purchase method, a company buys shares from the secondary market over a period of one year subject to a maximum price fixed by the management. Companies seem to now have a distinct preference for the open market purchase method as it gives them greater flexibility regarding time and price. As impact of buyback, the P/E ratio may change as a consequence of buyback operation. The P/E ratio may rise if investors view buyback positively or it may fall if the investors regard buyback negatively

Question 2

ICAI November 20 (New)

Differentiate between Economic Value Added (EVA) and Market Value Added (MVA)

Answer

Economic Value Added (EVA) and Market Value Added (MVA)

Economic Value Added (EVA) is a holistic method of evaluating a company's financial performance, which means that EVA is used not only as a mere valuation technique, but also to find the economic contribution of a company to the society at large. The core concept behind EVA is that a company generates 'value' only if there is a creation of wealth in terms of returns in excess of its cost of capital invested. So if a company's EVA is negative, it means the company is not generating value from the funds invested into the business. Conversely, a positive EVA shows a company is producing value from the funds invested in it.

Question 3

RTP May 21 (New)

Explain how Cash flow-based approach of valuation is different from Income based approach and also explain briefly the steps involved in this approach.

Answer

As opposed to the asset based and income based approaches, the cash flow approach takes into account the quantum of free cash that is available in future periods, and discounting the same appropriately to match to the flow's risk.

Simply speaking, if the present value arrived post application of the discount rate is more than the current cost of investment, the valuation of the enterprise is attractive to both stakeholders as well as externally interested parties (like stock analysts). It attempts to overcome the problem of over-reliance on historical data.

There are essentially five steps in performing DCF based valuation :

(i) Arriving at the 'Free Cash Flows'

(ii) Forecasting of future cash flows (also called projected future cash flows)

(iii) Determining the discount rate based on the cost of capital

(iv) Finding out the Terminal Value (TV) of the enterprise

(v) Finding out the present values of both the free cash flows and the TV, and interpretation of the results.

Question 4

MTP October 21 (New)

"Market Value Added is an attempt to resolve some of the issues involved in Economic Value Added". Explain this statement.

Answer

To some extent it can be said that MVA is an attempt to resolve some of the issues involved in EVA e.g. ignoring Value Drivers, Book Value etc. Though MVA itself does not give any basis of share valuation but an alternative way to gauge performance efficiencies of an enterprise, albeit from a market capitalisation point of view, the logic being that the market will discount the efforts taken by the management fairly. Hence, the MVA can be perceived as true value added by the market. In contrast, EVA is a derived value added that is for the more discerning investor.

Since MVA represents market views regarding company's future value generation companies with a higher MVA will naturally become the darlings of the share market and would eventually become 'pricey' from a pure pricing perspective. In such cases, the EVA may also sometimes have a slightly negative correlation as compared to MVA. But this will be a short term phenomenon as eventually the gap will get closed by investors themselves. A stock going ex-dividend will exhibit such propensities.

Thus we can conclude that the main objective of EVA is thus to show management efficiency in generating returns over and above the hurdle rate of invested capital.

Question 5

MTP November 21 (New)

Relative Valuation approach is a significant departure from Intrinsic Value approach. Explain

Answer

To some extent this statement is correct as in practical implementation of fair value within the valuation context it would be better to identify assets that are similar to the ones held by the acquiree company so that the values can be compared. Trying to get a value that would be the nearest to the market price would mean that the valuation of a particular portfolio, or a divestiture in an entity, would happen at an agreeable price that fits into the normal distribution.

In one sense, we are indeed using the relative valuation in a limited approach when we speak about expected market returns, or when we are adopting an index-based comparative. The more the asset pricing gets correlated to the similar assets in the market, the more inclusive it gets. Thus, when we are comparing bonds, the closer the YTM of the bond to the government index of return, the more credible it gets when it comes to pricing.

The Relative valuation, also referred to as 'Valuation by multiples,' uses financial ratios to derive at the desired metric (referred to as the 'multiple') and then compares the same to that of comparable firms. Comparable firms would mean the ones having similar asset and risk dispositions and assumed to continue to do so over the comparison period. In the process, there may be extrapolations set to the desired range to achieve the target set.

Question 6

ICAI SM

Relative Valuation is the method to arrive at a 'relative' value using a 'comparative' analysis to its peers or similar enterprises. Elaborate this statement.

Answer

The Relative valuation, also referred to as 'Valuation by multiples,' uses financial ratios to derive at the desired metric (referred to as the 'multiple') and then compares the same to that of comparable firms. Comparable firms would mean the ones having similar asset and risk dispositions and assumed to continue to do so over the comparison period. In the process, there may be extrapolations set to the desired range to achieve the target set. To elaborate –

1. Find out the 'drivers' that will be the best representative for deriving at the multiple
2. Determine the results based on the chosen driver(s) through financial ratios
3. Find out the comparable firms, and perform the comparative analysis, and,
4. Iterate the value of the firm obtained to smoothen out the deviations

Thus, we can conclude that 'Relative Valuation' is a comparative driven approach that assumes that the value of similar firms can form a good indicator for the value of the tested firm. There are some assumptions that are inherent to this model –

i. The market is efficient

ii. The function between the fundamentals and the multiples are linear

iii. The firms that are comparable are similar in structure, risk and growth pattern

Further, we can approach Enterprise Value (EV) in two ways –

(a) Take Entity Value as the base, and then adjust for debt values for arriving the 'EV';

or

(b) Take a balance sheet based approach and arrive at EV.

CHAPTER 14 : MERGERS, ACQUISITIONS AND CORPORATE RESTRUCTURING

Important Exam Concepts: Reverse Merger

Question 1

ICAI November 19 (Old) / MTP May 20 (Old) / RTP November 18 (Old) / Practice Manual

What is take over by reverse bid or Reverse Merger? When does it take place?

ICAI January 21 (Old)

What is take over by reverse bid or reverse merger?

Answer

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 holder

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.

Question 2

ICAI May 19 (Old) / Practice Manual

Write short note on carve out, and its difference from spin off

MTP March 21 (New)

Reconcile differences between Carve-out and Spin Off.

MTP March 21 (Old)

Carve out and its difference from Spin off.

Answer

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.

Question 3

ICAI November 18 (Old)

What are the various reasons for demerger or divestment.

