

STRATEGIC FINANCIAL MANAGEMENT

May 2017

It's not the bulls and bears that you need to avoid
- it's the bum steers.



LET'S HEDGE.....



what is life without little bit of money?

CURRENCY



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LEARNING TOOLS



CA FINAL

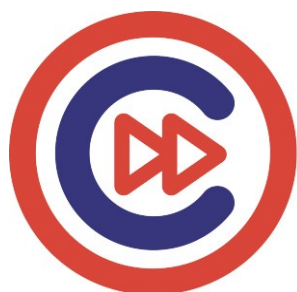
STRATEGIC FINANCIAL MANAGEMENT

SFM Theory

May 2017

CA Mayank Kothari
BBA, ACA

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Strategic Financial Management

SFM Theory

Mayank M. Kothari,

BBA, ACA

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Transforming Education

Project A

CF	utility	prob	uxp
-15000	-100	0.10	-10
-10000	-60	0.20	-12
15000	40	0.40	16
10000	30	0.20	6
5000	20	0.10	2
			<u>2</u>

Project B

CF	utility	prob	uxp
-10000	-60	0.10	-6
-9000	-3	0.15	-1.35
15000	40		
5000	20		
10000	30		

Y Ltd's offer

Yr	Particulars	CF	PVF/PVIF @ 12%	PV
0	Sale	500000		
	(-) Tax @ 34%	170000		
		<u>330000</u>		
	Investment	0		
1-5	Leave Rent	(90000)		
	Interest	28875		
	Net Profit	(61125)		
	(-) Tax saving	20783		
	Net CF	(40342)		
			3.605 (145437)	
5	Investment Release	330000	0.567	187110
				<u>NPV 41673</u>

Z Ltd's offer

Yr	Particulars	CF	PVF/PVIF @ 12%	PV
0	Sale	500000		
	(-) Tax	170000		
		<u>330000</u>		
	New Machine	0		
1	Tax saving on Dep	40000		
			0.896	35840
1-5	Maintenance	(10000)		
	(-) Tax saving	3400		
			3.605	12337
5	Sale value of New Machine	330000	0.567	187110
				<u>NPV 41673</u>

1)

	Mark	Mask
EAT	2000	400
No	200	100
EPS	10	4
x PE	10	5
MP	100	20

$\therefore$ Exchange Ratio $\frac{20}{100} = 1:5$

2) Post Merger EPS

	Mark	Mask
Post merger EAT	2400	
Post merger No.	220	
	$[200 + 100 \times \frac{1}{5}]$	
Post Merger EPS	$\approx 10.91/-$	

iii) MP - post merger

	Mark	Mask
Post merger EPS	10.91	
PE	10	
MP	$\approx 109.10/-$	

iv) MV of merged firm

	Mark	Mask
Post merger MP	109.10	
No.	220	
Post Merger MV		

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Derivatives

1) $F = S(1+r)$
 $= 1800(1.06)$
 $F = 1908$

ii) AFR (1950) > TFR (1908)
 Forward is overvalued
 $\therefore$ Sell Forward

Transactions under arbitrage

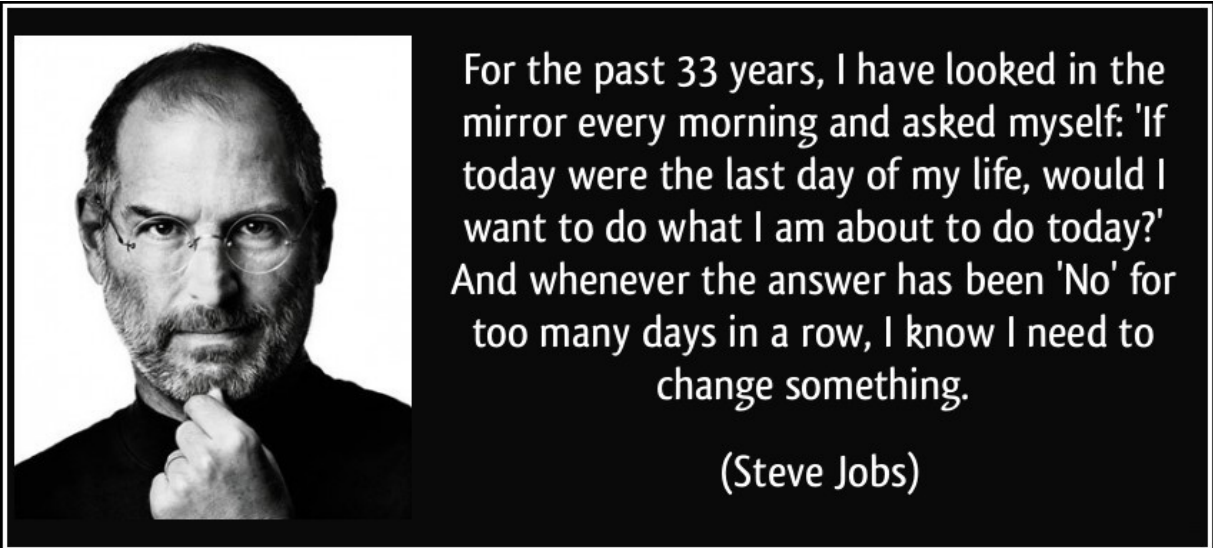
Time t=0		
x Sell Forward		
x Buy Spot	-1800	
Borrow	+1800	
	<u>0</u>	

Time t=6m		
Forward settle	+1950	
[Stock sell]		
Repayment of debt	-1908	
[1800 x 1.06]		

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My Inspiration



Words of Acknowledgment

When a dream turns into a reality, it's my duty to acknowledge those who have been the real strength behind my work.

Thanks To-

- Senior **CA Kamal Mulchandani, Prof. Sudhir Sachdeva, CA Farooq Haque**, for believing in me and giving me an opportunity to stand ahead of all.
- My friend, **CA Arjun Phatak** for his extensive support in helping us to reach the maximum number of students.
- My friend, **CA Garvita Agrawal**, her suggestions has made all the complex decisions very simple and effective.
- My Friend, **Sanskriti Khanna**, her support and suggestions helped me not to give up on my goals.
- Finally and the most important,

Thank you
Mom & Dad

Your everyday support means a lot to me.

- **CA Mayank Kothari**



Words to the wise

CA Exams

Getting practical with the bookish knowledge is very important.

I had to keep that thing in my mind all the time during exam preparation that only 5-6 People are going to pass out of 100.

Writing the correct answer and expecting to get the marks would have been the biggest mistake I could have done.

Because I cannot underestimate other participant in the contest, that's why I assumed that everybody is going to put their efforts for the same exam, and among 100 it's obvious that atleast 30-35 people can give the right answer for any particular question but not all the 30-35 are going to Pass the Exam. Clear enough.

So, writing the correct answer and expecting a spot in top 5 represents that I am still the poor guy who didn't understand the game yet.

And there's absolutely no place for the weak people in exams like CA, hence there's no choice but to be Strong.

Knowing all these things I was bound to put extra efforts, something which majority of the students might not be doing in their preparation.

I researched, I surfed, I asked and then found few things. I did it and frankly it was a blind game because I didn't know whether it's going to work or not. But taking the risk again is only option which may give you return. And on the other side I was happy somewhere because the moment I decided to do something extra was the moment I separated myself from rest of the world. In my eyes I was no more a person picked up from the crowd. First you only have to feel that you are special and then the world will participate in your belief.

- ✓ It's a game, not an exam
- ✓ Your fight is against the rest of the participants not with ICAI or its question paper.
- ✓ You not only have to prepare for what's in there your course, but also you have to prepare more than what the best person sitting in the exam will be.
- ✓ Be a Smart, not a Dolt
- ✓ If you have an option, why not to think big.
- ✓ Have some special reason of your own to get that degree, only then you will put extra efforts.
- ✓ Push your own limits and get out of the comfort zone.
- ✓ Every day break your own records else the world out there will break you to your knees.

Perseverance is what all required.

Keep Going, Keep Trying, Keep Improving... One day everything will be yours.

-CA Mayank Kothari

Importance of SFM Theory [Analysis of theory questions asked in past 18 exams]

No.	1	2	3	4	5	6	7	8	9	10	11	12	Total
Exam	Project Planning and Capital Budgeting	Indian Capital Market	Financial Services	Leasing Decisions	Dividend Decisions	Derivatives	Bond Valuation	Portfolio Management	Mutual Funds	Money Market Operations	Foreign Exchange Risk Management	Merger, Acquisition and Restructuring	
May-08	4	4	12	-	-	-	-	-	-	-	-	-	20
Nov-08	-	4	-	4	-	4	-	-	4	-	4	4	24
May-09	-	-	-	-	-	-	3	-	-	-	-	-	3
Nov-09	-	6	4	-	-	-	-	-	-	-	-	-	10
May-10	4	4	8	-	-	-	-	-	4	-	-	-	20
Nov-10	4	-	8	-	-	4	-	-	4	-	8	-	28
May-11	4	12	-	-	-	4	-	-	-	-	4	-	24
Nov-11	4	4	-	-	-	4	-	-	4	4	8	4	32
May-12	-	-	-	-	-	4	4	-	-	4	-	-	12
Nov-12	-	8	4	-	-	-	-	-	-	4	-	4	20
May-13	-	4	8	-	-	-	-	-	-	4	4	4	24
Nov-13	4	-	-	-	-	-	-	-	4	-	-	4	12
May-14	8	8	-	-	4	4	-	-	-	-	4	-	28
Nov-14	-	4	-	4	-	-	-	-	4	-	-	4	16
May-15	-	4	-	-	-	12	-	-	4	-	-	-	20
Nov-15	2	-	8	-	-	8	-	-	4	-	-	-	22
May-16	4	4	4	-							4	4	20
Nov-16	4	4	-	4					4			4	20
Average	4	5	7	4	4	6	4	0	4	4	5	4	20
Rank	IV	III	I	IV	IV	II	IV	V	IV	IV	III	IV	

*Cover **Small Things, Big Score** on page 83 before you start reading.

Matter of discussion: **SFM Theory Notes**

For CA Final- Strategic Financial Management

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- **CA Mayank Kothari**



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Total		175		



Indian Capital Market

Q1 What is Financial Market and its two major components?

Answer:

A financial market is a market that brings buyers and sellers together to trade in financial assets such as stocks, bonds, commodities, derivatives and currencies. The purpose of a financial market is to set prices for global trade, raise capital and transfer liquidity and risk. Although there are many components to a financial market, two of the most commonly used are:

- a. Capital Market**
- b. Money Market**

Q2 What is Capital Market?

Answer:

It is the part of a financial system concerned with raising capital by dealing in shares, bonds, and other long-term investments.

Q3 What is Money Market?

Answer:

It is the trade in short-term loans between banks and other financial institutions.

Q4 What is the difference between Capital Market and Money Market?

Answer:

- ✓ Money markets are used for a short-term basis, usually for assets up to one year.
- ✓ Conversely, capital markets are used for long-term assets, which are any asset with maturity greater than one year.
- ✓ Capital markets include the equity (stock) market and debt (bond) market.
- ✓ Together the money and capital markets comprise a large portion of the financial market and are often used together to manage liquidity and risks for companies, governments and individuals.

Q5 What constitutes Capital Market?

Answer: The main components of capital market are: 1. Primary Market 2. Secondary Market !

Q6 What is meant by Primary Market and Secondary market?

Answer:

Primary Market

- ✓ This is the market for new long term equity capital. The primary market is the market where the securities are sold for the first time. Therefore it is also called the new issue market (NIM).
- ✓ In a primary issue, the securities are issued by the company directly to investors.
- ✓ The company receives the money and issues new security certificates to the investors.
- ✓ Primary issues are used by companies for the purpose of setting up new business or for expanding or modernizing the existing business.
- ✓ The primary market performs the crucial function of facilitating capital formation in the economy.

- ✓ The new issue market does not include certain other sources of new long term external finance, such as loans from financial institutions. Borrowers in the new issue market may be raising capital for converting private capital into public capital; this is known as "going public."

Methods of floatation

Secondary Market

- ✓ The secondary market, also called the aftermarket, it is a market where investors purchase securities or assets from other investors, rather than from issuing companies themselves.
- ✓ In the secondary market, securities are sold by and transferred from one investor or speculator to another. It is therefore important that the secondary market be highly liquid.
- ✓ As a general rule, the greater the number of investors that participate in a given marketplace, and the greater the centralization of that marketplace, the more liquid the market.

Q7 Distinguish between Primary Market and Secondary Market.

Answer:

No.	Basis	Primary Market	Secondary Market
1	Nature of Securities	The primary market deals with new securities i.e. securities which are traded for the first time.	The secondary market deals with the old securities.
2	Nature of Financing	It provides additional funds to the issuing company directly.	Whereas secondary market does not provide additional funds to the concerned company.(there is indirect supply of capital)
3	Organisational Difference	The primary market is not rooted in any particular area and has no geographical existence.	The stock exchanges have physical existence and are located in a particular geographical area.
4	Another Name	New Issue Market (NIM)	After Market
5	Type of purchasing	Direct	Indirect
6	How many times a security can be sold?	Only Once	Multiple Times
7	Buying and Selling between	Company and Investors	Investors
8	Intermediary	Underwriters	Brokers
9	Price	Fixed Price	Fluctuates, based on the demand and supply

Q8 Name the Leading Stock Exchanges in India and Abroad.

Answer:

Stock Exchanges in India

- Bombay Stock Exchange (BSE)
- National Stock Exchange (NSE)

Stock Exchanges Abroad

- New York Stock Exchange (NYSE)
- Nasdaq (National Association of Securities Dealers Automated Quotations.)
- London Stock Exchange

**Q9 What are the functions of Stock Exchanges?****Answer:**

- (a) Liquidity and Marketability of Securities:** Stock exchange provides a ready and continuous market for purchase and sale of securities. Investors can at any time sell one and purchase another security, thus giving them marketability.
- (b) Fair Price Determination:** Due to nearly perfect information, active bidding takes place from both sides. This ensures fair price to be determined by demand and supply forces.
- (c) Sources of Long Term Funds:** Corporate, Government and public bodies raise funds from equity markets.
- (d) Helps in Capital Formation:** Stock exchange accelerates the process of capital formation. It creates the habit of saving, investing and risk taking among the investing class and converts their savings into profitable investment. It acts as an instrument of capital formation. In addition, it also acts as a channel for right (safe and profitable) investment.
- (e) Reflects the General State of the Economy:** Stock exchange indicates the state of health of companies and the national economy. It acts as a barometer of the economic situation / conditions.
- (f) Regulates Company Management:** Listed companies have to comply with rules and regulations of concerned stock exchange and work under the vigilance (i.e. supervision) of stock exchange authorities.
- (g) Provides Clearing House Facility:** Stock exchange provides a clearing house facility to members. It settles the transactions among the members quickly and with ease. The members have to pay or receive only the net dues (balance amount) because of the clearing house facility.

Q10 What is Stock Market Index?**Answer:**

- ✓ A stock index or a stock market index is a list of figures and stocks that are used to indicate the combined value of its constituents.
- ✓ The stock index is applied as a device for representing the essential features of its constituent stocks.
- ✓ Stock indices function as an indicator of the general economic scenario of a country.
- ✓ If the stock market indexes are on the high, it reflects that the overall financial condition of the different companies in the country and the general economy of the country are stable.
- ✓ If, however, there is a plunge noticed in the stock market index, it is indicative of poor economic condition of the companies and therefore, the general economy.

Stock Market Index answers to the question “how is the market doing?” A base year is set along with a basket of base shares.

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

Q11 What do the fluctuations of Index Say?**Answer:**

- a. Stocks are valued by **discounting future earnings** of the company; therefore stock indices reflect expectation about future performance of the companies listed in the stock market.
- b. When the Index goes up, the market thinks that the future returns will be higher than they are at present and when it goes down, the market thinks that the future returns will be lower than they are at present.

The concept behind the Index

Stock price are sensitive to the following news:

- Company specific news
- Country specific news (budget, elections, government policies, wars etc.)

On any one day there is some good news and bad news related to specific companies, which offset with each other. This news does not affect the index. However, the country specific news, which is common to all stocks, affects the index.

Q12 How is the Index calculated?

Answer:

Step 1: Calculate market capitalization (or market cap) of each individual company comprising the index. [Market price per share x Total no. of outstanding shares]

Step 2: Calculate total market capitalization by adding the individual market capitalization of all companies in the Index.

Step 3: Computing index of the next day requires the index value and the total market capitalization of the previous day and is computed as follows:

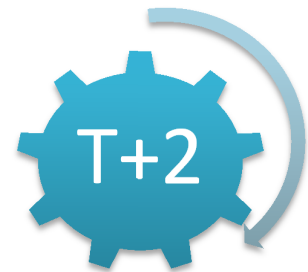
$$\text{Index value} = \text{Index on previous day} \times \frac{\text{total market capitalization for current day}}{\text{total capitalisation of previous day}}$$

Note: Indices may also be calculated by price weighted method. Here the share price of constituent companies forms the weights. However almost all equity indices world-wide are calculated using market capitalization weighted method (the one used above).

Q13 Write short note on Settlement Cycle and Trading Hours.

Answer:

- ✓ Equity spot markets follow a T+2 rolling settlement.
- ✓ This means that any trade taking place on Monday gets settled by Wednesday.
- ✓ All trading on stock exchanges takes place between 9:15 am and 3:30 pm, Indian Standard Time, Monday through Friday.
- ✓ Delivery of shares must be made in dematerialized form, and each exchange has its own clearing house, which assumes all settlement risk, by serving as a central counterparty.

**Q14 What is Clearing Houses?**

Answer:

- ✓ Clearing house is an exchange associated body charged with the function of ensuring the financial integrity of each trade.
- ✓ Orders are cleared by means of clearinghouse acting as a seller to all the buyers and buyer to all the sellers.
- ✓ It provides range of services related to the guarantee of contracts, clearing and settlement of trades and management of risk for their members and associated exchanges.

**Q15 What is the role of clearing house?****Answer:**

- ✓ Ensuring adherence to the system and procedures for smooth trading.
- ✓ Minimising credit risk by being a counter party to all trades.
- ✓ Daily accounting of gains and losses.
- ✓ Ensuring delivery of payment for assets on maturity dates for all outstanding contracts.
- ✓ Monitors the maintenance of speculation margins.

Q16 Write short note on Trading Mechanism.**Answer:**

- ✓ Trading at both the exchanges takes place through an open electronic limit order book, in which order matching is done by the trading computer.
- ✓ There are no market makers or specialists and the entire process is order-driven, which means that market orders placed by investors are automatically matched with the best limit orders. As a result, buyers and sellers remain anonymous.
- ✓ The advantage of an order driven market is that it brings more transparency, by displaying all buy and sell orders in the trading system.
- ✓ However, in the absence of market makers, there is no guarantee that orders will be executed.
- ✓ All orders in the trading system need to be placed through brokers, many of which provide online trading facility to retail customers.

Q17 What are the major capital market instruments?**Answer:**

- a) Debt Instruments
- b) Equities (Common stock)
- c) Preference Shares
- d) Derivatives

Q18 Write short notes on American Depository Receipts (ADRs).**Answer:**

- ✓ Introduced to the financial markets in 1927, an American Depository Receipt (ADR) is a stock that trades in the United States but represents a specified number of shares in a foreign corporation. ADRs are bought and sold on U.S. stock markets just like regular stocks and are issued/sponsored in the U.S. by a bank or brokerage.
- ✓ ADRs were introduced in response to the difficulty of buying shares from other countries which trade at different prices and currency values.
- ✓ U.S. banks simply purchase a large lot of shares from a foreign company, bundle the shares into groups and reissue them on either the NYSE, AMEX or Nasdaq.
- ✓ The depository bank sets the ratio of U.S. ADRs per home country share. This ratio can be anything less than or greater than 1. For example, a ratio of 4:1 means that one ADR share represents four shares in the foreign company.