Answer

There are various reasons for divestment or demerger viz.,

- To pay attention on core areas of business;
- The division/ business may not be sufficiently contributing to the revenues;
- The size of the firm may be too big to handle;
- The firm may be requiring cash urgently in view of other investment opportunities.

Question 4

RTP May 20 (New)

What is the difference between Management Buy Out and Leveraged Buyout? State the purpose of a leveraged buyout with the help of an example.

MTP April 18 (Old) / Practice Manual / MTP April 21 (Old)

Buy-outs

Answer

A buy-out happens when a person or group of persons gain control of a company by buying all or a majority of its shares. A buyout involves two entities, the acquirer and the target company. The acquirer seeks to gain controlling interest in the company being acquired normally through purchase of shares

The difference between Management Buy Outs and Leveraged Buy Outs has been discussed as below:

Management Buy Outs

Buyouts initiated by the management team of a company are known as a management buyout. In this type of acquisition, the company is bought by its own management team.

MBOs are considered as a useful strategy for exiting those divisions that does not form part of the core business of the entity.

Leveraged Buyout (LBO)

An acquisition of a company or a division of another company which is financed entirely or partially (50% or more) using borrowed funds is termed as a leveraged buyout. The target company no longer remains public after the leveraged buyout; hence the transaction is also known as going private. The deal is usually secured by the acquired firm's physical assets.

The intention behind an LBO transaction is to improve the operational efficiency of a firm and increase the volume of its sales, thereby increasing the cash flow of the firm. This extra

cash flow generated will be used to pay back the debt in LBO transaction. After an, LBO the target entity is managed by private investors, which makes it easier to have a close control of its operational activities. The LBOs do not stay permanent. Once the LBO is successful in increasing its profit margin and improving its operational efficiency and the debt is paid back, it will go public again. Companies that are in a leading market position with proven demand for product, have a strong management team, strong relationships with key customers and suppliers and steady growth are likely to become the target for LBOs. In India the first LBO took place in the year 2000 when Tata Tea acquired Tetley in the United Kingdom. The deal value was Rs 2,135 crores out of which almost 77% was financed by the company using debt. The intention behind this deal was to get direct access to Tetley's international market. The largest LBO deal in terms of deal value (7.6 Billion) by an Indian company is the buyout of Corus by Tata Steel.

Question 5

MTP October 19 (Old) / ICAI November 20 (Old)

Synergy in the context of Mergers and Acquisitions

Practice Manual

What is commercial meaning of synergy and how it used as a tool when deciding Merger and Acquisitions?

Answer

Synergy may be defined as follows: V (AB) > V (A) + V (B)

In other words the combined value of two firms or companies shall be more than their individual value. Synergy is the increase in performance of the combined firm over what the two firms are already expected or required to accomplish as independent firms. This may be result of complimentary services economics of scale or both.

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

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

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

Generally positive value of synergy forms the basis of rationale for the merger and acquisition decision. However, before such decision, cost attached with such merger and acquisition should be evaluated in this light. Accordingly, the net gain from merger and acquisition is as follows:

Net Gain = Value of Synergy – Costs associated with Merger and Acquisition.

Question 6

MTP October 18 (Old)

Defending a Company in a Takeover Bid

Answer

Due to the prevailing guidelines, the target company without the approval of the shareholder cannot resort to any issuance of fresh capital or sale of assets etc., and also due to the necessity of getting approvals from various authorities. Thus, the target company cannot refuse transfer of shares without the consent of shareholders in a general meeting.

A target company can adopt a number of tactics to defend itself fromhostile takeover through a tender offer

Divestiture	Crown jewels;	Poison pill;	Poison Put;
White knight;	Golden parachutes	Pac-man defense	Greenmail

Question 7

ICAI November 17 (Old) / MTP August 18 (Old) / Practice Manual

Financial restructuring

Answer

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.

Question 8

MTP March 18 (Old)

Merger Failures or Potential Adverse Competitive Effects.

Answer

Merger Failures or Potential Adverse Competitive Effects

The reasons for merger failures can be numerous. Some of the key reasons are:

- Acquirers generally overpay;
- The value of synergy is over-estimated;
- Poor post-merger integration; and
- Psychological barriers.

Most companies merge with the hope that the benefits of synergy will be realised. Synergy will be there only if the merged entity is managed better after the acquisition than it was managed before. Therefore, to make a merger successful, companies may follow the steps listed as under:

- Decide what tasks need to be accomplished in the post-merger period;
- Choose managers from both the companies (and from outside);
- Establish performance yardstick and evaluate the managers on that yardstick; and
- Motivate them.

Question 9

ICAI July 21 (Old) / RTP May 22 (New)

Unrelated companies come together to form an entity. What this relationship is called?

Discuss briefly the features of this entity.

MTP October 22 (New)

Despite the fact there may be some degree of overlapping in one or more common factors of unrelated Companies come together to form an entity. EXPLAIN.

Answer

Unrelated companies come together to form an entity. Such relationship is called conglomerate merger.

Such mergers involve firms engaged in unrelated type of business operations. In other words, the business activities of acquirer and the target are neither related to each other horizontally (i.e., producing the same or competing products) nor vertically (having relationship of buyer and supplier).

Features:

- 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.

Question 10

ICAI July 21 (Old)

Cross-Border M & A is a popular route for global growth and overseas expansion." Do you agree or disagree? Justify your stand.

Answer

Yes, I agree with the statement that "Cross-border M&A is a popular route for global growth and overseas expansion" since Cross-border M&A is also playing an important role in global M&A especially true for developing countries such as India.

Major factors that motivate multinational companies to engage in cross-border M&A in Asia include the following :

- Globalization of production and distribution of products and services.
- Integration of global economies.
- Expansion of trade and investment relationships on international level.
- Many countries are reforming their economic and legal systems and providing generous investment and tax incentives to attract foreign investment.
- Privatization of state-owned enterprises and consolidation of the banking industry.

Question 11

MTP March 21 (Old)

Demerger or Division of Family managed business

Answer

Around 80 per cent of private sector companies in India are family-managed companies. The family-owned companies are, under extraordinary pressure to yield control to professional managements, as, in the emerging scenario of a liberalised economy the capital markets are broadening, with attendant incentives for growth. So, many of these companies are arranging to hive off their unprofitable businesses or divisions with a view to meeting a variety of succession problems.

Even otherwise, a group of such family-managed companies may undertake restructuring of its operations with a view also to consolidating its core businesses. For this, the first step that may need to be taken is to identify core and non-core operations within the group. The second step may involve reducing interest burden through debt restructuring along with sale of surplus assets. The proceeds from the sale of assets may be employed for expanding by acquisitions and rejuvenation of its existing operations. The bottom line is that an acquisition must improve economies of scale, lower the cost of production, and generate and promote synergies. Besides acquisitions, therefore, the group may necessarily have to take steps to improve productivity of its existing operations.

Question 12

MTP October 20 (Old)

Types of Mergers

Answer

Following are major types of mergers:

- **(i) Horizontal Merger:** The two companies which have merged are in the same industry, normally the market share of the new consolidated company would be larger and it is possible that it may move closer to being a monopoly or a near monopoly to avoid competition.
- **(ii) Vertical Merger:** This merger happens when two companies that have 'buyer-seller' relationship (or potential buyer-seller relationship) come together.
- **(iii) Conglomerate Merger:** Such mergers involve firms engaged in unrelated type of business operations. In other words, the business activities of acquirer and the target are neither related to each other horizontally (i.e., producing the same or competing products) nor vertically (having relationship of buyer and supplier).In a pure conglomerate merger, there are no important common factors between the companies in production, marketing, research and development and technology.
- **(iv) Congeneric Merger:** In these mergers, the acquirer and the target companies are related through basic technologies, production processes or markets. The acquired company represents an extension of product-line, market participants or technologies of the acquirer. These mergers represent an outward movement by the acquirer from its current business scenario to other related business activities within the overarching industry structure
- **(v) Reverse Merger:** Such mergers involve acquisition of a public (Shell Company) by a private company, as it helps private company to by-pass lengthy and complex process required to be followed in case it is interested in going public.

Question 13

MTP April 21 (Old)

Buy-Outs

MTP October 21 (Old)

Buy-outs in context of Mergers and Acquisitions.

Answer

A very important phenomenon witnessed in the Mergers and Acquisitions scene, in recent times is one of buy - outs. A buy-out happens when a person or group of persons gain control of a company by buying all or a majority of its shares. A buyout involves two entities, the acquirer and the target company. The acquirer seeks to gain controlling interest in the company being acquired normally through purchase of shares. There are two common types of buy-outs: Leveraged Buyouts (LBO) and Management Buy-outs (MBO). LBO is the purchase of assets or the equity of a company where the buyer uses a significant amount of debt and very little equity capital of his own for payment of the consideration for acquisition. MBO is the purchase of a business by its management, who when threatened with the sale of its business to third parties or frustrated by the slow growth of the company, step-in and acquire the business from the owners, and run the business for themselves. The majority of buy-outs is management buy-outs and involves the acquisition by incumbent management of the business where they are employed. Typically, the purchase price is met by a small amount of their own funds and the rest from a mix of venture capital and bank debt.

Internationally, the two most common sources of buy-out operations are divestment of parts of larger groups and family companies facing succession problems. Corporate groups may seek to sell subsidiaries as part of a planned strategic disposal programme or more forced reorganisation in the face of parental financing problems. Public companies have, however, increasingly sought to dispose of subsidiaries through an auction process partly to satisfy shareholder pressure for value maximisation.

In recessionary periods, buy-outs play a big part in the restructuring of a failed or failing businesses and in an environment of generally weakened corporate performance often represent the only viable purchasers when parents wish to dispose of subsidiaries.

Buy-outs are one of the most common forms of privatisation, offering opportunities for enhancing the performances of parts of the public sector, widening employee ownership and giving managers and employees incentives to make best use of their expertise in particular sectors.

Question 14

RTP November 22 (New)

Explain different forms of divestitures.

Answer

Different ways of divestment or demerger or divestitures are as follows:

(a) Sell off / Partial Sell off: A sell off is the sale of an asset, factory, division, product line or subsidiary by one entity to another for a purchase consideration payable either in cash or in the form of securities. Partial Sell off, is a form of divestiture, wherein the firm sells its business unit or a subsidiary to another because it deemed to be unfit with the company's core business strategy.

Normally, sell-offs are done because the subsidiary doesn't fit into the parent company's core strategy. The market may be undervaluing the combined businesses due to a lack of synergy between the parent and the subsidiary. So, the management and the board decide that the subsidiary is better off under a different ownership. Besides getting rid of an unwanted subsidiary, sell-offs also raise cash, which can be used to pay off debts. In the late 1980s and early 1990s, corporate raiders used debt to finance acquisitions.

(b) Spin-off: In this case, a part of the business is separated and created as a separate firm. The existing shareholders of the firm get proportionate ownership. So, there is no change in ownership and the same shareholders continue to own the newly created entity in the same proportion as previously in the original firm. The management of spin-off division is however, parted with. Spin-off does not bring fresh cash. The reasons for spin off may be:

(i) Separate identity to a part/division.

(ii) To avoid the takeover attempt by a predator by making the firm unattractive to him since a valuable division is spun-off.

(iii) To create separate Regulated and unregulated lines of business.

(c) Split-up: This involves breaking up of the entire firm into a series of spin off (by creating separate legal entities). The parent firm no longer legally exists and only the newly created entities survive. For instance, a corporate firm has 4 divisions namely A, B, C, D. All these 4 divisions shall be split-up to create 4 new corporate firms with full autonomy and legal status. The original corporate firm is to be wound up. Since de-merged units are relatively smaller in size, they are logistically more convenient and manageable. Therefore, it is understood that spin-off and split-up are likely to enhance share-holders value and bring efficiency and effectiveness.

(d) Equity Carve outs: This is like spin off, however, some shares of the new company are sold in the market by making a public offer, so this brings cash. More and more companies are using equity carve-outs to boost shareholder value. A parent firm makes a subsidiary public through an initial public offering (IPO) of shares, amounting to a partial sell-off. A new publicly listed company is created, but the parent keeps a controlling stake in the newly traded subsidiary.

A carve-out is a strategic avenue a parent firm may take when one of its subsidiaries is growing faster and carrying higher valuations than other businesses owned by the parent. A carve-out generates cash because shares in the subsidiary are sold to the public, but the issue also unlocks the value of the subsidiary unit and enhances the parent's shareholder value.