Advantages of Investing in ADR

- ✓ ADRs allow US Investor to invest in companies outside North America with greater ease.

- ✓ By investing in different countries, you have the potential to capitalize on emerging economies.

Disadvantages of Investing in ADR

- ✓ ADRs come with more risks, involving political factors, exchange rates and so on.
- ✓ Language barriers and a lack of standards regarding financial disclosure can make it difficult to research foreign companies.

Q19 Write short notes on Global Depository Receipts (GDRs).

Answer:

- ✓ A global depository receipt (GDR) is similar to an ADR, but is a depository receipt sold outside of the United States and outside of the home country of the issuing company. Most GDRs are, regardless of the geographic market, denominated in United States dollars, although some trade in Euros or British sterling.
- ✓ It is not a different financial instrument, as it may sound, from that of ADR. In fact if the Indian Company which has issued ADRs in the American market wishes to further extend it to other developed and advanced countries such as Europe, then they can sell these ADRs to the public of Europe and the same would be named as GDR.
- ✓ GDR can be particularly helpful to those persons who are not resident of a country in which they want to invest. Because through GDR those persons can invest in the shares of the company without any problem and hence it is a great alternative of investment for them
- ✓ Prices of GDR are often close to values of related shares, but they are traded and settled separately than the underlying share.

Advantages of GDR to issuing company

- Accessibility to foreign capital markets
- Rise in the capital because of foreign investors

Advantages of GDR to investor

- Helps in diversification, hence reducing risk
- More transparency since competitor's securities can be compared

**Q20 Explain Moving Averages.****Answer:**

Moving averages are frequently plotted with prices to make buy and sell decisions. The two types of moving averages used by chartists are:

1. Arithmetic Moving Average(AMA)
2. Exponential Moving Average(EMA)

1. **Arithmetic Moving Average (AMA):** An n period AMA at period t is nothing but the simple average of the last n period prices.

$$AMA_{n,t} = 1/n[P_t + P_{t-1} + \dots + P_{t-(n-1)}]$$

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

$$EMA = [CP \times e] + [Previous EMA \times (1-e)]$$

CP= Current Closing Price, e=exponent in decimals

Q21 Write short notes on 'Stock Lending Scheme'.**Answer:**

- ✓ In stock lending, the legal title of a security is temporarily transferred from a lender to a borrower.
- ✓ The lender retains all the benefits of ownership, other than the voting rights.
- ✓ The borrower is entitled to utilize the securities as required but is liable to the lender for all benefits.
- ✓ A securities lending programme is used by the lenders to maximize yields on their portfolio. Borrowers use the securities lending programme to avoid settlement failures.
- ✓ Securities lending provide income opportunities for security holders and creates liquidity to facilitate trading strategies for borrowers. It is particularly attractive for large institutional shareholders as it is an easy way of generating income to offset custody fees and requires little involvement of time.

Q22 Explain the functions of Merchant Bankers?**Answer:**

The basic function of merchant bankers is marketing of corporate and other securities.

In this process, he performs a number of services concerning various aspects of marketing viz. origination, underwriting, and distribution of securities.

Other activities or services performed by merchant bankers in India include:

- ✓ Project promotion services
- ✓ Project Finance
- ✓ Management and marketing of new issues
- ✓ Underwriting of new issues
- ✓ Syndication of new issues
- ✓ Syndication of credit
- ✓ Leasing services
- ✓ Corporate advisory services
- ✓ Providing venture capital
- ✓ Operating mutual funds and off shore funds
- ✓ Investment management or portfolio management services
- ✓ Bought out deals

- ✓ Providing assistance for technical and financial collaborations and joint ventures
- ✓ Management of and dealing in commercial paper
- ✓ Investment services for non-resident Indians

Q23 Write short notes on 'Book Building'.

Answer:

Book building is a technique used for marketing a public offer of equity shares of a company. It is a way of raising more funds from the market. After accepting the free pricing mechanism by the SEBI, the book building process has acquired too much significance and has opened a new lead in development of capital market.

A company can use the process of book building to fine tune its price of issue. When a company employs book building mechanism, it does not pre-determine the issue price (in case of equity shares) or interest rate (in case of debentures) and invite subscription to the issue. Instead it starts with an indicative price band (or interest band) which is determined through consultative process with its merchant banker and asks its merchant banker to invite bids from prospective investors at different prices (or different rates). Those who bid are required to pay the full amount. Based on the response received from investors the final price is selected. The merchant banker (called in this case Book Runner) has to manage the entire book building process. Investors who have bid a price equal to or more than the final price selected are given allotment at the final price selected. Those who have bid for a lower price will get their money refunded.

In India, there are two options for book building process. One, 25 per cent of the issue has to be sold at fixed price and 75 per cent is through book building. The other option is to split 25 per cent of offer to the public (small investors) into a fixed price portion of 10 per cent and a reservation in the book built portion amounting to 15 per cent of the issue size. The rest of the book built portion is open to any investor.

The greatest advantage of the book building process is that this allows for price and demand discovery. Secondly, the cost of issue is much less than the other traditional methods of raising capital. In book building, the demand for shares is known before the issue closes. In fact, if there is not much demand the issue may be deferred and can be rescheduled after having realised the temper of the market.

Q24 Explain the term Buy Back of Securities.

Answer:

Companies are allowed to buy back equity shares or any other security specified by the Union Government. In India Companies are required to extinguish shares bought back within seven days. In USA Companies are allowed to hold bought back shares as treasury stock, which may be reissued. A company buying back shares makes an offer to purchase shares at a specified price. Shareholders accept the offer and surrender their shares.

The following are the management objectives of buying back securities:

- (i) To return excess cash to shareholders, in absence of appropriate investment opportunities.
- (ii) To give a signal to the market that shares are undervalued.
- (iii) To increase promoters holding, as a percentage of total outstanding shares, without additional investment. Thus, buy back is often used as a defence mechanism against potential takeover.
- (iv) To change the capital structure.

**Q25 Write short notes on 'Green Shoe Option'.****Answer:**

The green shoe option allows companies to intervene in the market to stabilise share prices during the 30-day stabilisation period immediately after listing. This involves purchase of equity shares from the market by the company-appointed agent in case the shares fall below issue price.

Guidelines for exercising green shoe option

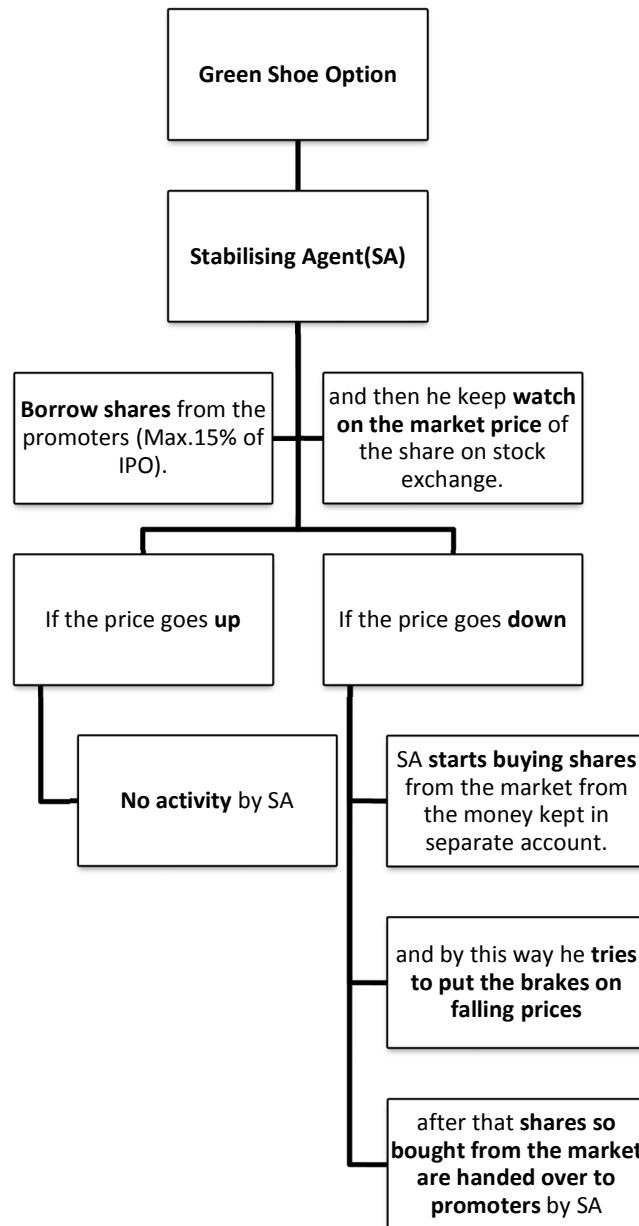
- The guidelines require the promoter to lend his shares (not more than 15% of issue size) which is to be used for price stabilisation to be carried out by a stabilising agent (normally merchant banker or book runner) on behalf of the company.
- The stabilisation period can be up to 30 days from the date of allotment of shares to bring stability in post listing pricing of shares.
- After making the decision to go public, the company appoints underwriters to find the buyers for their issue. Sometimes, these underwriters also help the corporate in determining the issue price and the kind of equity dilution i.e. how many shares will be made available for the public.
- But with the turbulent times prevailing in the market place, it is however quite possible that the IPO undersubscribed and trades below its issue price.
- This is where these underwriters invoke the green shoe option to stabilise the issue.

How green shoe option works

- As said earlier, the entire process of a greenshoe option works on over-allotment of shares. For instance, a company plans to issue 1 lakh shares, but to use the greenshoe option; it actually issues 1.15 lakh shares, in which case the over-allotment would be 15,000 shares. Please note, the company does not issue any new shares for the over-allotment.
- The 15,000 shares used for the over-allotment are actually borrowed from the promoters with whom the stabilising agent signs a separate agreement. For the subscribers of a public issue, it makes no difference whether the company is allotting shares out of the freshly issued 1 lakh shares or from the 15,000 shares borrowed from the promoters.
- Once allotted, a share is just a share for an investor. For the company, however, the situation is totally different. The money received from the over-allotment is required to be kept in a separate bank account (i.e. escrow account)

Role of the stabilising agent

1. The stabilizing agent start its process only after trading in the share starts at the stock exchanges.
2. In case the shares are trading at a price lower than the offer price, the stabilizing agent starts buying the shares by using the money lying in the separate bank account. In this manner, by buying the shares when others are selling, the stabilizing agent tries to put the brakes on falling prices. The shares so bought from the market are handed over to the promoters from whom they were borrowed.
3. In case the newly listed shares start trading at a price higher than the offer price, the stabilizing agent does not buy any shares.



Q26 Write short notes on Euro Convertible Bonds.

Answer:

- ✓ Euro Convertible bonds are quasi-debt securities (unsecured) which can be converted into depository receipts or local shares.
- ✓ ECBs offer the investor an option to convert the bond into equity at a fixed price after the minimum lock in period.
- ✓ The price of equity shares at the time of conversion will have a premium element. The bonds carry a fixed rate of interest.
- ✓ These are bearer securities and generally the issue of such bonds may carry two options viz., call option and put option. A call option allows the company to force conversion if the market



price of the shares exceeds a particular percentage of the conversion price. A put option allows the investors to get his money back before maturity.

- ✓ In the case of ECBs, the payment of interest and the redemption of the bonds will be made by the issuer company in US dollars. ECBs issues are listed at London or Luxemburg stock exchanges.
- ✓ Indian companies which have opted ECBs issue are Jindal Strips, Reliance, Essar Gujarat, Sterlite etc.
- ✓ Indian companies are increasingly looking at Euro-Convertible bond in place of Global Depository Receipts because GDRs are falling into disfavour among international fund managers.
- ✓ An issuing company desirous of raising the ECBs is required to obtain prior permission of the Department of Economic Affairs, Ministry of Finance, and Government of India.
- ✓ The proceeds of ECBs would be permitted only for following purposes:
 - (i) Import of capital goods.
 - (ii) Retiring foreign currency debts.
 - (iii) Capitalising Indian joint venture abroad.
 - (iv) 25% of total proceedings can be used for working capital and general corporate restructuring.

Q27 Explain the term “Short Selling”

Answer:

In purchasing stocks, you buy a piece of ownership in the company. The buying and selling of stocks can occur with a stock broker or directly from the company. Brokers are most commonly used. They serve as an intermediary between the investor and the seller and often charge a fee for their services.

In finance short selling (also known as shorting or going short) is the practice of selling securities or other financial instruments that are not currently owned, and subsequently repurchasing them ("covering").

The short seller borrows shares and immediately sells them. The short seller then expects the price to decrease, when the seller can profit by purchasing the shares to return to the lender.

The procedure:

Here's the skinny: when you short sell a stock, your broker will lend it to you. The stock will come from the brokerage's own inventory, from another one of the firm's customers, or from another brokerage firm. The shares are sold and the proceeds are credited to your account. Sooner or later, you must "close" the short by buying back the same number of shares (called covering) and returning them to your broker. If the price drops, you can buy back the stock at the lower price and make a profit on the difference. If the price of the stock rises, you have to buy it back at the higher price, and you lose money.

Most of the time, you can hold a short for as long as you want, although interest is charged on margin accounts, so keeping a short sale open for a long time will cost more. However, you can be forced to cover if the lender wants the stock you borrowed back. Brokerages can't sell what they don't have, so yours will either have to come up with new shares to borrow, or you'll have to cover. This is known as being called away. It doesn't happen often, but is possible if many investors are short selling a particular security.

Because you don't own the stock you're short selling (you borrowed and then sold it), you must pay the lender of the stock any dividends or rights declared during the course of the loan. If the stock splits during the course of your short, you'll owe twice the number of shares at half the price.

Q27 Explain the term "Offer for Sale". Write short notes on Bought Out Deals.

Answer:

Offer for sale is also known as bought out deal (BOD). It is a new method of offering equity shares, debentures etc., to the public. In this method, instead of dealing directly with the public, a company offers the shares/debentures through a sponsor.

The sponsor may be a commercial bank, merchant banker, an institution or an individual. It is a type of wholesale of equities by a company. A company allots shares to a sponsor at an agreed price between the company and sponsor. The sponsor then passes the consideration money to the company and in turn gets the shares duly transferred to him.

After a specified period as agreed between the company and sponsor, the shares are issued to the public by the sponsor with a premium. After the public offering, the sponsor gets the shares listed in one or more stock exchanges. The holding cost of such shares by the sponsor may be reimbursed by the company or the sponsor may get the profit by issue of shares to the public at premium.

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

Q28 Explain the term "Placement Method"

Answer:

1. Yet another method to float new issues of capital is the placing method defined by London Stock Exchange as "sale by an issue house or broker to their own clients of securities which have been previously purchased or subscribed". Under this method, securities are acquired by the issuing houses, as in offer for sale method, but instead of being subsequently offered to the public, they are placed with the clients of the issuing houses, both individual and institutional investors. Each issuing house has a list of large private and institutional investors who are always prepared to subscribe to any securities which are issued in this manner. Its procedure is the same with the only difference of ultimate investors.
2. In this method, no formal underwriting of the issue is required as the placement itself amounts to underwriting since the issuing houses agree to place the issue with their clients.
3. The main advantage of placing, as a method of issuing new securities, is its relative cheapness.
4. There is a cost cutting on account of underwriting commission, expense relating to applications, allotment of shares and the stock exchange requirements relating to contents of the prospectus and its advertisement. This method is generally adopted by small companies with unsatisfactory financial performances.
5. Its weakness arises from the point of view of distribution of securities. As the securities are offered only to a select group of investors, it may lead to the concentration of shares into a few hands who may create artificial scarcity of scrips in times of hectic dealings in such shares in the market.

**Q29 Explain briefly the advantages of holding securities in 'demat' form rather than in physical form.****Answer:**

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

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

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

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

Q30 Explain briefly the terms ESOS and ESPS with reference to the SEBI guidelines**Answer:**

Basis	ESOS	ESPS
1. Meaning	Employee Stock Option Scheme means a scheme under which the company grants option to employees.	Employee Stock Purchase Scheme means a scheme under which the company offers shares to employees as a part of public issue.
2. Auditors Certificate	Auditors certificate to be placed at each AGM stating that the scheme has been implemented as per the guidelines and in accordance with the special resolution passed.	No such certificate is required.
3. Transferability	It is not transferable.	It is transferable after lock in period.
4. Consequences of Failure	The amount payable may be forfeited. If the option is not vested due to non-fulfillment of condition relating to vesting of option then the amount may be refunded to the employees	Not Applicable in this case
5. Lock in Period	Minimum period of 1 year shall be there between the grant and vesting of options. Company is free to specify the lock in period for the shares issued pursuant to exercise of option.	One year from the date of allotment. If the ESPS is part of public issue and the shares are issued to employees at the same price as in the public issue, the shares issued to employees pursuant to ESPS shall not be subject to any lock in.

Q31 Write short notes on Real Estate Investment Trust [REIT]**Answer:**

- ✓ A Real Estate Investment Trust (REIT) is a trust that pools resources by offering units to the investors.
- ✓ Such funds are used to acquire and manage income producing properties and income generated from such properties is distributed to investors.
- ✓ REITs receive special tax considerations and are characterized by lower transaction costs.

REIT typically offer the following benefits:-

For the Investors:- REITs as an investment class provide the common man an opportunity to invest in fixed income securities which also provide long term capital appreciation and a natural inflation hedge. It also opens to small investors an arena (i.e rent generating real estate assets) which was hitherto the monopoly of large investors.

For the Industry:- REITs assist in streamlining the real estate sector by creating a new and transparent source of raising finance in the real estate sector. Further, REITs can provide developers with institutional capital to sell their assets and use funds to repay banks and/or utilize the funds for more development.

Key features of SEBI(Real Estate Investment Trusts) Regulations, 2014

- a. REITs shall be set up as a trust and registered with SEBI. It shall have parties such as Trustee, Sponsor(s) and Manager.
- b. The trustee of a REIT shall be a SEBI registered debenture trustee who is not an associate of the Sponsor/manager.
- c. REIT shall invest in commercial real estate assets, either directly or through SPVs. In such SPVs a REIT shall hold or proposes to hold controlling interest and not less than 50% of the equity share capital or interest. Further, such SPVs shall hold not less than 80% of its assets directly in properties and shall not invest in other SPVs.
- d. Once registered, the REIT shall raise funds through an initial offer. Subsequent raising of funds may be through follow-on offer, rights issue, qualified institutional placement, etc. The minimum subscription size for units of REIT shall be ₹2 lakhs. The units offered to the public in initial offer shall not be less than 25% of the number of units of the REIT on post-issue basis.
- e. Units of REITs shall be mandatorily listed on a recognized Stock Exchange and REIT shall make continuous disclosures in terms of the listing agreement. Trading lot for such units shall be ₹1Lakh.
- f. For coming out with an initial offer, the value of the assets owned/proposed to be owned by REIT shall be of value not less than ₹500 crore. Further, minimum issue size for initial offer shall be ₹250 crore.
- g. The Trustee shall generally have an overseeing role in the activity of the REIT. The manager shall assume operational responsibilities pertaining to the REIT. Responsibilities of the parties involved are enumerated in the Regulations.
- h. A REIT may have multiple sponsors, not more than 3, subject to each holding at least 5% of the units of the REIT. Such sponsors shall collectively hold not less than 25% of the units of the REIT for a period of not less than 3 years from the date of listing. After 3 years, the sponsors, collectively, shall hold minimum 15% of the units of REIT, throughout the life of the REIT.