Question 15

MTP April 23

Explain some of the 'sell-side' imperatives in Mergers & Acquisitions.

Answer

The following are some of the 'sell-side' imperatives

- Competitor's pressure is increasing.
- Sale of company seems to be inevitable because company is facing serious problems like:
  * No access to new technologies and developments
  * Strong market entry barriers. Geographical presence could not be enhanced
  * Badly positioned on the supply and/or demand side
  * Critical mass could not be realised
  * No efficient utilisation of distribution capabilities
  * New strategic business units for future growth could not be developed
  * Not enough capital to complete the project
- Window of opportunity: Possibility to sell the business at an attractive price
- Focus on core competencies
- In the best interest of the shareholders – where a large well known firm brings-up the proposal, the target firm may be more than willing to give-up.

CHAPTER 15 : STARTUP FINANCE

Important Exam Concepts: Venture Capital, Angel Investors, Pitch Book

Question 1

ICAI November 19 (New) / ICAI December 21 (New) / MTP October 23

State briefly the basic characteristics of venture capital financing?

RTP May 21 (New)

Venture Capital Financing is a unique way of financing Startup'. Discuss.

Answer

Yes, Venture Capital Financing is unique manner of financing a Startup as it possesses the following characteristics:

- Long time horizon: The fund would invest with a long time horizon in mind. Minimum period of investment would be 3 years and maximum period can be 10 years.
- Lack of liquidity: When VC invests, it takes into account the liquidity factor. It assumes that there would be less liquidity on the equity it gets and accordingly it would be investing in that format. They adjust this liquidity premium against the price and required return.
- High Risk: VC would not hesitate to take risk. It works on principle of high risk and high return. So, high risk would not eliminate the investment choice for a venture capital.
- Equity Participation: Most of the time, VC would be investing in the form of equity of a company. This would help the VC participate in the management and help the company grow. Besides, a lot of board decisions can be supervised by the VC if they participate in the equity of a company.

Question 2

ICAI November 19 (New) / MTP March 21 (New)

What is a startup to avail the benefits of government scheme ?

RTP November 18 (New)

Explain Startup India Initiative

Answer

Startup India scheme was initiated by the Government of India on 16th of January, 2016. The definition of startup was provided which is applicable only in case of Government Schemes.

Startup means an entity, incorporated or registered in India (at the date of initiation of the scheme):

- Not prior to ten years,
- With annual turnover not exceeding Rs 100 crore in any preceding financial year, and
- Working towards innovation, development, deployment or commercialization of new products, processes or services driven by technology or intellectual property.

Provided that such entity is not formed by splitting up, or reconstruction, of a business already in existence. Provided also that an entity shall cease to be a Startup if its turnover for the previous financial years has exceeded Rs 100 crore or it has completed 10 years from the date of incorporation/ registration. Provided further that a Startup shall be eligible for tax benefits only after it has obtained certification from the Inter - Ministerial Board, setup for such purpose.

Question 3

ICAI May 19 (New) / MTP October 22 (New)

Explain briefly the sources for funding a Start-up.

RTP May 20 (New) / MTP March 19 (New)

What are some of the innovative ways to finance a start up?

ICAI January 21 (New)

Non-bank Financial Sources are becoming popular to finance Start-ups. Discuss.

RTP November 21 (New)

Mr. R has completed his studies and wants to start his new online business. For a successful online business there are various expenditure costs with regards to advertisement & application development. To make the business successful he wants to raise funds. Explain some of the innovative sources for funding a start-up.

MTP October 20 (New)

Examine briefly the various innovative methods of funding the Startups.

ICAI May 19 (New)

Personal Financing is one of the innovative ways to finance a startup. Discuss any four other methods. ***(Refer Subpoint 2 to 9 of the answer)***

ICAI November 20 (New) / MTP March 23 (New)

Peer-to-Peer Lending and Crowd Funding are same and traditional methods of funding. Do you agree? Justify your stand. ***(Refer Subpoint 4 & 5 of the answer)***

MTP October 23

How Peer to Peer funding different from Crowd Funding? ***(Refer Subpoint 4 & 5 of the answer)***

Answer

Every startup needs access to capital, whether for funding product development, acquiring machinery and inventory, or paying salaries to its employee. Most entrepreneurs think first of bank loans as the primary source of money, only to find out that banks are really the least likely benefactors for startups. So, innovative measures include maximizing non-bank financing.

Here are some of the sources for funding a Start-up:

1. **Personal financing:** It may not seem to be innovative but you may be surprised to note that most

budding entrepreneurs never thought of saving any money to start a business. This is important because most of the investors will not put money into a deal if they see that you have not contributed any money from your personal sources.

2. **Personal credit lines:** One qualifies for personal credit line based on one's personal credit efforts. Credit cards are a good example of this. However, banks are very cautious while granting personal credit lines. They provide this facility only when the business has enough cash flow to repay the line of credit.
3. **Family and friends:** These are the people who generally believe in you, without even thinking that your idea works or not. However, the loan obligations to friends and relatives should always be in writing as a promissory note or otherwise.
4. **Peer-to-peer lending:** In this process group of people come together and lend money to each other. Peer to peer to lending has been there for many years. Many small and ethnic business groups having similar faith or interest generally support each other in their start up endeavors.
5. **Crowdfunding:** Crowdfunding is the use of small amounts of capital from a large number of individuals to finance a new business initiative. Crowdfunding makes use of the easy accessibility of vast networks of people through social media and crowdfunding websites to bring investors and entrepreneurs together.
6. **Microloans:** Microloans are small loans that are given by individuals at a lower interest to a new business ventures. These loans can be issued by a single individual or aggregated across a number of individuals who each contribute a portion of the total amount.
7. **Vendor financing:** Vendor financing is the form of financing in which a company lends money to one of its customers so that he can buy products from the company itself. Vendor financing also takes place when many manufacturers and distributors are convinced to defer payment until the goods are sold. This means extending the payment terms to a longer period for e.g. 30 days payment period can be extended to 45 days or 60 days. However, this depends on one's credit worthiness and payment of more money.
8. **Purchase order financing:** The most common scaling problem faced by startups is the inability to find a large new order. The reason is that they don't have the necessary cash to produce and deliver the product. Purchase order financing companies often advance the required funds directly to the supplier. This allows the transaction to complete and profit to flow up to the new business.
9. **Factoring accounts receivables:** In this method, a facility is given to the seller who has sold the good on credit to fund his receivables till the amount is fully received. So, when the goods are sold on credit, and the credit period (i.e. the date up to which payment shall be made) is for example 6 months, factor will pay most of the sold amount upfront and rest of the amount later. Therefore, in this way, a startup can meet his day to day expenses.

Question 4

ICAI November 18 (New) / MTP March 21 (New)

Explain Angel Investors.

MTP October 19 (New)

Briefly explain how Angel Investors finance the Startups.

MTP October 20 (New)

Explain the term Angel Investor.

MTP November 21 (New)

Who are Angel Investors and how they are different from Venture Capitalists.

Answer

- As per Investopedia, Angel investors invest in small startups or entrepreneurs. Often, angel investors are entrepreneur's family and friends. The capital angel investors provide may be a one-time investment to help the business propel or an ongoing injection of money to support and carry the company through its difficult early stages.
- Angel investors provide more favorable terms compared to other lenders, since they usually invest in the entrepreneur starting the business rather than the viability of the business. Angel investors are focused on helping startups take their first steps, rather than the possible profit they may get from the business. Essentially, angel investors are the opposite of venture capitalists.
- Angel investors are also called informal investors, angel funders, private investors, seed investors or business angels. These are affluent individuals who inject capital for startups in exchange for ownership equity or convertible debt. Some angel investors invest through crowdfunding platforms online or build angel investor networks to pool incapital.
- Angel investors typically use their own money, unlike venture capitalists who take care of pooled money from many other investors and place them in a strategically managed fund.
- Though angel investors usually represent individuals, the entity that actually provides the fund may be a limited liability company, a business, a trust or an investment fund, among many other kinds of vehicles.
- Angel investors who seed startups that fail during their early stages lose their investments completely. This is why professional angel investors look for opportunities for a defined exit strategy, acquisitions or initial public offerings (IPOs).

Question 5

ICAI May 18 (New) / MTP May 20 (New) / MTP April 22 (New)

Explain the advantages of bringing venture capital in the company.

Answer

- It injects long- term equity finance which provides a solid capital base for future growth.
- The venture capitalist is a business partner, sharing both the risks and rewards. Venture capitalists are rewarded with business success and capital gain.
- The venture capitalist is able to provide practical advice and assistance to the company based on past experience with other companies which were in similar situations.
- The venture capitalist also has a network of contacts in many areas that can add value to the company.

- The venture capitalist may be capable of providing additional rounds of funding should it be required to finance growth.
- Venture capitalists are experienced in the process of preparing a company for an initial public offering (IPO) of its shares onto the stock exchanges or overseas stock exchange such as NASDAQ.
- They can also facilitate a trade sale.

Question 6

RTP November 19 (New) / MTP October 19 (New) / MTP March 18 (New) / MTP April 18 (New)

Compare and contrast start-ups and entrepreneurship. Describe the priorities and challenges which start-ups in India are facing.

Answer

Differences between a start-up and entrepreneurship

Startups are different from entrepreneurship. The major differences between them have been discussed in the following paragraphs:

(i) Start up is a part of entrepreneurship. Entrepreneurship is a broader concept and it includes a startup firm.

(ii) The main aim of startup is to build a concern, conceptualize the idea which it has developed into a reality and build a product or service. On the other hand, the major objective of an already established entrepreneurship concern is to attain opportunities with regard to the resources they currently control.

(iii) A startup generally does not have a major financial motive whereas an established entrepreneurship concern mainly operates on financial motive.

Priorities and challenges which start-ups in India are facing

The priority is on bringing more and more smaller firms into existence. So, the focus is on need based, instead of opportunity based entrepreneurship. Moreover, the trend is to encourage self- employment rather than large, scalable concerns. The main challenge with the startup firms is getting the right talent. And, paucity of skilled workforce can hinder the chances of a startup organization's growth and development. Further, startups had to comply with numerous regulations which escalate its cost. It leads to further delaying the chances of a breakeven or even earning some amount of profit.

Question 7

RTP May 18 (New)

EXPLAIN the concept of Bootstrapping and describe the various methods of bootstrapping used by start ups.

MTP April 19 (New) / MTP September 22 (New)

Discuss Bootstrapping as a mode of financing for startups.

RTP November 20 (New) / MTP April 21 (New)

Explain the methods in which a Startup firm can bootstrap.

ICAI November 20 (New)

An individual attempts to found and build a company from personal finances or from the operating revenues of the new company. What this method is called? Discuss any two methods.

ICAI December 21 (New)

What is the mode of financing is called in Startups, when a person attempts to found & build a company from personal finances or from the operating revenues of a new company. Explain briefly the methods of this mode.

ICAI November 22 (New)

What do you mean by Bootstrapping? Explain the method of Trade Credit used by the startup firms in bootstrapping.

Answer

When a person attempts to found & build a company from personal finances or from the operating revenues of the new company is called 'Bootstrapping'.

Some of the methods of this mode are as follows:

(a) **Trade Credit:** When a person is starting his business, suppliers are reluctant to give trade credit. They will insist on payment of their goods supplied either by cash or by credit card. However, a way out in this situation is to prepare a well-crafted financial plan. The next step is to pay a visit to the supplier's office. If the business organization is small, the owner can be directly contacted. On the other hand, if it is a big firm, the Chief Financial Officer can be contacted and convinced about the financial plan.

(b) **Factoring:** This is a financing method where accounts receivable of a business organization is sold to a commercial finance company to raise capital. The factor then got hold of the accounts receivable of a business organization and assumes the task of collecting the receivables as well as doing what would've been the paperwork. Factoring can be performed on a non-notification basis. It means customers may not be told that their accounts have been sold.

(c) **Leasing:** Another popular method of bootstrapping is to take the equipment on lease rather than purchasing it. It will reduce the capital cost and also help lessee (person who take the asset on lease) to claim tax exemption. So, it is better to a take a photocopy machine, an automobile or a van on lease to avoid paying out lump sum money which is not at all feasible for a startup organization.