- i. Not less than 80% of the value of the REIT assets shall be in completed and revenue generating properties.
- j. Not more than 20% of the value of REIT assets shall be invested in following :
 - developmental properties,
 - mortgage backed securities,
 - listed/ unlisted debt of companies/body corporate in real estate sector,
 - equity shares of companies listed on a recognized stock exchange in India which derive not less than 75% of their operating income from Real Estate activity,
 - government securities,
 - money market instruments or Cash equivalents.

However investments in developmental properties shall be restricted to 10% of the value of the REIT assets

- k) A REIT shall invest in at least 2 projects with not more than 60% of value of assets invested in one project. Detailed investment conditions are provided in the Regulations.
- l) REIT shall distribute not less than 90% of the net distributable cash flows, subject to applicable laws, to its investors, atleast on a half yearly basis.
- m) REIT, through a valuer, shall undertake full valuation on a yearly basis and updation of the same on a half yearly basis and declare NAV within 15 days from the date of such valuation/updation.
- n) The borrowings and deferred payments of the REIT at a consolidated level shall not exceed 49% of the value of the REIT assets. In case such borrowings/ deferred payments exceed 25%, approval from unit holders and credit rating shall be required.
- o) Detailed provisions regarding related party transactions. valuation of assets, disclosure requirements, rights of unit holders, etc. are provided in the Regulations. However, for any issue requiring unit holders' approval, voting by a person who is a related party in such transaction as well as its associates shall not be considered.

Q32 Write short notes on Infrastructure Investment Trusts

Answer:

INVITS or Infrastructure Investments Trusts are similar to REITs with the difference that INVITS invest in income generating infrastructure projects as compared to REITs wherein investments are made in income generating real estate assets.

SEBI notified SEBI (Infrastructure Investment Trusts) Regulations, 2014 on September 26, 2014. The salient features of the regulations are as under:-

- 1) Infrastructure is as defined by Ministry of Finance vide its notification dated October 07, 2013 and shall include any amendments/additions made thereof.
- 2) INVITS shall be set up as a trust and registered with SEBI. It shall have parties such as Trustee, Sponsor(s), Investment Manager and Project Manager The trustee of an INVIT shall be a SEBI registered debenture trustee who is not an associate of the Sponsor/Manager.
- 3) INVITS shall invest in infrastructure projects, either directly or through SPV. In case of PPP projects, such investments shall only be through SPV.
- 4) An INVIT shall hold or propose to hold controlling interest and more than 50% of the equity share capital or interest in the underlying SPV, except where the same is not possible because of a regulatory requirement/ requirement emanating from the concession agreement. In such cases sponsor shall enter into an agreement with the INVIT, to ensure that no decision taken by the sponsor, including voting decisions with respect to the SPV, are against the interest of the INVIT its unit holders.

- 5) Sponsor(s) of an INVIT shall, collectively, hold not less than 25% of the total units of the INVIT on post issue basis for a period of at least 3 years, except for the cases where a regulatory requirement/concession agreement requires the sponsor to hold a certain minimum percent in the underlying SPV. In such cases the consolidated value of such sponsor holding in the underlying SPV and in the INVIT shall not be less than the value of 25% of the value of units of INVIT on post-issue basis.
- 6) The proposed holding of an INVIT in the underlying assets shall be not less than ₹500 crore and the offer size of the INVIT shall not be less than ₹250 crore at the time of initial offer of units.
- 7) The aggregate consolidated borrowing of the INVIT and the underlying SPVs shall never exceed 49% of the value of INVIT assets. Further, for any borrowing exceeding 25% of the value of INVIT assets, credit rating and unit holders' approval is required.
- 8) An INVIT which proposes to invest at least 80% of the value of the assets in the completed and revenue generating Infrastructure assets, shall :
 - ✓ raise funds only through public issue of units.
 - ✓ have a minimum 25% public float and at least 20 investors.
 - ✓ have minimum subscription size and trading lot of ten ₹ lakhs and ₹ five lakhs respectively.
 - ✓ distribute not less than 90% of the net distributable cash flows, subject to applicable laws, to the investors, at least on a half yearly basis.
 - ✓ through a valuer, undertake a full valuation on a yearly basis and updation of the same on
 - ✓ half yearly basis and declare NAV within 15 days from the date of such valuation/updation.
- 9) A publicly offered INVIT may invest the remaining 20% in under construction infrastructure projects and other permissible investments, as defined in the regulations. However, the investments in under construction infrastructure projects shall not be more than 10% of the value of the assets.
- 10) An INVIT which proposes to invest more than 10% of the value of their assets in under construction infrastructure projects shall :
 - ✓ raise funds only through private placement from Qualified Institutional Buyers and body corporates.
 - ✓ have minimum investment and trading lot of ₹1 crore.
 - ✓ have minimum of 5 investors with each holding not more than 25% of the unit
 - ✓ distribute not less than 90% of the net distributable cash flows, subject to applicable laws, to the investors, at least on a yearly basis
 - ✓ undertake full valuation on yearly basis and declare NAV within 15 days from the date of such valuation.

Conditions for INVITs investing in under construction projects

- i. **For PPP project(s):-** has achieved completion of at least 50% of the construction of the infrastructure project as certified by an - independent engineer; or has expended not less than 50% of the total capital cost set forth in the financial package of the relevant project agreement.
- ii. **For Non-PPP project(s),** the Infrastructure Project has received all the requisite approvals and certifications for commencing construction of the project;



- 11) **Listing** shall be mandatory for both publicly offered and privately placed INVITs and INVIT shall make continuous disclosures in terms of the listing agreement.
- 12) **Detailed provisions for related party transactions.** valuation of assets, disclosure requirements, rights of unit holders, etc. are provided in the Regulations. However, for any issue requiring unit holders approval, the voting by any person who is a related party in such transaction as well as its associates shall not be considered.

Derivatives

Q1 What are derivatives? Who are the users of derivatives? What is the purpose of use? Enumerate the difference between Cash and Derivative Market.

Answer:

A Derivative is an agreement between buyer and seller for an underlying asset which is to be bought/sold on certain future date.

Derivative does not have any value of its own but its value, in turn, depends on the value of the other physical assets which are called underlying assets.

Users of derivative market and purpose of use

1. **Hedgers:** Use derivatives to reduce risk of unfavourable price movement in the market to provide offsetting compensation against the underlying asset (kind of insurance).
2. **Speculators:** These are traders who use derivatives in the expectation of making a profit through market fluctuations.
3. **Arbitrageurs:** Arbitrageurs simply sell the asset in the overpriced market and simultaneously buy it in the cheaper market in order to gain from the different price of underlying in two different markets.

Difference between cash and derivative market

1. In cash market **tangible assets** are traded whereas in derivative market contracts based on tangible or intangibles assets like index or rates are traded.
2. In cash market, we can purchase even one share whereas in futures and options **minimum lots** are fixed.
3. Cash market is more **risky** than futures and options segment.
4. Cash assets may be meant for **consumption or investment**. Derivative contracts are for **hedging, arbitrage or speculation**.
5. Buying securities in cash market **involves putting up all the money upfront** whereas buying futures simply involves putting up the margin money.
6. With the purchase of shares of the company in cash market the **shareholder becomes part owner** of the company. While in futures it does not happen.

Q2 What is the difference between Forward Contract and Futures Contract?

Answer:

Basis	Forward Contract	Futures Contract
Trading	Traded in Over-the Counter(OTC) market.	Traded on an Exchange.
Default Risk	Traded privately and hence bears the risk of default.	Are exchange traded who provides the protection and hence no default risk.
Margin requirement	Involves no margin payment.	Initial margin is required to be paid as a good faith money.
Uses	Used for hedging purposes.	Used for both hedging and speculating purposes.
Transparency	Not transparent as the contract is private in nature.	Transparency is maintained and is reported by the exchange.
Delivery	Settled by physical delivery.	Settled by net cash payment only



		and very few by actual delivery.
Size of contract	No standardised size.	Standard in terms of quantity or amount as the case may be.
Maturity	Any valid business date agreed to by the two parties.	Standard Date. Usually one delivery date such as the second Thursday of every month.
Currencies Traded	All currencies	Major Currencies
Cash Flow	None until maturity date.	Initial margin plus ongoing variation margin because of mark to market and final payment on maturity date.

Q3 Write short note on Embedded Derivatives.

Answer:

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

“When a derivative feature is combined in a non-derivative contract, the derivative is referred to as embedded derivative and such non-derivative contract is called host contract. The combined contract is called hybrid contract.”

Suppose entity XYZ enters into a contract to issue a bond, and the payment of interest and principal of the bond is indexed with the price of gold. Here, the payment will increase or decrease according to the movement in the price of gold; and the debt instrument is host contract with an embedded derivative.

Examples of Embedded Derivative	Why
Company X issues ₹100 million variable-rate debt with a maturity of 5 years. The variable rate is LIBOR, (which is currently 5%) plus 75 basis points. The debt has an embedded derivative that caps the variable rate at 10%.	Host contract – Debt Embedded derivative – Interest Rate Cap The cap is indexed to interest rates, which is closely related to debt. The cap is above the current market rate when the instrument is issued (i.e. it is out of the money on the date of issuance) and contains no leverage feature
Company X leases property with a lease term of ten years. Embedded in the lease is a provision that requires the lease payment to be adjusted every two years for the changes in the Rupee consumer price index. The functional currency of Company X is the Rupee. Lease payments are also to be made in Rupee.	Host contract – lease Embedded derivative – forward contract to adjust rent payments by the rate of inflation (indexed to the consumer price index) Rentals for the use of leased assets and adjustments for inflation are considered to be closely related.

Examples of Embedded Derivative	Why
Z Ltd, a company with a sterling functional currency, enters into a contract to buy widgets from Y Ltd, to be delivered in 6 months' time. Payment is to be made on delivery, but the contract gives Z Ltd the option of paying either £1 million or Japanese Yen (JPY) 205.7 million for the widgets. (The figures reflect the GBP/JPY exchange rate at the start of the contract.) Widgets are not usually traded in Yen.	The currency feature in the purchase contract is a derivative, allowing Z Ltd to profit from favourable currency movements. When payment falls to be made, JPY 205.7 million is worth £980,000, so the company chooses to pay in Yen.

Q4 What do you know about the Swaptions and their uses?

Answer:

Interest rate swaption is an option on an interest rate swap whereby holder gets the right but not the obligation to enter into an interest rate swap at the specific fixed rate on an agreed future date.

Uses of swaptions

- 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.
- Swaptions can be applied in a variety of ways for both active traders as well as for corporate treasurers. 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.
- Swaptions are useful for borrowers targeting an acceptable borrowing rate. By paying an upfront premium, a holder of a payersswaption can guarantee to pay a maximum fixed rate on a swap, thereby hedging his floating rate borrowings.
- Swaptions have become useful tools for hedging embedded option which is common in the natural course of many businesses.

Q5 Write short note on Caps, Floors and Collars [CFC].

Answer

Caps:

- A cap provides a guarantee that the coupon rate each period will not be higher than agreed limit. It will be capped at certain ceiling.
- It's a derivative instrument where the buyer of the cap receives payment at the end of each period where the rate of interest exceeds the agreed strike price.

Floors:

- A floor provides a guarantee that the coupon rate each period will not be lower than agreed limit. It will be floored at certain ceiling.
- It's a derivative instrument where the buyer of the floor receives payment at the end of each period where the rate of interest goes below the agreed strike price.

**Collars:**

- Collar provides a guarantee that the coupon rate each period will not fall below lower limit and will not go beyond upper limit. It will be capped at upper limit and floored at lower limit.
- It's a combination of caps and floors.
- It's a derivative instrument where the buyer of the collar receives payment at the end of each period where the rate of interest goes below the lower limit or goes beyond the upper limit.

Q6 What are the features of futures contract?**Answer:**

- ✓ These are **traded on organised exchanges**.
- ✓ **Standardised contract** terms like the underlying assets, the time of maturity and the manner of maturity etc.
- ✓ Associated with clearing house to **ensure smooth functioning** of the market.
- ✓ **Margin requirements and daily settlement** to act as further safeguard i.e. marked to market.
- ✓ Existence of **regulatory authority**.
- ✓ Every day the transactions are **marked to market** till they are re-wound or matured.

Q7 What is insider trading practice?**Answer:**

The insider is any person who accesses the price sensitive information of a company before it is published to the general public. Insider includes corporate officers, directors, and owners of firm etc. who have substantial interest in the company. Even persons who have access to non public information due to their relationship with the company are an insider.

Insider trading practice is the act of buying or selling or dealing in securities by as a person having unpublished inside information with the intention of making abnormal profit's and avoiding losses. This inside information includes dividend declaration, issue or buy back of securities, amalgamation, mergers, takeover or major expansion plans.

Insider trading practices are lawfully prohibited. The regulatory bodies in general are imposing different fines and penalties for those who indulge in such practices. SEBI has framed various regulations implemented the same to prevent the insider trading practices.

Q8 Write short notes on the "Marking to Market".**Answer:**

- ✓ Futures contracts **follow a practice** known as mark-to-market.
- ✓ At the end of each trading day, the exchange sets a **settlement price** based on the day's closing price range for each contract.
- ✓ Each trading account is credited or debited based on that day's profits or losses and checked to ensure that the trading account **maintains the appropriate margin** for all open positions.
- ✓ While the margin accounts of each party get adjusted at the end of each day, on the same time the **old futures contract gets replaced with the new one** at the new price.
- ✓ Thus each future contract is **rolled over** to the next day at **new price**.

Q9 Explain the term Intrinsic Value and Time Value of the option.**Answer:**

Intrinsic value of an option and time value of an option are primary determinants of an option's price.

Intrinsic value is the value that any given option would have if it is to be exercised immediately. This is defined as the difference between the options strike price and the stock's actual current price.

An option's intrinsic value can never be negative.

1. Say you bought a **call** option with strike price of ₹500 for ₹20 and two months later its market price is ₹515

Here the intrinsic value of the option is

$$= \text{Spot (Market) Price} - \text{Strike Price} = 515 - 500 = 15$$

2. Say you bought a **put** option with strike price of ₹500 for ₹20 and two months later its market price is ₹490

Here the intrinsic value of the option is

$$= \text{Strike price} - \text{Spot Price} = 500 - 490 = 10$$

Time value (extrinsic value) is the difference between options premium and its intrinsic value.

Considering the same example of call option we can compute the time value of the option

Time Value = Options Premium – Intrinsic Value

$$= 20 - 15$$

$$= 5$$

Q10 Write short notes on Interest Swaps**Answer:**

- ✓ A swap is a contractual agreement between two parties to exchange or 'swap' future payment streams based on differences in the returns to different securities or changes in the price of some underlying item.
- ✓ In an Interest rate swap, the parties to the agreement, termed as swap counterparties, agree to exchange payments indexed to two different interest swaps.
- ✓ Financial intermediaries, such as banks, pension funds, and insurance companies as well as non financial firms use interest rate swaps to effectively change the maturity of outstanding debt or that of an interest bearing asset.
- ✓ Currency swaps grew out of parallel loan agreements in which firms exchange loans denominated in different currencies.

Q11 What is the significance of underlying in relation to derivative instrument?**Answer:**

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

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

**Q12 What is the difference between options and futures****Answer:**

Basis	Futures	Options
Obligation to perform	Both parties are obliged to perform.	Only the seller (Writer) is obliged to perform.
Premium	No premium is paid by any party.	Premium is paid by the buyer to the seller at the inception of the contract.
Potential of gain/loss	There is potential/risk for unlimited gain/loss for the futures buyer.	Loss is restricted while there is unlimited gain potential for the option buyer.
Exercise	A futures contract has to be honoured by both the parties only on the date specified.	An American option contract can be exercised any time during its period by the buyer.

Q13 Explain Initial Margin & Maintenance Margin.**Answer:****Initial Margin**

Before a futures position can be opened, there must be enough available balance in the futures trader's margin account to meet the initial margin requirement. Upon opening the futures position, an amount equal to the initial margin requirement will be deducted from the trader's margin account and transferred to the exchange's clearing firm. This money is held by the exchange clearinghouse as long as the futures position remains open.

Maintenance Margin

The maintenance margin is the minimum amount a futures trader is required to maintain in his margin account in order to hold a futures position. The maintenance margin level is usually slightly below the initial margin.

If the balance in the futures trader's margin account falls below the maintenance margin level, he or she will receive a margin call to top up his margin account so as to meet the initial margin requirement.

Example:

Let's assume we have a speculator who has ₹10000 in his trading account. He decides to buy August Crude Oil at ₹40 per barrel. Each Crude Oil futures contract represents 1000 barrels and requires an initial margin of ₹9000 and has a maintenance margin level set at ₹6500.

Since his account is ₹10000, which is more than the initial margin requirement, he can therefore open up one August Crude Oil futures position.

One day later, the price of August Crude Oil drops to ₹38 a barrel. Our speculator has suffered an open position loss of ₹2000 ($₹2 \times 1000$ barrels) and thus his account balance drops to ₹8000.

Although his balance is now lower than the initial margin requirement, he did not get the margin call as it is still above the maintenance level of ₹6500.

Unfortunately, on the very next day, the price of August Crude Oil crashed further to ₹35, leading to an additional ₹3000 loss on his open Crude Oil position. With only ₹5000 left in his trading account, which is below the maintenance level of ₹6500, he received a call from his broker asking him to top up his trading account back to the initial level of ₹9000 in order to maintain his open Crude Oil position.

This means that if the speculator wishes to stay in the position, he will need to deposit an additional ₹4000 into his trading account.

Otherwise, if he decides to quit the position, the remaining ₹5000 in his account will be available to use for trading once again.

Q14 Write Short Notes on Put Call Parity Theory

Answer:

This theory was developed to explain the **relationship between the prices of the options and their underlying stock.**

Put-call parity is the relationship that must exist between the prices of European put and call options that both have the same underlier, strike price and expiration date. (Put-call parity does not apply to American options because they can be exercised prior to expiry.)

According to Put Call parity theory "The total of current price of the underlying stock and the price of the put option is exactly equal to the total of the price of the call option and present value of the exercise price of the underlying stock."

We can represent the above theory in following formula

$$S + P = C + \text{PV of Exercise price of the stock}$$

Where,

S = Current price of the underlying asset

P = Price (Premium) of the put option

C = Price (Premium) of the call option

Q15 Write Short Notes FRA's

Answer: Forward Rate Agreement(future) is an agreement between two parties to fix the future interest rate. Interest rate is based on agreed notional principal for a specified period.

On the agreed date if the market rate differs from the agreed FRA rate. A difference amount is paid by either of the party as settlement. The principal amount is not exchanged here and no party is obliged to borrow or lend money.

Users

- Those who wish **to hedge against future interest rate risk** by fixing the future interest rate today itself.
- Those who want **to make profit based on their expectation** on the future development of interest rate.
- Those who try **to take advantage of different prices of FRAs and other financial instruments.**

Characteristics

- It is an off balance sheet agreement as there is no exchange of principal amount.
- There is no need to pay initial margins or variation margins
- The existing FRA agreement can be closed any time by entering into new and opposite FRA at a new price.
- FRAs are customised to meet the specific requirements of the customer.
- FRAs offers highest liquidity and hence termed as money market instrument

**Q16 What is the difference between Cash and Derivative Market****Answer:**

Basis	Cash Market	Derivative Market
Assets traded	In cash market tangible assets are traded	In derivative market contracts based on tangible or intangibles assets like index or rates are traded.
Quantity Traded	In cash market, we can purchase even one share	In Futures and Options minimum lots are fixed.
Risk	Cash market is more risky	Futures and Options segment are less risky as compared to the cash market
Purpose	Cash assets may be meant for consumption or investment.	Derivative contracts are for hedging, arbitrage or speculation.
Amount Required	Buying securities in cash market involves putting up all the money upfront	Buying futures simply involves putting up the margin money.
Ownership	With the purchase of shares of the company in cash market, the holder becomes part owner of the company.	While in future it does not happen.

Q17 Write Short Notes on Options**Answer:**

Option Contract is a type of derivatives contract traded on the exchanges which gives the buyer of the contract the right (but not the obligation) to buy/sell the underlying asset at a predetermined price within or at the end of a specified period.

- The buyer / holder of the option purchase the right from the seller/writer for a consideration which is called the **premium**. The seller/writer of an option is obligated to settle the option as per the terms of the contract when the buyer/holder exercises his right.
- The **underlying asset** could include securities, an index of prices of securities etc.
- **Under Securities Contracts (Regulations) Act, 1956** options on securities has been defined as "option in securities" meaning a contract for the purchase or sale of a right to buy or sell, securities in future, and includes a teji, a mandi, a tejimandi, a galli, a put, a call or a put and call in securities.
- Further, an option that is exercisable on or before the expiry date is called **American option** and one that is exercisable only on the expiry date, is called **European option**.
- Therefore, in the case of American options the buyer has the right to exercise the option at any time on or before the expiry date. This request for exercise is submitted to the exchange, which randomly assigns the exercise request to the sellers of the options, who are obligated to settle the terms of the contract within a specified time frame.
- The price at which the option is to be exercised is called **Strike price or Exercise price**.
- In a **"Covered" Option**, the seller of the option already **owns the asset**. In a **"Naked" Option**,

the seller **does not own the asset**.

- Margin amount is required to be paid in case of Short Position in Options, means instead of buying call and put if you are selling options then the trader is required to deposit the margin amount to the exchange.

There are two basic types of Option:

- 1) A **Call option** is the right, but not the obligation, to **buy the underlying asset** by a certain date for a certain price.
- 2) A **Put option** is the right, but not the obligation, to **sell the underlying asset** by a certain date for a certain price.

Q18 How are stock futures settled? Or Write short note on Settlement Mechanism of Futures

Answer:

- ✓ The positions in the futures contracts for each member is marked-to-market to the daily settlement price of the futures contracts at the end of each trade day.
- ✓ The profits/ losses are computed as the difference between the trade price or the previous day's settlement price, as the case may be, and the current day's settlement price.
- ✓ The Client Members who have suffered a loss are required to pay the mark-to-market loss amount to NSCCL which is passed on to the members who have made a profit. This is known as daily mark-to-market settlement.

Q19 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:

- ✓ It adds flexibility to one's investment portfolio. Institutional investors and other large equity holders prefer the most this instrument in terms of **portfolio hedging purpose**. The stock systems do not provide this flexibility and hedging.
- ✓ 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.
- ✓ Stock index futures are the most cost efficient hedging device whereas hedging through individual stock futures is costlier.
- ✓ Stock index futures cannot be easily manipulated whereas individual stock price can be exploited more easily.
- ✓ 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.
- ✓ One can sell contracts as readily as one buys them and the amount of margin required is the same.



- ✓ 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.
- ✓ It is also seen that regulatory complexity is much less in the case of stock index futures in comparison to stock futures.
- ✓ It provides hedging or insurance protection for a stock portfolio in a falling market.

Q20 What are the assumptions under Black-Scholes Model

Answer:

1. Options considered are European options means the options which are redeemed only on the expiry date.
2. The underlying security does not pay a dividend.
3. There is no arbitrage opportunity.
4. It is possible to borrow and lend cash at known risk free interest rate.
5. It is possible to buy and sell even the fraction of the share.
6. The above transaction does not incur any fees or cost. i.e. no transaction cost
7. Stock price movement follow random walk.
8. Stock returns are normally distributed over a period of time.
9. The variance of the return is constant over the life of the option.

Q21 Explain various types of Swaps

Answer:

1. Plain Vanilla Interest Rate Swap

- ✓ The most common and simplest swap is a "plain vanilla" interest rate swap.
- ✓ In this swap, Party A agrees to pay Party B a predetermined, fixed rate of interest on a notional principal on specific dates for a specified period of time.
- ✓ Concurrently, Party B agrees to make payments based on a floating interest rate to Party A on that same notional principal on the same specified dates for the same specified time period.
- ✓ In a plain vanilla swap, the two cash flows are paid in the same currency.
- ✓ The specified payment dates are called settlement dates, and the time between are called settlement periods.
- ✓ Because swaps are customized contracts, interest payments may be made annually, quarterly, monthly, or at any other interval determined by the parties.
- ✓ For example, on Dec. 31, 2006, Company A and Company B enter into a five-year swap with the following terms:
 - Company A pays Company B an amount equal to 6% per annum on a notional principal of ₹20 million.
 - Company B pays Company A an amount equal to one-year LIBOR + 1% per annum on a notional principal of ₹20 million.

2. Basis Rate Swap

- ✓ A basis swap is a floating-floating interest rate swap. A simple example is a swap of 1-month Libor for 6-month Libor.
- ✓ Basis rate swap is a type of swap in which two parties swap variable interest rates based on different money markets. This is usually done to limit interest-rate risk that a company faces as a result of having differing lending and borrowing rates.

- ✓ For example, a company lends money to individuals at a variable rate that is tied to the London Interbank Offer (LIBOR) rate but they borrow money based on the Treasury Bill rate. This difference between the borrowing and lending rates (the spread) leads to interest-rate risk. By entering into a basis rate swap, where they exchange the T-Bill rate for the LIBOR rate, they eliminate this interest-rate risk.

3. Asset Rate Swap

- ✓ Similar in structure to a plain vanilla swap, the key difference is the underlying of the swap contract. Rather than regular fixed and floating loan interest rates being swapped, fixed and floating investments are being exchanged.
- ✓ In a plain vanilla swap, a fixed libor is swapped for a floating libor. In an asset swap, a fixed investment such as a bond with guaranteed coupon payments is being swapped for a floating investment such as an index.

4. Amortising Rate Swap

- ✓ **An exchange of cash flows, one of which pays a fixed rate of interest and one of which pays a floating rate of interest, and both of which are based on a notional principal amount that decreases.**
- ✓ **In an amortizing swap, the notional principal decreases periodically because it is tied to an underlying financial instrument with a declining (amortizing) principal balance, such as a mortgage.**
- ✓ The notional principal in an amortizing swap may decline at the same rate as the underlying or at a different rate which is based on the market interest rate of a benchmark like mortgage interest rates or the London Interbank Offered Rate.
- ✓ The opposite of an amortizing swap is an accreting principal swap - its notional principal increases over the life of the swap. In most swaps, the amount of notional principal remains the same over the life of the swap.



Portfolio Management

Q1 What are the objectives of portfolio management?

Answer:

1. Security of the Principal Investment

Portfolio management not only involves keeping the investment intact but also contributes towards the growth of its purchasing power over the period. **The motive of a financial portfolio management is to ensure that the investment is absolutely safe.**

2. Consistency of returns

Portfolio management also **ensures to provide the stability of returns** by reinvesting the same earned returns in profitable and good portfolios.

3. Risk reduction

Portfolio management is purposely designed to reduce the risk of loss of capital and/or income by investing in different types of securities available in a wide range of industries. **The investors shall be aware of the fact that there is no such thing as a zero risk investment.**

4. Capital growth

Portfolio management guarantees the growth of capital by reinvesting in growth securities or by the purchase of growth securities.

5. Liquidity

Portfolio management is planned in such a way that it facilitates to take maximum advantage of various good opportunities upcoming in the market. The portfolio should always ensure that there are enough funds available at short notice to take care of the investor's liquidity requirements.

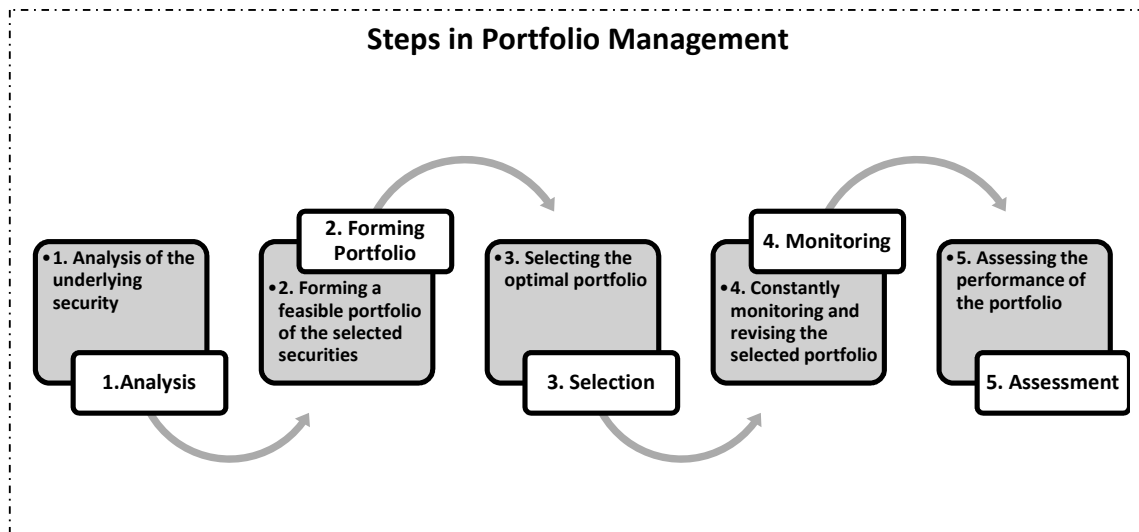
6. Marketability

Portfolio management ensures the flexibility to the investment portfolio. A portfolio consists of such investment, which can be marketed and traded.

7. Favourable tax treatment

Portfolio management is planned in such a way to increase the effective yield an investor gets from his surplus invested funds. By minimizing the tax burden, yield can be effectively improved.



Q2 What are the steps in Portfolio Management?**Answer:****Q3 Write short note on Factors affecting investment decisions in portfolio management.****Answer:**

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

(ii) **Selection of investment**

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

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

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

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

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

Q4 Distinguish between Systematic Risk and Unsystematic Risk?

Answer:

Particulars	Systematic Risk	Unsystematic Risk
Meaning	Risk inherent to the entire market or entire market segment .	Risk inherent to the specific company or industry .
Control	Uncontrollable by an organisation	Controllable by an organisation
Nature	Macro in nature	Micro in nature
Types	Interest rate risk, market risk, purchasing power / inflationary risk	Business/Liquidity risk, financial/credit risk
Also known as	Market risk, Non diversifiable risk	Diversifiable risk
Example	Recession and wars all represent sources of systematic risk because they affect the entire market and cannot be avoided through diversification.	Sudden strike by the employees of a company you have shares in, is considered to be unsystematic risk.

Q5 What is Diversification?

Answer:

Diversification is a risk-management technique that mixes a wide variety of investments within a portfolio in order to minimize the impact that any one security will have on the overall performance of the portfolio. Diversification lowers the risk of your portfolio. Academics have complex formulas to demonstrate how this works, but we can explain it clearly with an example:

Suppose that you live on an island where the entire economy consists of only two companies: one sells umbrellas while the other sells sunscreen. If you invest your entire portfolio in the company that sells umbrellas, you'll have strong performance during the rainy season, but poor performance when it's sunny outside. The reverse occurs with the sunscreen company, the alternative investment; your portfolio will be high performance when the sun is out, but it will tank when the clouds roll in. Chances are you'd rather have constant, steady returns. The solution is to invest 50% in one company and 50% in the other. Because you have diversified your portfolio, you will get decent performance year round instead of having either excellent or terrible performance depending on the season. There are three main practices that can help you ensure the best diversification:

1. Spread your portfolio among multiple investment vehicles such as cash, stocks, bonds, mutual funds and perhaps even some real estate.
2. Vary the risk in your securities. You're not restricted to choosing only blue chip stocks. In fact, it would be wise to pick investments with varied risk levels; this will ensure that large losses are offset by other areas.
3. Vary your securities by industry. This will minimize the impact of industry-specific risks.

Diversification is the most important component in helping you reach your long-range financial goals while minimizing your risk. At the same time, diversification is not an ironclad guarantee against loss. No matter how much diversification you employ, investing involves taking on some risk.

Another question that frequently baffles investors is how many stocks should be bought in order to reach optimal diversification. According to portfolio theorists, adding about 20 securities to your portfolio reduces almost all of the individual security risk involved. This assumes that you buy stocks of different sizes from various industries.

**Q6 What do you mean by Risk Reduction?**

Answer: Risk reduction means actual risk (σ) of the portfolio is less than the weighted average risk of the securities that constitutes the portfolio. This is the point where one can say that diversification has resulted into risk reduction.

Q7 Write short notes on Capital Asset Pricing Model.

Answer:

The Capital Asset Pricing Model is used to determine a theoretically appropriate required rate of return of an asset, if that asset is to be added to an already diversified portfolio, given that assets non-diversifiable risk.

R_j = Defined as the minimum expected return needed so that investor will purchase and hold asset.

SML is the graphical representation of the results of the CAPM.

Advantages of CAPM

1. Considers only systematic risk.
2. Better method to calculate cost of equity.
3. Can be used as risk adjusted discounted rate (RADR)

Limitations of CAPM

1. Unreliable Beta.
2. Hard to get the market information.

Return of security under CAPM

$$R_j = R_f + \beta(R_m - R_f)$$

Where,

R_j = Return on Security

R_f = Risk free rate of return

R_m = Market return

β = beta of the security

Q8 What sort of investor normally views the variance (or Standard Deviation) of an individual security's return as the security's proper measure of risk?

Answer:

A rational risk-averse investor views the variance (or standard deviation) of her portfolio's return as the proper risk of her portfolio. If for some reason or another the investor can hold only one security, the variance of that security's return becomes the variance of the portfolio's return. Hence, the variance of the security's return is the security's proper measure of risk.

While risk is broken into diversifiable and non-diversifiable segments, the market generally does not reward for diversifiable risk since the investor himself is expected to diversify the risk himself. However, if the investor does not diversify, he cannot be considered to be an efficient investor. The market, therefore, rewards an investor only for the non-diversifiable risk. Hence, the investor needs to know how much non-diversifiable risk he is taking. This is measured in terms of beta.

An investor therefore, views the beta of a security as a proper measure of risk, in evaluating how much the market reward him for the non-diversifiable risk that he is assuming in relation to a security. An investor who is evaluating the non-diversifiable element of risk, that is, extent of deviation of returns viz -a-viz the market therefore consider beta as a proper measure of risk.

Q9 What sort of investor rationally views the beta of a security as the security's proper measure of risk? In answering the question, explain the concept of beta.

Answer:

If an individual holds a diversified portfolio, she still views the variance (or standard deviation) of her portfolios return as the measure of the risk of her portfolio. However, she is no longer interested in the variance of each individual security's return. Rather she is interested in the contribution of each individual security to the variance of the portfolio.

Under the assumption of homogeneous expectations, all individuals hold the market portfolio. Thus, we measure risk as the contribution of an individual security to the variance of the market portfolio.

The contribution when standardized properly is the beta of the security. While a very few investors hold the market portfolio exactly, many hold reasonably diversified portfolio. These portfolios are close enough to the market portfolio so that the beta of a security is likely to be a reasonable measure of its risk.

In other words, beta of a stock measures the sensitivity of the stock with reference to a broad based market index like BSE Sensex. For example, a beta of 1.3 for a stock would indicate that this stock is 30 per cent riskier than the Sensex. Similarly, a beta of a 0.8 would indicate that the stock is 20 per cent (100 – 80) less risky than the Sensex. However, a beta of one would indicate that the stock is as risky as the stock market index.

Q10 Discuss the Random Walk Theory

Answer:

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

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

- ✓ 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).

Q11 Discuss how the risk associated with securities is effected by Government Policy

Answer:

The risk from Government policy to securities can be impacted by any of the following factors.

- (i) Licensing Policy
- (ii) Restrictions on commodity and stock trading in exchanges
- (iii) Changes in FDI and FII rules.
- (iv) Export and import restrictions
- (v) Restrictions on shareholding in different industry sectors
- (vi) Changes in tax laws and corporate and Securities laws.



Q12 Write short notes on assumptions of the Markowitz Model of Risk Return Optimization

Answer:

- The return on an investment adequately summarises the outcome of the investment.
- The investors can visualise a probability distribution of rates of return.
- The investors' risk estimates are proportional to the variance of return they perceive for a security or portfolio.
- Investors base their investment decisions on two criteria i.e. expected return and variance of return.
- All investors are risk averse. For a given expected return he prefers to take minimum risk, for a given level of risk the investor prefers to get maximum expected return.
- Investors are assumed to be rational in so far as they would prefer greater returns to lesser ones given equal or smaller risk and are risk averse. Risk aversion in this context means merely that, as between two investments with equal expected returns, the investment with the smaller risk would be preferred.
- 'Return' could be any suitable measure of monetary inflows like NPV but yield has been the most commonly used measure of return, so that where the standard deviation of returns is referred to it is meant the standard deviation of yield about its expected value.

Dividend Decisions

Q1 Write Short notes on Dividend Policy

Answer:

Firm's dividend policy divides net earnings into retained earnings and dividends. Retained earnings provide necessary funds to finance long term growth while dividends are paid in cash generally. Dividend policy of the firm is governed by:

(i) Long Term Financing Decision:

- a. When dividend decision is treated as a financing decision, net earnings are viewed as a source of long term financing.
- b. When the firm does not have profitable investment opportunities, dividend will be paid. The firm grows at a faster rate when it accepts highly profitable opportunities.
- c. External equity is raised to finance investments. But retained earnings are preferable because they do not involve floatation costs.
- d. Payment of cash dividend reduces the amount of funds necessary to finance profitable investment opportunities thereby restricting it to find other avenues of finance.
- e. Thus earnings may be retained as part of long term financing decision while dividends paid are distribution of earnings that cannot be profitably re-invested.

(ii) Wealth Maximisation Decision:

- a. Because of market imperfections and uncertainty, shareholders give higher value to near dividends than future dividends and capital gains.
- b. Payment of dividends influences the market price of the share. Higher dividends increase value of shares and low dividends decrease it. A proper balance has to be struck between the two approaches.
- c. When the firm increases retained earnings, shareholders' dividends decrease and consequently market price is affected. Use of retained earnings to finance profitable investments increases future earnings per share. On the other hand, increase in dividends may cause the firm to forego investment opportunities for lack of funds and thereby decrease the future earnings per share.
- d. Thus, management should develop a dividend policy which divides net earnings into dividends and retained earnings in an optimum way so as to achieve the objective of wealth maximization for shareholders.
- e. Such policy will be influenced by investment opportunities available to the firm and value of dividends as against capital gains to shareholders.