Question 8

MTP May 20 (New)

Explain the basic documents that are required to make up Financial Presentations during Pitch Presentation.

Answer

Basic documents required to make Financial Projections during Pitch Presentation

➢ **Income statement :** This projects how much money the business will generate by projecting income and expenses, such as sales, cost of goods sold, expenses and capital. For your first year in business, you'll want to create a monthly income statement. For the second year, quarterly statements will suffice. For the following years, you'll just need an annual income statement.

- **Cash flow statement :** A projected cash flow statement will depict how much cash will be coming into the business and out of that cash how much cash will be utilized into the business. At the end of each period (e.g. monthly, quarterly, annually), one can tally it all up to show either a profit or loss.
- **Balance sheet :** The balance sheet shows the business's overall finances including assets, liabilities and equity. Typically one will create an annual balance sheet for one's financial projections.

Question 9

MTP October 18 (New)

Describe the term Pitch Presentation in context of Start-up Business?

MTP October 22 (New)

EXPLAIN briefly the various methods as how to approach Pitch presentation.

MTP April 22 (New)

EXPLAIN briefly the term Pitch Presentation. ***(Refer only First Paragraph of the answer)***

MTP September 23

During Pitch Presentation to convince the investors to put money into the proposed business how promoters deal with following points:

(i) Problem (ii) Solution (iii) Marketing/Sales (iv) Business Model ***(Refer subpoint (iii), (iv), (v), (viii) of the answer)***

Answer

Pitch deck presentation is a short and brief presentation (not more than 20 minutes) to investors explaining about the prospects of the company and why they should invest into the startup business. So, pitch deck presentation is a brief presentation basically using PowerPoint to provide a quick overview of business plan and convincing the investors to put some money into the business. Pitch presentation can be made either during face to face meetings or online meetings with potential investors, customers, partners, and co-founders.

Here, some of the methods have been highlighted below as how to approach a pitch presentation:

(i) Introduction

To start with, first step is to give a brief account of yourself i.e. who are you? What are you doing? But care should be taken to make it short and sweet. Also, use this opportunity to get your investors interested in your company. One can also talk up the most interesting facts about one's business, as well as any huge milestones one may have achieved.

(ii) Team

The next step is to introduce the audience the people behind the scenes. The reason is that the investors will want to know the people who are going to make the product or service successful. Moreover, the investors are not only putting money towards the idea but they are also investing in the team. Also, an attempt should be made to include the background of the promoter, and how it relates to the new company. Moreover, if possible, it can also be highlighted that the team has worked together in the past and achieved significant results.

(iii) Problem

Further, the promoter should be able to explain the problem he is going to solve and solutions emerging from it. Further the investors should be convinced that the newly introduced product or service will solve the problem convincingly.

(iv) Solution

It is very important to describe in the pitch presentation as to how the company is planning to solve the problem.

(v) Marketing/Sales

This is a very important part where investors will be deeply interested. The market size of the product must be communicated to the investors. This can include profiles of target customers, but one should be prepared to answer questions about how the promoter is planning to attract the customers. If a business is already selling goods, the promoter can also brief the investors about the growth and forecast future revenue.

(vi) Projections or Milestones

It is true that it is difficult to make financial projections for a startup concern. If an organization doesn't have a long financial history, an educated guess can be made. Projected financial statements can be prepared which gives an organization a brief idea about where is the business heading? It tells us that whether the business will be making profit or loss?

(vii) Competition

Every business organization has competition even if the product or service offered is new and unique. It is necessary to highlight in the pitch presentation as to how the products or services are different from their competitors.

(viii) Business Model

The term business model is a wide term denoting core aspects of a business including purpose, business process, target customers, offerings, strategies, infrastructure, organizational structures, sourcing, trading practices, and operational processes and policies including culture.

Every investor wants to get his money back, so it's important to tell them in a pitch presentation as to how they should plan on generating revenue. It is better to show the investors a list of the various revenue streams for a business model and the timeline for each of them.

(ix) Financing

If a startup business firm has raised money, it is preferable to talk about how much money has already been raised, who invested money into the business and what they did about it.

Question 10

MTP August 18 (New)

Explain various stages of Venture Capital Funding.

ICAI January 21 (New)

Venture Capital Funding passes through various stages. Discuss.

Answer

Stages of Venture Capital Funding

1. Seed Money: Low level financing needed to prove a new idea.
2. Start-up: Early stage firms that need funding for expenses associated with marketing and product development.
3. First-Round: Early sales and manufacturing funds.
4. Second-Round: Working capital for early stage companies that are selling product, but not yet turning in a profit.
5. Third Round: Also called Mezzanine financing, this is expansion money for a newly profitable company.
6. Fourth-Round: Also called bridge financing, it is intended to finance the "going public" process.

Question 11

ICAI July 21 (New) / RTP May 23 (New)

Explain Indicative Risk Matrix of each stages of funding for Venture Capital Financing.

MTP October 21 (New)

“For a Venture Capitalist while the risk is different in each stage of financing so the risk perception and activity to be financed”. Explain this statement.

Answer

Yes, risk in each stage is different stage of Venture Capital financing and so risk perception and activity to be financed as per indicative Risk matrix is given below:

Financial Stage	Period (Funds locked in years)	Risk Perception	Activity to be financed
Seed Money	7-10	Extreme	For supporting a concept or idea or R&D for product development and involves low level of financing.
Start Up	5-9	Very High	Initializing prototypes operations or developing products and its marketing.
First Stage	3-7	High	Started commercials production and marketing.
Second Stage	3-5	Sufficiently high	Expanding market and growing working capital need though not earning profit.

Third Stage	1-3	Medium	Market expansion, acquisition & product development for profit making company. Also called Mezzanine Financing.
Fourth Stage	1-3	Low	Facilitating public issue i.e. going public. Also called Bridge Financing.

Question 12

MTP April 21 (New)

Explain the term Business Model with help of an example.

MTP October 21 (New)

Explain the term 'Business Model' with the help of an illustration.

Answer

The term business model is a wide term denoting core aspects of a business including purpose, business process, target customers, offerings, strategies, infrastructure, organizational structures, sourcing, trading practices, and operational processes and policies including culture.

Further, as per Investopedia, a business model is the way in which a company generates revenue and makes a profit from company operations. Analysts use the term gross profit as a way to compare the efficiency and effectiveness of a firm's business model. Gross profit is calculated by subtracting the cost of goods sold from revenues.

A business model can be illustrated with the help of an example. There are two companies – company A and company B. Both the companies are engaged in the business of renting movies. Prior to the advent of internet both the companies rent movies physically. Both the companies made Rs. 5 crore as revenues. Cost of goods sold was Rs. 4,00,000. So, the companies made Rs. 1,00,000 as gross profit. After the introduction of internet, company A started to offer movies online instead of renting or selling it physically. This change affected the business model of company A positively. Revenue is still Rs. 5,00,000. But the significant part is that cost of goods sold is now Rs. 2,00,000 only. This is because online sales lead to significant reduction of storage and distribution costs. So, the gross profit increases from 20% to 60%.

Therefore, Company A isn't making more in sales, but it figured out a way to revolutionize its business model, which greatly reduces costs. Managers at company A have an additional 40% more in margin to play with than managers at company A. Managers at company A have little room for error and they have to tread carefully.

Hence, every investor wants to get his money back, so it's important to tell them in a pitch presentation as to how they should plan on generating revenue. It is better to show the investors a list of the various revenue streams for a business model and the timeline for each of them. Further, how to price the product and what does the competitor charge for the same or similar product shall also be highlighted. It is also beneficial to discuss the lifetime value of the customer and what should be the strategy to keep him glued to their product.

Question 13

MTP November 21 (New)

Explain alternatives available to offshore investors for making investments in Venture Capital Funds in India. ***(Refer Subpoint (b) of the answer)***

ICAI May 23

"A Limited Partnership Entity, in India, is not recognized for the purpose of Venture Capital Fund." Do you agree? Briefly explain the structure of Venture Capital Fund in India.

Answer

Yes, agree with the statement.

Three main types of fund structure exist: one for domestic funds and two for offshore ones::

(a) Domestic Funds: Domestic Funds (i.e. one which raises funds domestically) are usually structured as:

(i) A domestic vehicle for the pooling of funds from the investor, and

(ii) A separate investment adviser that carries those duties of asset manager.

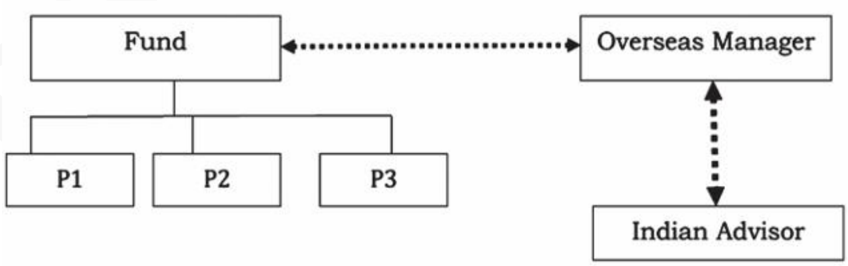
The choice of entity for the pooling vehicle falls between a trust and a company, (India, unlike most developed countries does not recognize a limited partnership), with the trust form prevailing due to its operational flexibility.

(b) Offshore Funds

Two common alternatives available to offshore investors are: the "offshore structure" and the "unified structure".

Offshore structure

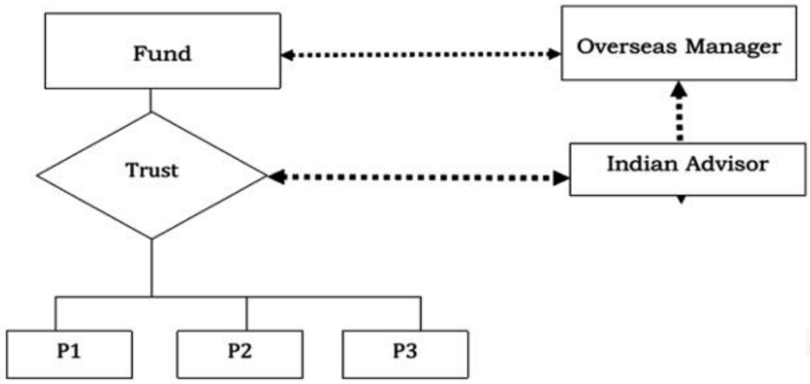
Under this structure, an investment vehicle (an LLC or an LP organized in a jurisdiction outside India) makes investments directly into Indian portfolio companies. Typically, the assets are managed by an offshore manager, while the investment advisor in India carries out the due diligence and identifies deals.



Off shore structure

Unified Structure

When domestic investors are expected to participate in the fund, a unified structure is used. Overseas investors pool their assets in an offshore vehicle that invests in a locally managed trust, whereas domestic investors directly contribute to the trust. This is later device used to make the local portfolio investments.



Unified Structure

Question 14

MTP March 22 (New)

EXPLAIN the conditions that need to be met for considering an entity to be called as a Startup.

ICAI May 22 (New)

Enlist the criteria for an entity to be classified as a Startup entity under the Startup India Scheme initiated by the Government of India.

MTP April 23 / RTP November 23

Explain the conditions that are required to be satisfied by an entity to be considered as a Startup vide GSR Notification 127 (E) dated 19th February 2019.

Answer

As per GSR Notification 127 (E) dated 19th February 2019, an entity shall be considered as a Startup:

i. Upto a period of ten years from the date of incorporation/ registration, if it is incorporated as a private limited company (as defined in the Companies Act, 2013) or registered as a partnership firm (registered under section 59 of the Partnership Act, 1932) or a limited liability partnership (under the Limited Liability Partnership Act, 2008) in India.

ii. Turnover of the entity for any of the financial years since incorporation/ registration has not exceeded one hundred crore rupees.

iii. Entity is working towards innovation, development or improvement of products or processes or services, or if it is a scalable business model with a high potential of employment generation or wealth creation.

Provided that an entity formed by splitting up or reconstruction of an existing business shall not be con sidered a 'Startup'.

Question 15

MTP March 22 (New) / ICAI May 22 (New)

"Angel Investors provide more favourable terms than other lenders". EXPLAIN.