Q2 What are the factors determining dividend policy of the company?

Or What are the determinants of dividend policy?

Answer:

The factors that affect the dividend policy of the company are:

1. **Liquidity:** Payment of dividend results in cash outflow. A company may have adequate earning but it may not have sufficient funds to pay dividends.
2. **Repayment of debt:** If debt is scheduled for payment then it may be difficult for the company to pay dividend.
3. **Stability of profits:** A company which has stable earnings can afford to have a higher dividend payout ratio.
4. **Financial needs of the company:** If the company has profitable projects and it is costly to raise funds, it may decide to retain the earnings.



5. **Legal considerations:** Legal stipulations do not require a dividend declaration but they specify the requirements under which dividends must be paid.
6. **Shareholders preference:** The dividend policy of a firm is likely to be affected by the owner's considerations of (i) the tax status of the shareholders, (ii) their opportunities of investments and (iii) dilution of ownership.
7. **State of Capital Market:**
 - a. Favourable Market: Liberal dividend policy.
 - b. Unfavourable market: Conservative dividend policy.
8. **Inflation:** Inflation should also be considered in dividend policy.

Q3 Write short notes on Optimum Dividend Payout

Answer:

Investors put their money in the shares of a company in order to earn income on the investment by way of dividend and capital appreciation.

But what if you have the option to earn more than what the company will pay you via dividend and capital appreciation. It's obvious that you will choose that option and are not going to put the money in shares.

Shareholders expect some returns from the company. It's termed as cost of equity for the company (K_e) and the return that the company will earn on its investment is (r)

Considering this as the basis we come across three different situations:

A. When the company is earning more than what the investor would have earned

Means:

1. Investors expectation(K_e) are **less** than what the company earns(r)
2. $K_e < r$
3. Means the company is **growth company**.
4. Investors will be willing to **let the company retain the profits** and do not declare dividends in anticipation of the more returns in the future.
5. Hence the optimum payout ratio will be 0%

B. When the company is earning exactly same as the investor would have earned

Means:

1. Investors expectation(K_e) are **equal to** what the company earns(r)
2. $K_e = r$
3. Means the company is **normal company**.
4. **Investors will be indifferent** at this point as it does not matter whether company retain or distribute the profit as dividend
5. Hence the optimum payout ratio does not matter here.

C. When the company is earning less than what the investor would have earned

Means:

1. Investors expectation (K_e) are **more** than what the company earns(r)
2. $K_e > r$
3. Means the company is **declining company**.
4. Investors will be willing to **let the company distribute all its profits** by way of dividends
5. Hence the optimum payout ratio will be 100%

Q4 Explain the concept of Homemade Dividends**Answer:**

A form of investment income that comes from the sale of a portion of shares held by a shareholder. This differs from dividends that shareholders receive from a company according to the number of shares the shareholder has.

The existence of homemade dividends is the reason some financial analysts believe that looking at a company's dividend policy is not important. If investors desire an income stream they will either sell their shares when they want the income or they will invest in other income-generating assets.

Let's take an example

ABC Ltd. is quoted at ₹50 and Sundar is holding 100 shares of this company. Now if the company declare a dividend of ₹2/share then you would expect the market prices ex-dividend to go down to Rs.48 after the record date.

1. The total wealth of the Sundar is $100 \times 50 = 5000$
2. Once the dividend has been paid it will become $100 \times 48 + 200 = 5000$
3. If Sundar was expecting more than Rs.2/dividend then he can add money to his pocket by selling 2 shares

Market value + Dividend + Sale Proceeds

$$(100 - 2) \times 48 + 100 \times 2 + 48 \times 2 = 5000$$

Thus in all the above cases wealth of the shareholders was same and dividend policy of the company is irrelevant.

Q5 Explain various dividend policies**Answer:****1. Constant Dividend per Share**

Some companies may follow the policy of paying constant dividend per share every year **irrespective of the earnings of that year.**

This is because companies would **like to retain some amount for the payment of dividend in the bad years as well.**

When the company thinks it has reached a certain satisfied level of earnings then it can increase the annual dividend per share.

This type of policy is preferred by the investors who are **dependent on dividend income** for their expenses as the policy ensures regular amount of dividend.

e.g. Rs 20 per share will be paid every year.

2. Constant percentage of earnings

Some companies may like to follow the policy of paying constant % of earnings every year. This ratio which is based on the earnings of the company **is known as the dividend payout ratio.**

By this the amount of dividend every year will be **in direct proportion to the earnings of the company.**

This policy will ensure that the shareholders will get **more returns in the year of high profits and they will get no returns in case company incurs losses.**

e.g. 20% will be paid as dividend out of the profits of every year

3. Small Constant Dividend per Share plus Extra Dividend

Companies can adopt the policy to pay dividend which consist of two amount. First part will be certain **fixed amount of dividend** and other is variable dividend means extra.

Fixed amount of dividend will be paid every year irrespective of the performance of the company. Variable amount will depend each year on the performance of the company. If the



company earns high profits it can payout some extra dividend treating as variable amount and if the company earns normal profits only then company can either pay small amount as variable or else can even skip paying variable amount.

This way company can ensure that **investors are satisfied with regular income and also with variables on the occasions**. Even when the company fails to pay extra dividend it will not have any depressing effect on investors.

e.g ₹20 per share plus 5% of the profits of every year.

Q6 Explain various forms of dividends

Answer:

- (i) **Cash dividend:**
 - a. The company should have sufficient cash in bank account when cash dividends are declared. If it does not have enough bank balance, it should borrow funds.
 - b. For stable dividend policy a cash budget may be prepared for coming period to indicate necessary funds to meet regular dividend payments.
 - c. The cash account and reserve account of the company will be reduced when cash dividend is paid.
 - d. Both total assets and net worth of the company are reduced when cash dividend is distributed. According to Hastings, market price of share drops by the amount of cash dividend distributed.
- (ii) **Stock Dividend (Bonus shares):**
 - a. It is distribution of shares in lieu of cash dividend to existing shareholders.
 - b. Such shares are distributed proportionately thereby retaining proportionate ownership of the company.
 - c. If a shareholder owns 100 shares at a time, when 10% dividend is declared he will have 10 additional shares thereby increasing the equity share capital and reducing reserves and surplus (retained earnings).
 - d. The total net worth is not affected by bonus issue.

Q7 List down the assumptions under Gordon Growth Model

Answer:

This model explicitly relates the market value of the firm to dividend policy. In this model, the current ex-dividend at the amount which shareholders expected date of return exceeds the constant growth rate of dividends. It is based on the following assumptions:

The firm is an all equity firm, and it has no debt.

- No external financing is used and investment programmes are financed exclusively by retained earnings.
- The internal rate of return, r , of the firm is constant.
- The appropriate discount rate, k_e , for the firm remains constant.
- The firm has perpetual life.
- The retention ratio, b , once decided upon, is constant. Thus, the growth rate, $g = br$, is also constant.
- The discount rate is greater than the growth rate, $k_e > br$.

Q8 List down the assumptions under Modigliani Miller Hypothesis**Answer:**

Modigliani and Miller Hypothesis is in support of the irrelevance of dividends. Modigliani and Miller argue that firm's dividend policy has no effect on its value of assets and is, therefore of no consequence i.e. dividends are irrelevant to shareholders wealth. According to them, 'Under conditions of perfect capital markets, rational investors, absence of tax discrimination between dividend income and capital appreciation, given the firm's investment policy, its dividend policy may have no influence on the market price of shares.

The hypothesis is based on the following assumptions:

- The firm operates in perfect capital markets in which all investors are rational and information is freely available to all.
- There are no taxes. Alternatively, there are no differences in the tax rates applicable to capital gains and dividends.
- The firm has a fixed investment policy.
- There are no floatation or transaction costs.
- Risk of uncertainty does not exist. Investors are able to forecast future prices and dividends with certainty, and one discount rate is appropriate for all securities and all time periods.

Thus, $r = k = k_t$ for all t .

Q9 What is Radical Approach under Dividend Policy**Answer:**

This approach takes into consideration the tax aspects on dividend i.e. the corporate tax and the personal tax. Also it considers the fact that tax on dividend and capital gains are taxed as different rate. The approach is based on one premise that if tax on dividend is higher than tax on capital gains, the share of the company will be attractive if the company is offering capital gain. Similarly, if tax on dividend is less than the tax on capital gains, i.e. company offering dividend rather than capital gains, will be priced better.

Q10 According to the position taken by Miller and Modigliani, dividend decision does not influence value.

Please state briefly any two reasons, why companies should declare dividend and not ignore it.

Answer:

The position taken by M & M regarding dividend does not take into account certain practical realities is the market place. Companies are compelled to declare annual cash dividends for reasons cited below:-

- (i) Shareholders expect annual reward for their investment as they require cash for meeting needs of personal consumption.
- (ii) Tax considerations sometimes may be relevant. For example, dividend might be tax free receipt, whereas some part of capital gains may be taxable.
- (iii) Other forms of investment such as bank deposits, bonds etc, fetch cash returns periodically, investors will shun companies which do not pay appropriate dividend.
- (iv) In certain situations, there could be penalties for non-declaration of dividend, e.g. tax on undistributed profits of certain companies.

Q11 Write short note on effect of a Government imposed freeze on dividends on stock prices and the volume of capital investment in the background of Miller-Modigliani (MM) theory on dividend policy.

Answer:

- ✓ According to MM theory, under a perfect market situation, the dividend of a firm is irrelevant as it does not affect the value of firm.
- ✓ Thus under MM's theory the government imposed freeze on dividend should make no difference on stock prices.
- ✓ Firms if do not pay dividends will have higher retained earnings and will either reduce the volume of new stock issues, repurchase more stock from market or simply invest extra cash in marketable securities.
- ✓ In all the above cases, the loss by investors of cash dividends will be made up in the form of capital gains. Whether the Government imposed freeze on dividends have effect on volume of capital investment in the background of MM theory on dividend policy have two arguments.
- ✓ One argument is that if the firms keep their investment decision separate from their dividend and financing decision then the freeze on dividend by the Government will have no effect on volume of capital investment.
- ✓ If the freeze restricts dividends the firm can repurchase shares or invest excess cash in marketable securities e.g. in shares of other companies.
- ✓ Other argument is that the firms do not separate their investment decision from dividend and financing decisions. They prefer to make investment from internal funds. In this case, the freeze of dividend by government could lead to increased real investment.

Q12 Write a short note on Traditional & Walter Approach to Dividend Policy

Answer

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

$$P = m (D + E/3)$$

Where,

P = Market Price per share

D = Dividend per share

E = Earnings per share

m = a Multiplier.

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

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

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

The weights provided by Graham and Dodd are based on their subjective judgments and not derived from objective empirical analysis. Notwithstanding the subjectivity

of these weights, the major contention of the traditional position is that a liberal payout policy has a favourable impact on stock prices.

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

Walter Model focuses on two factors which influences Market Price

(i) Dividend Per Share.

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

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

$$\text{Market price per share} = \frac{DPS + \frac{\text{Rate of Return on Investment}}{\text{Cost of Equity Capital}} (EPS - DPS)}{\text{Cost of Equity Capital}}$$

$$P = \frac{D + \frac{r}{K_e} (E - D)}{K_e}$$



Foreign Exchange & Risk Management

Q1 Operations in foreign exchange market are exposed to a number of risks. Explain

Answer:

Firm dealing with foreign exchange may be exposed to foreign currency exposures. Following are the three types of exposure that a firm may face:

- **FX Exposures**

- 1. **Transaction Exposure**

- A firm has transaction exposure whenever it has contractual cash flows (sales/purchases) whose values are subject to unanticipated changes in exchange rate due to contract being denominated in a foreign currency.
 - Ex. Change in the value of Receivables on export on exchange rate fluctuation.

- 2. **Economic/Operating Exposure**

- A firm has economic exposure to the degree that its market value is influenced by unexpected exchange rate fluctuations.
 - Ex. Shift in exchange rate will affect demand of the product. This is economic exposure

- 3. **Translation Exposure**

- A firm's translation exposure is the extent to which its financial reporting is affected by exchange rate movements
 - Ex. Revaluation of debtors and creditors at balance sheet date for the exchange rate fluctuations.

Q2 Write short notes on:

a. **Interest Rate Parity Theory**

b. **Purchasing Power Parity Theory**

Answer:

a. **Interest Rate Parity Theory**

Interest rate parity is a no-[arbitrage](#) condition representing an [equilibrium](#) state under which investors will be indifferent to [interest rates](#) available on [bank deposits](#) in two countries. The fact that this condition does not always hold allows for potential opportunities to earn riskless profits from [covered interest arbitrage](#).

IRP theoretical formula

$$\frac{1 + r_d}{1 + r_f} = \frac{F}{S}$$

Where,

r_d = Rate of interest in domestic market

r_f = Rate of interest in foreign market

F = Forward rate of the foreign currency

S = Spot rate of the foreign currency

When Interest rate parity exist then high interest in one country will be offset by the depreciation in the currency of that country.

IRP theory states that the size of the forward premium (discount) should be equal to the interest rate differential between the two countries in consideration.

b. Purchasing Power Parity Theory

Purchasing power parity (PPP) is an [economic](#) theory and a technique used to determine the relative [value](#) of [currencies](#), estimating the amount of adjustment needed on the [exchange rate](#) between countries in order for the exchange to be equivalent to (or on par with) each currency's [purchasing power](#).

PPP theoretical formula

$$F = S \times \frac{1 + i_d}{1 + i_f}$$

Where,

i_d = Inflation rate in domestic market

i_f = Inflation rate in foreign market

F = Forward rate for foreign currency

S = Spot rate for foreign currency

Two forms of Purchasing Power Parity theory

1. **The Absolute form:** The purchasing power parity theory is based on the common sense idea. If a basket of goods cost ₹1000 in India and the same goods cost \$25 in United States then the purchasing power parity between the two currencies is ₹40 / US Dollar. This form of exchange rate is called absolute PPP.
The Absolute form which is also known as Law of One price states that “prices of similar product of two different countries should be equal when measured in a common currency”
2. **The Relative form:** The relative purchasing power parity explains the relationship between the inflation rates and exchange rates of the two countries. It means that if the inflation rate in one country is higher than that in another country then the effect of this high inflation is offset by the depreciation in the currency of that country.

Q3 Write short notes on Nostro, Vostro and Loro accounts.

Answer: Suppose there are Two Banks ICICI bank in India and Bank of America(BOA) in US.

Now the ICICI bank has 1 account of its own in BOA.

From ICICI banks point of view- It's My Account in Your Bank, - Nostro Account

From BOA's point of view- It's Your Account in My Bank, - Vostro Account

Now suppose if the Bank of London has to make some payment to ICICI bank but instead of direct payment to ICICI bank it has deposited the money in ICICI Bank's account in Bank of America. So this account is LORO Account for Bank of London.

So here, the same account is

Nostro – For ICICI Bank

Vostro – For Bank of America

Loro – For Bank of London

- i) **Nostro Account: (Italian, English, 'ours'):** It is the overseas account which is held by the domestic bank in the foreign bank or with the own foreign branch of the bank. For example the account held by ICICI bank with bank of America in New York is a Nostro account of the ICICI bank.
- ii) **Vostro Account (Italian, English, 'yours'):** a bank account held by a foreign bank with a domestic bank, is Vostro Account. Thus, if the account of Bank of America in ICICI bank is Vostro account for ICICI



- iii) **Loro Account (Italian, English, 'theirs')**: it is used when referring to third party accounts. Ex: If ICICI, Mumbai has an account with Bank of America, New York denominated in US Dollars then when Bank of London has to refer to this account while corresponding with Bank of America, it would refer to it as LORO Account, meaning 'their account with you'

Q4 What is Exposure Netting? What are the advantages of 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 losses or gains on the first exposed position should be offset by gains or losses on the second currency exposure.

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 forex exposures though different from forward and option contracts. This method is similar to portfolio approach in handling systematic risk.

Advantages of Netting

- **Reduces the number of cross border transactions** between subsidiaries thereby decreasing the overall administrative costs of such cash transfers.
- **Reduces the need for foreign exchange conversion** and hence decreases transaction costs associated with foreign exchange conversion.
- **Improves cash flow forecasting** since net cash transfers are made at the end of each period.
- **Gives an accurate report and settles accounts** through co-ordinate efforts among all subsidiaries.

Q5 What is Leading and Lagging?

Answer:

Leading: Leading refers to prepaying import payments or receiving early payment for exports;

If the importer expects the foreign currency to appreciate beyond the cost of home currency funds then he will be willing to make an early payment by borrowing the amount. On the other hand if the exporter expects that the foreign currency to depreciate more than the cost of investment then he will be willing to receive early payments for the sales made by him.

Lagging: Lagging relates to delaying import payments or receiving late payment on exports.

If the importer expects the foreign currency to depreciate more than the interest charged by the vendor for delaying the payments then he will be willing to make delayed payment. On the other hand if the exporter expects that the foreign currency to appreciate more than the cost of investment then he will be willing to receive late payments for the sales made by him.

Q6 Write short notes on 'Arbitrage Operations'.**Answer:**

- ✓ Arbitrage is the buying and selling of the same commodity in different markets. A number of pricing relationships exists in the foreign exchange market, whose variation would imply the existence of arbitrage opportunities – the opportunity to make a profit without risk or investment. These transactions refer to advantage derived between two currencies at two different centers at the same time or of difference between cross rates and actual rates.
- ✓ For example, a customer can gain from arbitrage operation by purchase of dollars in the local market at cheaper price prevailing at a point of time and sell the same for sterling in the London market. The sterling will then be used for meeting his commitment to pay the import obligation from London.
- ✓

Q7 Explain the significance of LIBOR in international financial transactions.**Answer:**

- ✓ LIBOR stands for London Inter Bank Offered Rate.
- ✓ 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 worldwide.



Project Planning

Q1 Explain the concept of 'Zero date of project' in project management.

Answer:

- ✓ Zero date of project means a date is fixed from which implementation of the project begins.
- ✓ It is a starting point of incurring cost. The project completion period is counted from the zero date.
- ✓ Pre Project activities should be completed before zero date. These activities are:
 - i) Identification of project
 - ii) Determination of plant capacity
 - iii) Selection of technical help
 - iv) Selection of site
 - v) Selection of survey of soil/plot etc.
 - vi) Manpower planning and recruiting key personnel
 - vii) Cost and finance scheduling

Q2 What is Project Cost Accounting?

Answer:

- ✓ Project cost accounting is essentially a service that supports Project Management. It is the process of recognizing, measuring, recording and reporting the project cost data (MIS) to its stakeholders about the project milestones and costs.
- ✓ One of the most important requirements of Project Cost Accounting is estimating the "Cost to Completion" and therefore, differs from "financial and corporate accounting" significantly.
- ✓ Project costing starts with a Budget, a benchmark, with which the current performance is continuously measured. Note that "What cannot be measured cannot be managed/controlled" (Peter Drucker).
- ✓ Reporting on cost overruns, physical overruns, time overruns is the essential part of the Project Costing.
- ✓ Finally, timeliness in reporting on project costs and milestone overruns is much more important than precision in reporting.

Q3 What are the advantages of post completion audit?