Answer

To some extent the given statement is correct because though being a country of many cultures and communities traditionally inclined to business and entrepreneurship, India still ranks low on comparative ratings across entrepreneurship, innovation and ease of doing business. The reasons are obvious. These include our old and outdated draconian rules and regulations which provides a hindrance to our business environment for a long time. Other reasons are red tapism, our time consuming procedures, and lack of general support for entrepreneurship. Off course, things are changing in recent times.

Often, angel investors are among an entrepreneur's family and friends. The capital angel investors provide may be a one-time investment to help the business propel or an ongoing injection of money to support and carry the company through its difficult early stages.

Further since they usually invest in the entrepreneur starting the business rather than the viability of the business. Angel investors are focused on helping startups take their first steps, rather than the possible profit they may get from the business. Essentially, angel investors are the opposite of venture capitalists.

Angel investors are also called informal investors, angel funders, private investors, seed investors or business angels. These are affluent individuals who inject capital for startups in exchange for ownership equity or convertible debt. Some angel investors invest through crowdfunding platforms online or build angel investor networks to pool in capital.

Angel investors typically use their own money, unlike venture capitalists that take care of pooled money from many other investors and place them in a strategically managed fund.

Though angel investors usually represent individuals, the entity that actually provides the fund may be a limited liability company, a business, a trust or an investment fund, among many other kinds of vehicles.

Question 16

ICAI November 22 (New)

Write a short note on Venture Capital Fund.

Answer

Venture Capital Fund means investment vehicle that manage funds of investors seeking to invest in startup firms and small businesses with exceptional growth potential. Venture capital is money provided by professionals who alongside management invest in young, rapidly growing companies that have the potential to develop into significant economic contributors.

Venture Capitalists generally

- Finance new and rapidly growing companies
- Purchase equity securities
- Assist in the development of new products or services
- Add value to the company through active participation.

Question 17

ICAI November 23

NIYA Healthcare is a proprietary concern engaged in the manufacture and development of Pharmaceutical products since last five years. To scale up the business operations and increase the present turnover which is hovering around 500 Million, the proprietor decides to convert his existing business into a Private Limited Company. He also wants to get access to various tax benefits, easier compliances under the startup India initiative and get recognized as a startup company.

Advise whether NIYA Healthcare can be recognized as a startup company in view of the criteria considered eligible for the startup recognition initiated by the Government of India?

Answer

As per Government of India notification an entity can be considered as a Startup:

i. If it is incorporated as a private limited company or registered as a partnership firm or a limited liability partnership in India upto a period of 10 years from date of incorporation or registration.

ii. Turnover of the entity for any of the financial years since incorporation/ registration has not exceeded one hundred crore rupees.

iii. Entity is working towards innovation, development or improvement of products or processes or services, or if it is a scalable business model with a high potential of employment generation or wealth creation.

Provided that an entity formed by splitting up or reconstruction of an existing business shall not be considered a 'Startup'.

Advise: In the present scenario, NIYA healthcare is converted into a private limited company. In other words there is a reconstruction of an exiting propriety business into a private limited company. In view of the above the company cannot be recognised as a startup company.

Question 18

ICAI November 23

"In Deal Structuring, in many structures to facilitate the exit, the Venture Capital may put a tag-along clause". What do you mean by that clause? Explain Deal Structuring and Exit Plan to Venture Capital Investment Process.

Answer

Tag-alone clause means VC is put by condition that promoter must sell a part of his/ her stake along with the VC.

Deal Structuring: Once the case passes through the due diligence it would now go through the deal structuring. The deal is structured in such a way that both parties win. In many cases, the convertible structure is brought in to ensure that the promoter retains the right to buy back the share.

Exit plan: At the time of investing, the VC would ask the promoter or company to spell out in detail the exit plan. Mainly, exit happens in two ways:

(a) One way is 'sell to third party(ies)'. This sale can be in the form of IPO or Private Placement to other VCs.

(b) The second way to exit is that promoter would give a buy back commitment at a pre agreed rate (generally between IRR of 18% to 25%). In case the exit is not happening in the form of IPO or third-party sell, the promoter would buy back. In many deals, the promoter buyback is the first refusal method adopted i.e. the promoter would get the first right of buyback.

Question 19

RTP May 24

Succession planning is a good way for companies to ensure that businesses are fully prepared to promote and advance all employees— not just those who are at the management or executive levels. Explain the above statement.

Answer

Succession planning is the process of identifying the critical positions within an organization and developing action plans for individuals to assume those positions. A succession plan identifies future need of people with the skills and potential to perform leadership roles.

Taking a holistic view of current and future goals, this type of preparation ensures that the right people are available for the right jobs today and in the years to come. It can also provide a liquidity event, which enables the transfer of ownership in a going concern to rising employees.

Need for succession planning can be explained below:

- **Risk mitigation** – If existing leader quits, then searches can take six-nine months for suitable candidate to close. Keeping an organization without leader can invite disruption, uncertainty, conflict and endangers future competitiveness.
- **Cause removal** – If the existing leader is culpable of gross negligence, fraud, wilful misconduct, or material breach while discharging duties and has been barred from undertaking further activities by court, arbitral tribunal, management, stakeholders or any other agency.
- **Talent pipeline –** Succession planning keep employees motivated and determined as it can help them obtaining more visibility around career paths expected, which would help in retaining the knowledge bank created by company over a period of time and leverage upon the same.
- **Conflict Resolution Mechanism –** This planning is very helpful in promoting open and transparent communication and settlement of conflicts.
- **Aligning –** In family owned business succession planning helps to align with the culture, vision, direction and values of the business.

Question 20

MTP March 24

What do you mean by the term Unicorn? State the features a Start-up should possess to be referred as a Unicorn?

Answer

A Unicorn is a privately held start-up company which has achieved a valuation US$ 1 billion. This term was coined by venture capitalist Aileen Lee, first time in 2013. Unicorn, a mythical animal represents the statistical rarity of successful ventures.

A start-up is referred as a Unicorn if it has following features:

(i) A privately held start-up.

(ii) Valuation of start-up reaches US$ 1 Billion.

(iii) Emphasis is on the rarity of success of such start-up.

(iv) Other common features are new ideas, disruptive innovation, consumer focus, high on technology etc.

However, it is important to note that in case the valuation of any start-up slips below US$ 1 billion it can lose its status of 'Unicorn'. Hence a start-up may be Unicorn at one point of time and may not be at another point of time.