Answer:

Post completion audit evaluates actual performance with projected performance. It verifies both revenues and costs. The advantages of completing post completion audit are:

- ✓ The experience gained is highly valuable for future decision making since it can highlight mistakes that can be avoided and areas of improvements brought about.
- ✓ Identify individuals with superior abilities in planning and forecasting.
- ✓ It helps in discovering biases in judgment.
- ✓ It induces healthy caution among the sponsors of projects as project sponsors make over-optimistic projections for their proposals.
- ✓ It helps in exerting discipline in the investment planning and control process.

Q4 Write a brief note on project appraisal under inflationary conditions

Answer:

Project Appraisal under Inflationary Conditions: 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 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:

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

**Q5 What are the contents of the Project Report?****Answer:**

The following aspects need to be taken into account for a Project Report -

1. **Promoters:** Their experience, past records of performance form the key to their selection for the project under study.
2. **Industry Analysis:** The environment outside and within the country is vital for determining the type of project one should opt for.
3. **Economic Analysis:** The demand and supply position of a particular type of product under consideration, competitor's share of the market along with their marketing strategies, export potential of the product, consumer preferences are matters requiring proper attention in such type of analysis.
4. **Cost of Project:** Cost of land, site development, buildings, plant and machinery, utilities e.g. power, fuel, water, vehicles, technical knowhow together with working capital margins, preliminary/pre-operative expenses, provision for contingencies determine the total value of the project.
5. **Inputs:** Availability of raw materials within and outside the home country, reliability of suppliers cost escalations, transportation charges, manpower requirements together with effluent disposal mechanisms are points to be noted.
6. **Technical Analysis:** Technical know-how, plant layout, production process, installed and operating capacity of plant and machinery form the core of such analysis.
7. **Financial Analysis:** Estimates of production costs, revenue, tax liabilities profitability and sensitivity of profits to different elements of costs and revenue, financial position and cash flows, working capital requirements, return on investment, promoters contribution together with debt and equity financing are items which need to be looked into for financial viability.
8. **Social Cost Benefit Analysis:** Ecological matters, value additions, technology absorptions, level of import substitution form the basis of such analysis.
9. **SWOT Analysis:** Liquidity/Fund constraints in capital market, limit of resources available with promoters, business/financial risks, micro/macro economic considerations subject to government restrictions, role of Banks/Financial Institutions in project assistance, cost of equity and debt capital in the financial plan for the project are factors which require careful examinations while carrying out SWOT analysis.
10. **Project Implementation Schedule:** Date of commencement, duration of the project, trial runs, cushion for cost and time over runs and date of completion of the project through Network Analysis have all to be properly adhered to in order to make the project feasible.

Capital Budgeting

Q1 What are the issues that need to be considered by an Indian Investor and incorporated within the Net Present Value (NPV) Model for the evaluation of Foreign Investment Proposals?

Answer: Following are the issues that need to be considered in NPV Model for evaluation of foreign investment proposals:

- 1) **Taxes on Income associated with foreign projects**
 - a. Heavy Indirect Taxes
 - b. Difference in definition of taxable income from country to country
 - c. Tax treaties entered into with different countries
- 2) **Political Risks:**
 - a. Risk of seizure of property
 - b. Risk of nationalization of industry without paying full compensation
 - c. Restrictions on employment of foreign managerial personnel
 - d. Restrictions on imports of raw material
- 3) **Economic Risk:**
 - a. Fluctuation in Exchange Rates
 - b. Inflation

Q2 Distinguish between Net Present Value and Internal Rate of Return.

Answer:

Basis	Net present value (NPV)	Internal rate of return (IRR)
Expressed in	Value in units of a currency	Percentage terms
Cash flows are assumed to be	Reinvested at the cost of capital	Reinvested at an internal rate of return
Additional wealth	NPV takes into account additional wealth	IRR does not consider additional wealth
Cash Flows	NPV can be used even if the cash flows are changing	IRR method cannot be used if the cash flows are changing
Users	For general public NPV is better method to grasp.	Business managers are more comfortable with the IRR method.

Q3 Write short note on Certainty Equivalent Approach.

Answer:

- ✓ CE is an approach for dealing with risk in capital budgeting to reduce the forecasts of cash flows to some conservative level.
- ✓ One of the ways of incorporating risk is Certainty Equivalent Method, wherein the expected cash flows are adjusted to reflect the project risk.
- ✓ The cash flows are brought down because higher the risk less is the probability of those cash flows being certain.
- ✓ The certainty equivalent approach adjusts future cash flows rather than discount rate.
- ✓ Certainty equivalent coefficient lies between 0 and 1.
- ✓ CE coefficient of 1 indicates that the cash flow is certain or there is no risk.

**Q4 What is Sensitivity Analysis in Capital Budgeting?****Answer:**

- ✓ Sensitivity analysis is used in Capital Budgeting for 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 projects life to the estimation errors.
- ✓ It answers questions like:
 - i) What happens to the present value if cash flows are, say Rs. 50000 than the expected Rs. 80,000?
 - ii) And what will happen to NPV if economic life of the project is only 3 years rather than expected 5 years?
- ✓ Sensitivity analysis involves three steps:
 - i) Identification of all those variables having an influence on the projects NPV or IRR.
 - ii) Definition of the underlying quantitative relationship among the variables.
 - iii) Analysis of the impact of the changes in each of the variables on the NPV of the project.
- ✓ In Sensitivity Analysis, decision maker always asks himself the question – What IF?
- ✓ systems.

Q5 What is Capital Rationing?**Answer:**

- ✓ Capital Rationing means the utilization of existing funds in most profitable manner by selecting the acceptable projects in the descending order or ranking with limited available funds.
- ✓ The firm must be able to maximise the profits by combining the most profitable proposals.
- ✓ Capital rationing may arise due to external factors(hard capital rationing) such as high borrowing rate and internal factors(soft capital rationing) such as limits imposed by management on spending of funds.
- ✓ Either the internal rate of return method or the net present value method may be used in ranking investments.
- ✓ Where there is a multi period capital rationing linear programming techniques should be used to maximise NPV.

Q6 Write short note on Risk Adjusted Discount Rate.**Answer:**

- ✓ RADR, where the various project risks are dealt with by changing the discount rate.
- ✓ The project having
 - i) average risk is discounted at the organization's cost of capital,
 - ii) higher risk is discounted at the rate higher than the cost of capital,
 - iii) low risk is discounted at the rate lower than the cost of capital.
- ✓ Here discount rate is adjusted to incorporate the risk of the project
- ✓ RADR when underlying consideration is Risk Premium

$$r_k = i_f + n + d_k$$

Where,

 i_f = risk free rate of interest, n = adjustment for firms normal risk, d_k = risk premium

- ✓ RADR when underlying consideration is Risk Factor

$$r_k = i_f + (K_e - i_f) \times \text{Risk Factor}$$

Where, K_e = Cost of equity of the firm**Q7 Distinguish between Risk Adjusted Discounted Rate (RADR) and Certainty Equivalent Approach (CEA).****Answer:**

Comparison between RADR and CEA			
Sr. No.	Particulars	Risk adjusted discount rate	Certainty equivalent approach
1	Method of incorporating risk	by adjusting the Discount Rate	by adjusting Cash Flows
2	NPV Formula	deals with the denominator of the NPV formula	deals with the numerator of the NPV formula
3	Variation in the risk	in RADR there is an implied assumption that, the risk of the proposal increases at a constant rate over the life of the project	Whereas, the CE approach incorporates different risk for different years .

Q8 What is hard and soft capital rationing?**Answer:**

Hard Capital Rationing: When the external environment imposes a condition as to availability of financial resources for a firm to deploy on its capital projects, the resulting paucity of capital forces rationing of the resources to deserving projects. This situation is called hard capital rationing. External capital rationing is nothing but the hard capital rationing.

Soft Capital Rationing: Sometimes restrictions are imposed by the executive board of the company, even though funding is available from the external environment. Such situation is called as the soft capital rationing. Internal capital rationing is nothing but soft capital rationing.

**Q9 What are the Steps in Simulation Analysis?****Answer:**

1. Modeling the project: The model shows the relationship of NPV with parameters and exogenous variables.
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 frequency distribution of NPV.

Q10 Many companies calculate the internal rate of return of the incremental after -tax cash-flows from financial leases.**What problems do you think this may give rise to? To what rate should the internal rate of return be compared? Discuss.****Answer:**

Main problems faced in using Internal Rate of Return can be enumerated as under:

- (1) The IRR method cannot be used to choose between alternative lease bases with different lives or payment patterns.
- (2) If the firms do not pay tax or pay at constant rate, then IRR should be calculated from the lease cash-flows and compared to after-tax rate of interest. However, if the firm is in a temporary non-tax paying status, its cost of capital changes over time, and there is no simple standard of comparison.
- (3) Another problem is that risk is not constant. For the lessee, the payments are fairly riskless and interest rate should reflect this. The salvage value for the asset, however, is probably much riskier. As such two discount rates are needed. IRR gives only one rate, and thus, each cash-flow is not implicitly discounted to reflect its risk.
- (4) Multiple roots rarely occur in capital budgeting since the expected cash-flow usually changes sign once. With leasing, this is not the case often. A lessee will have an immediate cash inflow, a series of outflows for a number of years, and then an inflow during the terminal year. With two changes of sign, there may be, in practice frequently two solutions for the IRR.

Q11 How would standard deviation of the present value distribution help in Capital Budgeting decisions?**Answer:**

Standard deviation is a statistical measure of dispersion; it measures the deviation from a central number i.e. the mean.

In the context of capital budgeting decisions especially where we take up two or more projects giving somewhat similar mean cash flows, by calculating standard deviation in such cases, we can measure in each case the extent of variation. It can then be used to identify which project is least riskier in terms of variability of cash flows.

A project, which has a lower coefficient of variation will be preferred if sizes are heterogeneous. Besides this, if we assume that probability distribution is approximately normal we are able to calculate the probability of a capital budgeting project generating a net present value less than or more than a specified amount.

Q12 Write short notes on Real Options in Capital Budgeting.**Answer:**

Real options are the options companies have when making capital investment decisions. A company has the option to invest in such a project but can delay the decision. It can also put an existing operation on hold; it can expand an investment or reduce it.

The traditional analytical methods of project evaluation (IRR, NPV etc.) assume management's passive commitment to a certain operating strategy, viz. initiate the project immediately and operate it continuously at a set scale until the end of its pre specified expected useful life. These methods typically ignore the synergistic effects that an investment project can create. Sometimes the performance of one project will allow you to perform a second project that would not have been possible without the first (e.g. many research and development projects). Similarly, there could be significant value in waiting for additional information that could make an impact on the success of a project. Therefore the existing analytical methods usually underestimate investment opportunities because they ignore management's flexibility to alter decisions as new information becomes available.

The real option methodology is an approach to capital budgeting that relies on option pricing theory to evaluate projects. Insights from option based analysis can improve estimates of project value and therefore has potential in many instances to significantly enhance project management. However Real Options approach is intended to supplement, and not replace, capital budgeting analysis based on standard DCF methodologies.

Q13 Write short notes on Techniques of Social Cost Benefit Analysis**Answer:**

- ✓ **Goods & Services:** social gain/losses from outputs and inputs of a project are measured by the willingness of the consumers to pay for the goods.
- ✓ **Labour:** Social cost of labour is lower than market wage because of massive un/under employment along with traditions, changes in life style etc. Removal of labour from farms should not cause reduction in agricultural output as other members work harder to offset the loss. Employing labour on nonfarm activities is costless. Shadow wage is zero.
- ✓ **Foreign Exchange:** Existence of extensive trade controls leads to official undervaluation of foreign exchange. Official exchange rate understates the benefit of exports and costs of imports in terms of domestic resources. An upward adjustment is necessary.
- ✓ **Social Rate of Discount:** Market rate of interest does not reflect society's preference for current consumption over future consumption. Choice of social discount rate is based on value judgment about weights to be attached to the welfare of future generations compared to that of present generations.
- ✓ **Shadow Price of Investment:** Society as a whole gives importance to future generations than that accorded by private decision makers. Imperfections of capital markets lead to less than optimal total investment.

**Q14 Distinguish between Financial Options and Real Options****Answer:**

Basis	Financial Options	Real Options
Trading	Financial options have an underlying asset that is traded - usually a security like a stock.	A real option has an underlying asset that is not a security - for example a project or a growth opportunity, and it isn't traded.
Payoffs	The payoffs for financial options are specified in the contract. Real options are "found" or created inside of projects. Their payoffs can be varied.	
Exercise Period	Financial Options have short exercise period. E.g. 3 months	Real Options have long exercise period E.g. 15 years (Life of the project)
Pricing/ Valuation	And finally, financial options are "priced".	And real options are "valued"

Q15. Write Short Notes on Financial Engineering**Answer:**

"Financial Engineering" involves the design, development and implementation of innovative financial instruments and processes and the formulation of creative solutions and problems in finance. Financial engineering lies in innovation and creativity to promote market efficiency.

- ✓ In involves construction of innovative asset liability structures using a combination of basic instruments so as to obtain hybrid instruments which may either provide a risk-return configuration otherwise unviable or result in gain by heading efficiently, possibly by creating an arbitrage opportunity.
- ✓ It is of great help in corporate finance, investment management, trading activities and risk management.

Over the years, Financial managers have been coping up with the challenges of changing situations. Different new techniques of financial analysis and new financial instruments have been developed. The process that seeks to adopt existing financial instruments and develop new ones so as to enable financial market participants to cope more effectively with changing conditions is known as financial engineering.

- ✓ In recent years, the rapidity with which corporate finance and investment finance have changed in practice has given birth to new area of study known as financial engineering.
- ✓ It involves use of complex mathematical modelling and high speed computer solutions. Financial engineering includes all this. It also involves any moral twist to an existing idea and is not limited to corporate finance.
- ✓ It has been practiced by commercial banks in offering new and tailor made products to different types of customers.
- ✓ Financial engineering has been used in schemes of merger and acquisitions.
- ✓ The term financial engineering is often used to refer to risk management.

Leasing Decisions

Q1 Write short note on Cross Border Leasing.

Answer:

Cross-border leasing is a leasing arrangement where lessor and lessee are situated in different countries. This presents significant additional issues related to tax avoidance and tax shelters. A major objective of the cross border leasing is to reduce the overall cost of financing through utilization by the lessor of tax depreciation allowances to reduce its taxable income. The tax savings are passed through to the lessee as a lower cost of finance. The basic prerequisites are relatively high tax rates in the lessor's country, liberal depreciation rules and either very flexible or very formalistic rules governing tax ownership.

Other important objectives of the cross border leasing include the following:

1. The lessor is often able to utilize nonrecourse debt to finance a substantial portion of the equipment cost. The debt is secured by among other things, a mortgage on the equipment and by an assignment of the right to receive payments under the lease.
2. Also depending on the structure, in some countries the lessor can utilize very favourable "leveraged lease" financial accounting treatment for the overall transaction.
3. In some countries it is easier for a lessor to repossess the leased equipment following a lessee default because the lessor is an owner and not a mere secured lender.
4. Leasing provides the lessee with 100% financing.

Q2 Distinguish between Financial and Operating lease.

Or What are the salient features of Financial and Operating lease?

Answer:

Basis	Financial Lease	Operating Lease
Lease term	Covers the economic life of the equipment.	Covers significantly less than the economic life of the equipment.
Cancellation	Financial lease cannot be cancelled during the primary lease period.	Operating lease can be cancelled by the lessee prior to its expiration.
Amortization	The lease rentals are more or less fully amortized during the primary lease period.	The lease rentals are not sufficient enough to amortize the cost of the asset.
Risk of obsolescence	The lessee is required to take the risk of obsolescence.	The lessee is protected against the risk of obsolescence.
Costs of maintenance, taxes, insurance etc.	Incurred by the lessee unless the contract provides otherwise.	Incurred by the lessor.

Q3 What is Sales and Lease back leasing?

Answer:

Leaseback, short for 'sale-and-leaseback,' is a financial transaction, where one sells an asset and leases it back for the long-term; therefore, one continues to be able to use the asset but no longer owns it.

After purchasing an asset, the owner enters a long-term agreement by which the property is leased back to the seller, at an agreed rate. One reason for a leaseback is for the seller to raise money by



offloading a valuable asset to a buyer who is presumably interested in making a long-term secured investment.

Q4 What is Sales Aid Lease?

Answer:

Sale aid lease: When the leasing company (lessor) enters into an agreement with the manufacturer of the equipment, to market the latter's product through its own leasing operations, it is called "sales-aid-lease". Leasing company gets a commission from the manufacturer on such sales.

Q5 What are the advantages and disadvantages of leasing?

Answer:

Advantages

- 100% Financing
- Protection against obsolescence
- Off-balance-sheet financing
- Tax advantages
- Leasing Increases Lessee's Capacity To Borrow
- Absence Of Restrictive Convenience
- Flexible requirements according to user needs

Disadvantages

- Cash outflow soon after the acquisition of asset
- Seller's warranty may not be there
- Hypothecation by bank
- High cost of financing

Q6 Write short notes on Internal Rate of Return Analysis of lease evaluation

Answer:

- ✓ Under this method there is no need to assume any rate of discount. To this extent, this is different from the former method [Present Value Analysis] where the after-tax cost of borrowed capital was used as the rate of discount.
- ✓ The result of this analysis is the after tax cost of capital explicit in the lease which can be compared with that of the other available sources of finance such as a fresh issue of equity capital, retained earnings or debt.
- ✓ Simply stated, this method seeks to establish the rate at which the lease rentals, net of tax shield on depreciation are equal to the cost of leasing.
- ✓ In Internal rate of return analysis Leasing is compared with buying an asset from retained earnings.

Q7 Write short notes on Bower-Herringer-Williamson method of lease evaluation

Answer:

This method segregates the financial and tax aspects of lease financing. If the operating advantage of a lease is more than its financial disadvantage or vice-versa lease will be preferred.

The procedure of evaluation is briefly as follows:

1. Compare the present value of debt with the discounted value of lease payments (gross), the rate of discount being the gross cost of debt capital. The net present value is the financial advantage (or disadvantage).
2. Work out the comparative tax benefit during the period and discount it at an appropriate cost of capital. The present value is the operating advantage (or disadvantage) of leasing.
3. If the net result is an advantage, select leasing.

Financial Services

Q1 What are the functions of Investment Banks.

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

- ✓ **Underwriting:** The underwriting function within corporate finance involves shepherding the process of raising capital for a company. In the investment banking world, capital can be raised by selling either stocks or bonds to the investors.
- ✓ **Managing an IPO (Initial Public Offering):** This includes hiring managers to the issue, due diligence and marketing the issue.
- ✓ **Issue of debt:** When a company requires capital, it sometimes chooses to issue public debt instead of equity.
- ✓ **Follow-on hiring of stock:** A company that is already publicly traded will sometimes sell stock to the public again. This type of offering is called a follow-on offering, or a secondary offering.
- ✓ **Mergers and Acquisitions:** Acting as intermediary between Acquirer and target company
- ✓ **Sales and Trading:** This includes calling high net worth individuals and institutions to suggest trading ideas (on a caveat emptor basis), taking orders and facilitating the buying and selling of stock, bonds or other securities such as currencies.
- ✓ **Research Analysis:** Research analysts study stocks and bonds and make recommendations on whether to buy, sell, or hold those securities.
- ✓ **Private Placement:** A private placement differs little from a public offering aside from the fact that a private placement involves a firm selling stock or equity to private investors rather than to public investors.
- ✓ **Financial Restructuring:** When a company cannot pay its cash obligations - it goes bankrupt. In this situation, a company can, of course, choose to simply shut down operations and walk away or, it can also restructure and remain in business.

Q2 Distinguish between Investment Banks and Commercial Banks.

Answer:

Basis	Investment Bank	Commercial Bank
1. Function	Investment banks help their clients by acting as an intermediary between the buyers and the sellers of securities (stocks or bonds).	Commercial banks are engaged in the business of accepting deposits from customers and lending money to individuals and corporate.
2. Acceptance of deposits	Investment banks do not take deposits from customers.	Commercial banks can legally take deposits from customers.
3. Ownership for the product selling to the customers	Investment banks do not own the securities and only act as an intermediary for smooth transaction of buying and selling securities.	Commercial banks own the loans granted to their customers.
4. Source of Income	Investment banks earn underwriting commission.	Commercial banks earn interest on loans granted to their customers.

**Q3 What is Credit Rating? What is the benefit of credit rating?****Answer:**

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

Benefits from credit ratings

- ✓ Provide superior information to the investors at a low cost;
- ✓ Provide a sound basis for proper risk-return structure;
- ✓ Subject borrowers to a healthy discipline and
- ✓ Assist in the framing of public policy guidelines on institutional investment.

Q4 What are the different Credit Rating Agencies in India**Answer:**

- **CRISIL**
 - Credit Rating Information Services of India Limited
- **FITCH**
 - Fitch Rating India Private Limited
- **ICRA**
 - Investment Information and Credit Rating Agency of India Limited
- **CARE**
 - Credit Analysis and Research Limited
- **Brickworks**
 - Brickwork Ratings India Private Limited
- **SMERA**
 - Small and Medium Enterprises Rating Agencies

Q5 Explain the Credit Rating Process/ How credit rating is being issued?**Answer:****1) Request from issuer and analysis**

A company approaches a rating agency for rating a specific security. A team of analysts interact with the company's management and gathers necessary information.

2) Rating Committee

On the basis of information obtained and assessment made, team of analysts present a report to the Rating committee. The issuer is not allowed to participate in this process as it is an internal evaluation of the rating agency. The nature of credit evaluation depends on the type of information provided by the issuer.

3) Communication to management and appeal

The rating decision is communicated to the issuer and then the rating is shared with the issuer. If the issuer disagrees, an opportunity of being heard is given to him. Issuer appealing against a rating decision is asked to submit relevant material information. The Rating Committee reviews the decision although such a review may not alter the rating. The issuer may reject a rating and rating score need not be disclosed to the public.

4) Pronouncement of the rating

If the rating decision is accepted by the issuer, the rating agency makes a public announcement of it.

5) Monitoring of the assigned rating

The rating agencies monitor the on-going performance of the issuer and the economic environment in which it operates.

6) Rating watch

Based on the constant scrutiny carried out by the agency it may place a rated instrument on Rating Watch. The rating may change for the better or for the worse. Rating watch is followed by a full scale review for confirming or changing the original rating.

Q6 What are the uses of Credit Rating?

Answer:

For Users

- Aids in investment decisions.
- Helps in fulfilling regulatory obligations.
- Provides analysts in Mutual Funds to use credit ratings as one of the valuable inputs to their independent evaluation system.

For Issuers

- Requirement of meeting regulatory obligations as per SEBI guidelines.
- Recognition given by prospective investors providing value to the ratings which helps them to raise debt/equity capital.

Q7 What is Scripless Trading System?

Answer: The depository holds electronic custody of securities and also arranges for transfer of ownership of securities on the settlement dates. This system is known as 'scripless trading system'.

Q8 What is the difference between Debit Card and Credit Card?

Answer: The basic difference between the two is the fact that a credit card takes the form of a personal loan from the issuing bank to the consumer while a debit card is more like a cheque, money is directly deducted from a person's bank account to pay for transaction.

Q9 Explain CAMEL model in Credit Rating.

Answer:

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

- a) Capital:** Composition of retained earnings and external funds; Fixed dividend component for preference shares and fluctuating component for equity shares and adequacy of long term funds adjusted to gearing levels; ability of issuer to raise further borrowings.
- b) Assets:** Revenue generating capacity of existing/ proposed assets, fair values, technological/ physical obsolescence, linkage of asset values to turnover, consistency, appropriation of methods of depreciation and adequacy of charge to revenues. Size, ageing and recoverability of monetary assets.
- c) Management:** Extent of involvement of management personnel, team work, authority, timeliness, effectiveness and appropriateness of decision making along with directing management to achieve corporate goals.
- d) Earnings:** Absolute levels, trends, stability, adaptability to cyclical fluctuations ability of the entity to service existing and additional debts proposed.
- e) Liquidity:** Effectiveness of working capital management, corporate policies for stock and creditors, management and the ability of the corporate to meet their commitment in the short run.

**Q10 Explain the Credit Rating Process/ How credit rating is being issued?****Answer:**

Credit rating is a very important indicator for prudence but it suffers from certain limitations. Some of the limitations are:

- ✓ **Conflict of Interest** – The rating agency collects fees from the entity it rates leading to a conflict of interest. Since the rating market is very competitive, there is a distant possibility of such conflict entering into the rating system.
- ✓ **Industry Specific rather than Company Specific** – Downgrades are linked to industry rather than company performance. Agencies give importance to macro aspects and not to micro ones; overreact to existing conditions which come from optimistic / pessimistic views arising out of up / down turns. At times, value judgments are not ruled out.
- ✓ **Rating Changes** – Ratings given to instruments can change over a period of time. They have to be kept under constant watch. Downgrading of an instrument may not be timely enough to keep investors educated over such matters.
- ✓ **Corporate Governance Issues** – Special attention is paid to:
 - Rating agencies getting more of their revenues from a single service or group.
 - Rating agencies enjoying a dominant market position. They may engage in aggressive competitive practices by refusing to rate a collateralized / securitized instrument or compel an issuer to pay for services rendered.
 - Greater transparency in the rating process viz. in the disclosure of assumptions leading to a specific public rating.
- ✓ **Basis of Rating** – Ratings are based on 'point of time' concept rather than on 'period of time' concept and thus do not provide a dynamic assessment. Investors relying on the credit rating of a debt instrument may not be aware that the rating pertaining to that instrument might be outdated and obsolete.
- ✓ **Cost Benefit Analysis** – Since rating is mandatory, it becomes essential for entities to get themselves rated without carrying out cost benefit analysis. . Rating should be left optional and the corporate should be free to decide that in the event of self rating, nothing has been left out.

Q11 What is Depository? What are the major players of the Depository System? What are the advantages to the clearing member offered by depository system?**Answer:**

- ✓ Depository means one who receives a deposit of money, securities, instruments or other property, a person to whom something is entrusted, a trustee, a person or group entrusted with the preservation or safe keeping of something.
- ✓ The depository is an organization where the securities of a shareholder are held in the form of electronic accounts, in the same way as a bank holds money.
- ✓ There are two security depositories 1) NSDL- National Securities Depository Limited (1996) 2)CDSL- Central Depository Services Limited (1999)
- ✓ **Players of the depository system**
 - i. Depository
 - ii. Issuers or Company
 - iii. Depository participants
 - iv. Clearing Members
 - v. Corporation
 - vi. Stock Brokers
 - vii. Clearing Corporation
 - viii. Investors
 - ix. Banks

✓ **Advantages to the clearing member**

- ✓ Enhanced liquidity, safety and turnover on stock market.
- ✓ Opportunity for development of retail brokerage business.
- ✓ Ability to arrange pledges without movement of physical scrip and further increase of trading activity, liquidity and profits.
- ✓ Improved protection of shareholder's rights resulting from more timely communications from the issuer.
- ✓ Reduced transaction costs.
- ✓ Elimination of forgery and counterfeit instruments with attendant reduction in settlement risk from bad deliveries.
- ✓ Provide automation to post-trading processing.
- ✓ Standardization of procedures.

Q12 What is the difference between Physical and Dematerialized Share Trading?

Answer:

Physical Share Trading	Dematerialized Share Trading
1) For buy transaction , delivery is to be sent to company for registration.	1) No need to send the document to the company for registration.
2) Open delivery can be kept	2) Not possible to keep delivery open.
3) Processing time is long	3) Processing time is less
4) Stamp Charges @ 0.5% are levied for transfer	4) No stamp charges are required for transfer
5) For sales transaction , no charges other than brokerage are levied.	5) Sales transactions are also charged.
6) Actual delivery of share is to be exchanged	6) No actual delivery of share is needed.

Q13 What are the benefits of Credit Cards over Debit Cards?

Answer:

- a. With a **flexible spending limit**, a cardholder can take advantage of the easy loan facility of a credit card, and can use it to purchase items or spend money that he expects in the near future, not just money that he presently has in his account.
- b. Most of the major features of a debit card such as **withdrawal of cash from ATMs** are available on credit cards as well.
- c. A credit card has **greater security measures**.
- d. A credit card can be used as a convenient way to **check and record your spending**.
- e. Since there is a fixed credit limit, a cardholder **cannot overstretch his purchases**.

Q14 What is meant by Online Share Trading?

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

**Q15 What are the advantages and disadvantages of depository system?****Answer:****Advantages:**

- Transaction costs are reduced.
- Immediate Transfer: Transfer of securities is effected immediately.
- Paper work is minimized.
- Safe: Securities are held in a safe and convenient manner.
- No stamp duty: Stamp duty for transfer is eliminated.
- Bad deliveries, fake securities and delays in transfers are eliminated.
- Routine changes viz. change in address of one person owning securities issued by different companies can be taken care of simultaneously for all securities with little delay.

Disadvantages:

- **Human Fraud:** Unlawful transfers by individuals against whom insolvency proceedings are pending or transfer by attorney holders with specific or limited powers are possible.
- **Additional record keeping:** In built remote provisions for rematerialization exist to take care of the needs of individuals who wish to hold securities in physical form. Companies will invariably need to maintain records on a continuous basis for securities held in physical form. Periodical reconciliation between demat segment and physical segment is very much necessary.
- **Cost of Depository Participant (DP)** Onetime fee is levied by the depository participant which small investors consider to be an avoidable cost.
- **Systematic Failure:** Unforeseen failures, intentional or otherwise, on the part of the individuals entrusted with protecting data integrity, could lead to chaos.

Q16 What are the advantages of Online Stock Trading?**Answer:**

Standardized Procedure	One stop Shop	Flexibility	Time	Informed Research
• Customer can easily expect the time when cash or shares to be credited to his account.	• Bank statements and transaction statements can be viewed at the click of a button.	• Customers can modify the placed orders according to the market movements.	• Customers can trade online in a real time basis as buying and selling of shares happen with a press of button.	• Customers can directly see the stock analysis provided by the broker.

Q17 What are the disadvantages of Online Stock Trading?**Answer:**

Time required	Internet Connectivity	Limited Knowledge
Customers have to spend lots of time sitting in front of terminal to monitor stock prices. It's not suitable for busy professionals.	Online trading requires high speed internet connectivity. But many rural and urban areas don't have this facility today.	Sometimes customers don't have knowledge regarding how to use the online trading portal. And also lack the financial awareness about stock market.

Q18 Write short notes on 'Debt Securitisation'.**Answer:**

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

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

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

Q19 Write short notes on 'Depository Participant'.**Answer:**

- ✓ Under this system, the securities (shares, debentures, bonds, Government securities, MF units etc) are held in electronic form just like cash in a bank account.
- ✓ To speed up the transfer mechanism of securities from sale, purchase, transmission, SEBI introduced Depository Services also known as Dematerialization of listed securities.
- ✓ It is the process by which certificates held by investors in physical form are converted to an equivalent number of securities in electronic form.
- ✓ The securities are credited to the investor's account maintained through an intermediary called Depository Participant (DP).
- ✓ Shares/Securities once dematerialized lose their independent identities. Separate numbers are allotted for such dematerialized securities. Organization holding securities of investors in electronic form and which renders services related to transactions in securities is called Depository.

**Q20 Write short notes on 'Asset Securitisation'.****Answer:**

- ✓ Securitisation is a process of transformation of illiquid asset into security which may be traded later in the open market. It is the process of transformation of the assets of a lending institution into negotiable instruments. The term 'securitisation' refers to both switching away from bank intermediation to direct financing via capital market and/or money market, and the transformation of a previously illiquid asset like automobile loans, mortgage loans, trade receivables, etc. into marketable instruments.
- ✓ This is a method of recycling of funds. It is beneficial to financial intermediaries, as it helps in enhancing lending funds. Future receivables, EMIs and annuities are pooled together and transferred to a special purpose vehicle (SPV). These receivables of the future are shifted to mutual funds and bigger financial institutions. This process is similar to that of commercial banks seeking refinance with NABARD, IDBI, etc.

Bond Valuation

Q1 Why should the duration of a coupon carrying bond always be less than the time to its maturity?

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

Q2 Write short notes on 'Zero Coupon Bonds'.**Answer:**

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

Mutual Funds

Q1 Explain Briefly the NAV of a Mutual Fund scheme.

Answer: NAV is the value of the fund's assets minus its liabilities. SEBI rules require funds to calculate the NAV daily. To calculate the NAV per share, simply subtract the fund's liabilities from its assets and then divide the result by the number of shares outstanding.

If the market value of a fund's portfolio increases, after deduction of expenses and liabilities, then the value (NAV) of the fund and its shares increases. The higher NAV reflects the higher value of your investment.

NAV of a Mutual Fund are published on a daily basis in the newspapers and electronic media and play an important role in investor's decision to enter or to exit. Analyst use the NAV to determine the yield on the schemes.

$$\text{Net asset value} = \frac{\text{Net assets of the scheme}}{\text{Number of units outstanding}}$$

Where Net Assets of the scheme

Particulars	Amount
Market value of the Investment	XXXX
+ Receivables	XXX
+ Other Accrued Income	XXX
+ Other Assets	XXX
- Accrued Expenses	(XXX)
- Other Payables	(XXX)
- Other Liabilities	(XXX)
Net assets of the scheme	XXXX

Q2 What are the advantages and drawbacks of investing in a Mutual Fund?

Answer:

Advantages

1. Professional management	2. Diversification	3. Affordability	4. Convenience
5. Return Potential	6. Low Cost	7. Liquidity	8. Transparency
9. Well Regulated	10. Flexibility	11. Tax Benefits	

**Drawbacks**

1. No Guaranteed Return	2. Fees and Expenses	3. Management Risk	4. Unethical Practices
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Q3 Explain Briefly what is Exchange Traded Funds.**Answer:**

An exchange-traded fund (ETF) is an investment fund traded on stock exchanges, much like stocks. An ETF holds assets such as stocks, commodities, or bonds, and trades close to its net asset value over the course of the trading day. Most ETFs track an index, such as a stock index or bond index. ETFs may be attractive as investments because of their low costs, tax efficiency, and stock-like features. ETFs are the most popular type of exchange-traded product.

ETFs offer public investors an undivided interest in a pool of securities and other assets and thus are similar in many ways to traditional mutual funds, except that shares in an ETF can be bought and sold throughout the day like stocks on a securities exchange through a broker-dealer.

Advantages of ETFs are the following:

- Buy and sell just like shares
- Buy and sell at real time prices
- One can put limit orders
- Delivery in your demat account
- Minimum trading lot is just one unit

Q4 Distinguish Between Open Ended and Close Ended Funds.**Answer:**

PARAMETER	OPEN ENDED FUNDS	CLOSE ENDED FUNDS
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
NAV	Daily	Daily
Portfolio Disclosure	Monthly	Monthly

Money Market Operations

Q1 What is Call Money/Notice Money in the context of financial market?

Answer:

- ✓ Call money is a part of the money market where day to day surplus funds, mostly of banks are traded. Moreover, the call money market is most liquid of all short term money market instruments.
- ✓ The maturity period of call loans vary from 1 to 14 days. The money that is lent for one day in call money market is also known as 'overnight money'.
- ✓ Current and expected interest rates on call money are the basic rates to which other money markets and to some extent the Government securities market are anchored.
- ✓ In India, call money is lent mainly to even out the short term mismatches of assets and liabilities and to meet CRR requirements of banks that they should maintain with RBI every fortnight and is computed as a percentage of Net Demand and Time Liabilities (NDTL).

Q2 What is the distinction between Money Market and Capital Market?

Basis	Money Market	Capital Market
Classification	There is no distinction between primary and secondary market.	Capital market is classified into primary and secondary market.
Purpose	It deals for funds of short term requirement.	It deals with funds of long term requirement.
Instruments	Money market instruments include interbank call money, notice money, short term deposits upto 3 months, commercial paper, 91 days treasury bills	Capital market instruments are shares and debt instrument.
Participants	Money Market participants are banks, financial institutions, RBI and Government.	Capital Market participants include retail investors, institutional investors like mutual funds, financial institutions, corporate and banks

Q3 Explain briefly what is Money Market Mutual Funds.

Answer:

A money market fund is a mutual fund that invests solely in money market instruments. Money market instruments are forms of debt like Commercial Papers (CPs), Certificate of Deposits (CDs) and Treasury Bills (TBs) that mature in less than one year and are very liquid. Treasury bills make up the bulk of the money market instruments. Securities in the money market are relatively risk-free.

Money market mutual funds are one of the safest instruments of investment for the retail low income investor. The assets in a money market fund are invested in safe and stable instruments of investment issued by governments, banks and corporations etc.

Generally, money market instruments require huge amount of investments and it is beyond the capacity of an ordinary retail investor to invest such large sums. Money market mutual funds allow retail investors the opportunity of investing in money market instrument and benefit from the price advantage.

- The goal of a money-market fund is to preserve principal while yielding a modest return.
- Money-market mutual fund is akin to a high-yield bank account but is not entirely risk free.

**Q4 Write a short note on Inter Bank Participation Certificate.****Answer:**

Inter-Bank Participation Certificates are instruments issued by scheduled commercial banks only to raise funds or to deploy short term surplus. There will be two types of Participations:

- I. Inter-Bank Participations with Risk Sharing
- II. Inter-Bank Participations without Risk Sharing

The IBP with risk sharing can be issued for a period between 91 days to 180 days. The IBP without risk sharing is a money market instrument with a tenure not exceeding 90 days and the interest rate on such IBPs is left to be determined by the two concerned banks without any ceiling on interest rate.

Q5 Write short note on Commercial Bill.**Answer:**

A commercial bill is one which arises out of a genuine trade transaction i.e. credit transaction. As soon as goods are sold on credit, the seller draws a bill on the buyer for the amount due. The buyer accepts it immediately agreeing to pay amount mentioned therein after a certain specified date. Thus, a bill of exchange contains a written order from the creditor to the debtor, to pay a certain sum, to a certain person, after a certain period. A bill of exchange is a 'self-liquidating' paper and negotiable; it is drawn always for a short period ranging between 3 months and 6 months.

Q6 What are the advantages of developed bill market?**Answer:**

A developed bill market is useful to borrowers, creditors and to financial and monetary system as a whole. The bill market scheme will go a long way to develop the bill market in the country. The following are various advantages of developed bill market

- i) Bill finance is better than cash credit. Bills are self-liquidating and the date of repayment of banks loan through discounting or rediscounting is certain.
- ii) Bills provide greater liquidity to their holders because they can be shifted to others in the market in case of need for cash.
- iii) A developed bill market is also useful to the banks in case of emergency. In the absence of such market the banks in need of cash have to depend either on call money market or the Reserve Bank's loan window.
- iv) The commercial bill rate is much higher than the Treasury bill rate. Thus, the commercial banks and other financial institutions with short term surplus funds find in bills an attractive source of both liquidity as well as profit.
- v) A developed bill market will also makes the monetary system of the country more elastic.

Q7 Write short note on Certificate of Deposits.**Answer:**

A certificate of deposit (CD) is a fixed-deposit investment option offered by banks and lending institutions. It offers higher interest rates than conventional savings accounts because it requires investors to deposit funds for a specified term ranging from one month to more than five years. However, like savings accounts, CDs are a secure form of investment, as they are insured by government agencies.

A person can buy a certificate of deposit (CD) by depositing the minimum requisite amount. In general, the higher the deposited amount, the better will be the interest rate offered on it. The buyer of a CD receives a written declaration or certificate where the applicable interest rate, term of deposit and date of maturity are stated.

CDs can be issued by (i) scheduled commercial banks {excluding Regional Rural Banks and Local Area Banks}; and (ii) select All-India Financial Institutions (FIs) that have been permitted by RBI to raise short-term resources within the umbrella limit fixed by RBI.

Minimum amount of a CD should be Rs.1 lakh, i.e., the minimum deposit that could be accepted from a single subscriber should not be less than Rs.1 lakh, and in multiples of Rs. 1 lakh thereafter.

The **maturity period** of CDs issued by banks should not be less than 7 days and not more than one year, from the date of issue.

The FIs can issue CDs for a period not less than 1 year and not exceeding 3 years from the date of issue.

[Master Circular dated July 01, 2013: Guidelines for Issue of Certificate of Deposit, RBI/2013-14/104, IDMD.PCD.05/14.01/03/2013-14]

Q8 Write short note on Commercial Paper.

Answer:

What is it?

Commercial Paper (CP) is an unsecured money market instrument issued in the form of a promissory note.

Corporate, primary dealers (PDs) and the All-India Financial Institutions (FIs) are eligible to issue CP.

It is generally issued at a discount freely determined by the market to major institutional investors and corporations either directly by issuing corporation or through a dealer bank.

Commercial paper represents a form of financing that allows the issuer of the paper to borrow money at relatively low interest rates. The availability of funding through the commercial paper market means the firm can negotiate to get bank loans, another source of financing, on better terms. From the issuer's point of view, the inability to retire debt before the end of its term without paying a penalty is a disadvantage. The firm may want to retire the debt early and save money on interest payments.

Q9 What is Repo Rates?

Answer:

- ✓ Repo rate is the rate at which RBI lends to commercial banks generally against government securities.
- ✓ Reduction in Repo rate helps the commercial banks to get money at a cheaper rate.
- ✓ Increase in Repo rate discourages the commercial banks to get money as the rate increases and becomes expensive.

Q10 What is Reverse Repo Rates?

Answer:

- ✓ Reverse Repo rate is the rate at which RBI borrows money from the commercial banks.
- ✓ The increase in the Repo rate will increase the cost of borrowing and lending of the banks which will discourage the public to borrow money and will encourage them to deposit.
- ✓ As the rates are high the availability of credit and demand decreases resulting to decrease in inflation.
- ✓ Increase in Repo Rate and Reverse Repo Rate is a symbol of tightening of the policy. As of August 2013, the repo rate is 7.25 % and reverse repo rate is 6.25%

**Q11 What is Cash Reserve Ratio (CRR)?****Answer:**

- ✓ **Definition:** Cash Reserve Ratio (CRR) is a specified minimum fraction of the total deposits of customers, which commercial banks have to hold as reserves either in cash or as deposits with the central bank. CRR is set according to the guidelines of the central bank of a country.
- ✓ **Description:** The amount specified as the CRR is held in cash and cash equivalents, is stored in bank vaults or parked with the Reserve Bank of India. The aim here is to ensure that banks do not run out of cash to meet the payment demands of their depositors. CRR is a crucial monetary policy tool and is used for controlling money supply in an economy.
- ✓ CRR specifications give greater control to the central bank over money supply. Commercial banks have to hold only some specified part of the total deposits as reserves. This is called fractional reserve banking.

Q12 What is Statutory Liquidity Ratio (SLR)?**Answer:**

- ✓ Statutory liquidity ratio refers to the amount that the commercial banks require to maintain in the form of gold or govt. approved securities before providing credit to the customers. Here by approved securities we mean, bond and shares of different companies.
- ✓ Statutory Liquidity Ratio is determined and maintained by the Reserve Bank of India in order to control the expansion of bank credit. It is determined as percentage of total demand and time liabilities.
- ✓ Time Liabilities refer to the liabilities, which the commercial banks are liable to pay to the customers after a certain period mutually agreed upon and demand liabilities are such deposits of the customers which are payable on demand.
- ✓ Example of time liability is a fixed deposits for 6 months, which is not payable on demand but after six months. Example of demand liability is deposit maintained in saving account or current account, which are payable on demand through a withdrawal form of a cheque.
- ✓ SLR is used by bankers and indicates the minimum percentage of deposits that the bank has to maintain in form of gold, cash or other approved securities. Thus, we can say that it is ratio of cash and some other approved liabilities (deposits). It regulates the credit growth in India.

Q13 Write short not on Treasury Bills**Answer:**

- ✓ Treasury Bills: Treasury bills are short-term debt instruments of the Central Government, maturing in a period of less than one year.
- ✓ Treasury bills are issued by RBI on behalf of the Government of India for periods ranging from 14 days to 364 days through regular auctions.
- ✓ They are highly liquid instruments and issued to tide over short-term liquidity shortfalls.
- ✓ Treasury bills are sold through an auction process according to a fixed auction calendar announced by the RBI.
- ✓ Banks and primary dealers are the major bidders in the competitive auction process. Provident Funds and other investors can make non-competitive bids. RBI makes allocation to non-competitive bidders at a weighted average yield arrived at on the basis of the yields quoted by accepted competitive bids.
- ✓ These days the treasury bills are becoming very popular on account of falling interest rates.
- ✓ Treasury bills are issued at a discount and redeemed at par. Hence, the implicit yield on a treasury bill is a function of the size of the discount and the period of maturity. Now, these bills are becoming part of debt market.

- ✓ In India, the largest holders of the treasury bills are commercial banks, trust, mutual funds and provident funds. Although the degree of liquidity of treasury bills are greater than trade bills, they are not self liquidating as the genuine trade bills are.
- ✓ T-bills are claim against the government and do not require any grading or further endorsement or acceptance.

Q14 What is interest rate risk, reinvestment risk & default risk & what are the types of risk involved in investments in G-Sec.?

Answer:

(i) Interest Rate Risk:

- ✓ Interest Rate Risk, market risk or price risk are essentially one and the same. These are typical of any fixed coupon security with a fixed period to maturity.
- ✓ This is on account of inverse relation of price and interest. As the interest rate rises the price of a security will fall.
- ✓ However, this risk can be completely eliminated in case an investor's investment horizon identically matches the term of security.

(ii) 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.

(iii) 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. However, these securities suffer from a small variant of default risk i.e. maturity risk.
- ✓ Maturity risk is the risk associated with the likelihood of government issuing a new security in place of redeeming the existing security. In case of Corporate Securities it is referred to as credit risk.



Merger Acquisition & Restructuring

Q1 What are the different types of Merger?

Answer:

- **A Horizontal Merger** is usually between two companies in the same business sector. The example of horizontal merger would be if a health care system buys another health care system. This means that synergy can be obtained through many forms including such as; increased market share, cost savings and exploring new market opportunities.

- **A Vertical Merger** represents the buying of supplier of a business. In the same example as above if a health care system buys the ambulance services from their service suppliers is an example of vertical buying. The vertical buying is aimed at reducing overhead cost of operations and economy of scale.

- **Conglomerate Merger** is the third form of M&A process which deals the merger between two irrelevant companies. The example of conglomerate M&A with relevance to above scenario would be if the health care system buys a restaurant chain. The objective may be diversification of capital investment.

- **Congeneric Merger** is a merger where the acquirer and the related 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.

Q2 Write short notes on Friendly and Hostile takeover.

Answer:

Friendly takeover

The acquisition of one firm by another where the owners of both firms agree to the terms of the takeover transaction is known as friendly takeover.

Hostile takeover

A hostile takeover of a corporation results from a takeover that is opposed by the target corporation's directors. In a tender offer, an acquiring entity offers the target corporation's shareholders cash in exchange for their shares. If the acquiring corporation obtains enough shares, it can approve a merger resolution or, alternatively, simply operate the corporation as its subsidiary by replacing its directors and officers with its own appointees and direct corporate affairs in this manner.

Whether a purchase is perceived as being a "friendly" one or a "hostile" depends significantly on how the proposed acquisition is communicated to and perceived by the target company's board of directors, employees and shareholders.

Q3 What are the various antitakeover strategies?

or What do you mean by Defending against takeover bid?

Answer:

Takeover defenses include actions by managers to resist having their firms acquired by other companies. There are several methods to defend a takeover.

1. **Crown Jewel Defense:** The target company has the right to sell off the entire or some of the company's most valuable assets when facing a hostile bid in the hope to make the company less attractive in the eyes of the acquiring company and to force a drawback of the bid.

2. **Poison Pill:** The logic behind the pill is to dilute the targeting company's stock in the company so much that bidder never manages to achieve an important part of the company without the consensus of the board.
3. **Poison Put:** Here the company issue bonds which will encourage the holder of the bonds to cash in at higher prices which will result in Target Company being less attractive.
4. **Greenmail:** Greenmail involves repurchasing a block of shares which is held by a single shareholder or other shareholders at a premium over the stock price in return for an agreement called as standstill agreement. In this agreement it is stated that bidder will no longer be able to buy more shares for a period of time often longer than five years.
5. **White Knight:** The target company seeks for a friendly company which can acquire majority stake in the company and is therefore called a white knight. The intention of the white knight is to ensure that the company does not lose its management. In the hostile takeover there are lots of chances that the company acquired changes the management.
6. **White squire:** A different variation of white knight is white squire. Instead of acquiring the majority stake in the target company white squire acquires a smaller portion, but enough to hinder the hostile bidder from acquiring majority stake.
7. **Golden Parachutes:** A golden parachute is an agreement between a company and an employee (usually upper executive) specifying that the employee will receive certain significant benefits if employment is terminated. This will discourage the bidders and hostile takeover can be avoided.
8. **Pac-man defense:** The target company itself makes a counter bid for the Acquirer Company and let the Acquirer Company defence itself which will call off the proposal of takeover.

Q4 What do you mean by Takeover by reverse bid or Reverse Bid or Reverse Merger?

Answer:

"Acquisition" usually refers to a purchase of a smaller firm by a larger one. Sometimes, however, a smaller firm will acquire management control of a larger and/or longer-established company and retain the name of the latter for the post-acquisition combined entity. This is known as a **reverse takeover**. Another type of acquisition is the **reverse merger**, a form of transaction that enables a **private company** to be publicly listed in a relatively short time frame. A reverse merger occurs when a privately held company (often one that has strong prospects and is eager to raise financing) buys a publicly listed shell company, usually one with no business and limited assets.

Three test requirement for takeover by reverse bid

1. The assets of the transferor company are greater than the transferee company.
2. Equity capital to be issued by the transferee company for acquisition should exceed its original share capital.
3. There should be a change of control in transferee company by way of introduction of a minority holder or group of holders

Q5 Write short note on Chop Shop Method.

Answer:

Chop shop methods seeks to identify the companies having different segments of operations which if separated can fetch more value.

It's simple

1. Find out the different business segments of the target company.
2. Calculate the value of the each of the basis (sales, assets etc.). It is the sum total of the (basis x applicable capitalization ratio).
3. Average of the all the basis will be the average theoretical value of the target company.

**Q6 Write short note on Leverage Buy Out (LBO).****Answer:**

A leveraged buyout (LBO) is an acquisition (usually of a company, but can also be single assets such as a real estate property) **where the purchase price is financed through a combination of equity and debt** and in which the cash flows or assets of the target are used to secure and repay the debt.

In other words, the acquisition of another company using a significant amount of borrowed money (bonds or loans) to meet the cost of acquisition. Since the debt always has a lower cost of capital than the equity, the returns on the equity increase with increasing debt. The debt thus effectively serves as a lever to increase returns which explains the origin of the term LBO.

LBOs can have many different forms such as Management Buy-out (MBO), Management Buy-in (MBI), secondary buyout and tertiary buyout, among others, and can occur in growth situations, restructuring situations and insolvencies.

Q7 Write short note on Management Buy Out (MBO).**Answer:**

A management buyout (MBO) is a form of acquisition where a company's existing manager acquires a large part or all of the company from either the parent company or from the private owners.

Management buyouts are similar in all major legal aspects to any other acquisition of a company. The particular nature of the MBO lies in the position of the buyers as managers of the company,

An MBO can occur for a number of reasons

1. The owners of the business want to retire and want to sell the company to the management team they trust (and with whom they have worked for years).
2. The owners of the business have lost faith in the business and are willing to sell it to the management (who believes in the future of the business) in order to get some value for the business.
3. The managers see a value in the business that the current owners do not see and do not want to pursue.

Q8 Write short note on 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.

Q9 Write short note on Demerger.**Answer:**

Demerger: The word 'demerger' is defined under the Income-tax Act, 1961. It refers to a situation where pursuant to a scheme for reconstruction/restructuring, an 'undertaking' is transferred or sold to another purchasing company or entity. The important point is that even after demerger, the transferring company would continue to exist and may do business.

Demerger is used as a suitable scheme in the following cases:

- Restructuring of an existing business
- Division of family-managed business
- Management 'buy-out'.

While under the Income tax Act there is recognition of demerger only for restructuring as provided for under sections 391 – 394 of the Companies Act, in a larger context, demerger can happen in other situations also.

Q10 Write short note on 'Economic Value Added'.**Answer:**

- ✓ Economic Value Added method (EVA): It is defined in terms of returns earned by the company in excess of the minimum expected return of the shareholders. EVA is calculated as follows:
 - ✓ $EVA = EBIT - \text{Taxes} - \text{Cost of funds employed} = \text{Net operating profit after taxes} - \text{Cost of Capital employed}.$
 - ✓ Where, net operating profit after taxes = Profit available to provide a return to lenders and the shareholders.
 - ✓ $\text{Cost of Capital employed} = \text{Weighted average cost of capital} \times \text{Capital employed}.$
 - ✓ EVA is a residual income which a company earns after capital costs are deducted. It measures the profitability of a company after having taken into account the cost of all capital including equity. Therefore, EVA represents the value added to the shareholders by generating operating profits in excess of the cost of capital employed in the business. EVA increases if:
 - (i) Operating profits grow without employing additional capital.
 - (ii) Additional capital is invested in projects that give higher returns than the cost of incurring new capital and
 - (iii) Unproductive capital is liquidated i.e. curtailing the unproductive uses of capital.
 - ✓ In India, EVA has emerged as a popular measure to understand and evaluate financial performance of a company. Several Companies have started showing EVA during a year as a part of the Annual Report. Infosys Technologies Ltd. and BPL Ltd. are a few of them.

Q11 Explain synergy in the context of Mergers 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. This may be result of complimentary services economics of scale or both.

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

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

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



Security Analysis

Q1 Explain the Efficient Market Theory in and what are major misconceptions about this theory?**Answer:**

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

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

- ✓ Weak form efficiency – Price reflect all information found in the record of past prices and volumes.
- ✓ Semi – Strong efficiency – Price reflect not only all information found in the record of past prices and volumes but also all other publicly available information.
- ✓ Strong form efficiency – Price reflect all available information public as well as private.

Q2 Explain the different challenges to Efficient Market Theory.**Answer:**

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. Other challenges are as follows:

(a) Limited information processing capabilities –

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

(b) Irrational Behaviour –

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

(c) Monopolistic Influence –

- ✓ A market is regarded as highly competitive. No single buyer or seller is supposed to have undue influence over prices.
- ✓ In practice, powerful institutions and big operators wield great influence over the market.
- ✓ The monopolistic power enjoyed by them diminishes the competitiveness of the market.

Q3 Explain the Empirical Evidence of Weak form Efficient Market Theory:

Answer:

Three types of tests have been employed to empirically verify the weak form of Efficient Market Theory- Serial Correlation Test, Run Test and Filter Rule Test.

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

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

-, +, -, -, -, +, +.

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

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

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

Q4 Explain in detail the Dow Jones Theory?

Answer:

Dow Jones Theory is the Bible for traders, who want to trade in stock market. Dow Jones Theory has been established by Charles Dow.

This most popular theory is regarding the behaviour of stock market prices according to Charles Dow

“The market is always considered as having three movements, all going at the same time.

- 1) Daily Fluctuations – This is the narrow movement from day to day.
- 2) Secondary movement – This is the short swing running from two weeks to a month or more and
- 3) Primary movement – This is the main movement, covering at least 4 years in its duration.

1. **Primary Movements:** They reflect the trend of the stock market from last one year to four years or sometimes even more. On study of the long range behaviour of market prices, it has been empirically observed that share prices go through definite phases, Where the prices are either consistently rising or falling. These phases are popularly known as bull and bear phases. So long as each successive rally or price advance reaches a higher level than the one before it, and each secondary reaction, or price decline, stops at a higher level than the previous one, primary trend is up. This is called a “Bull Market”. When each intermediate decline carries prices to successively lower levels and each intervening rally fails to bring them back up to the top level of the preceding



rally, the trend is down. This is called a “Bear Market”. Popularly Bull market is known by formation of “Higher Tops and Higher Bottoms”, and Bear Market is known by formation of “Lower Tops and Lower Bottoms”.

2. **Secondary Movements:** The secondary trends are intermediate declines or “corrective phase”, which occur in bull market and intermediate rallies which occur in bear markets. Normally they last from 4 weeks to 13 weeks. Generally it retraces 33.33% or 66.66% of primary movements. It is imperative to note here that secondary movements are always in opposite direction of the primary movements.
3. **Daily Movements:** They are irregular fluctuations, which occur every day in the market. These fluctuations are without any definite trend. Thus if the daily share market price index for a few months is plotted on the graph it will show both upward and downward fluctuations. These fluctuations are on account of speculative factors.
The theory advocates behaviour of stock price is 90% psychological and 10% logical. The behaviour is contingent upon the mood of the investors at large and this behaviour can fairly estimated by analyzing various price movements and volume of transactions.

Q5 Explain Elliot Wave Theory of Technical Analysis?

Answer:

The Elliott Wave Theory is named after Ralph Nelson Elliott. Inspired by the Dow Theory and by observations found throughout nature, Elliott concluded that the movement of the stock market could be predicted by observing and identifying a repetitive pattern of waves. In fact, Elliott believed that all of man's activities, not just the stock market, were influenced by these identifiable series of waves.

Simplifying Elliott Wave Analysis

Elliott Wave analysis is a collection of complex techniques. Approximately 60 percent of these techniques are clear and easy to use. The other 40 are difficult to identify, especially for the beginner. The practical and conservative approach is to use the 60 percent that are clear.

When the analysis is not clear, why not find another market conforming to an Elliott Wave pattern that is easier to identify?

From years of fighting this battle, we have come up with the following practical approach to using Elliott Wave principles in trading.

The whole theory of Elliott Wave can be classified into two parts:

- Impulse patterns
- Corrective patterns

Q6 Mention the various types of techniques used in economic analysis.**Answer:**

Some of the techniques used for economic analysis are:

- ✓ **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.
- ✓ **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:
 - **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.
 - **Roughly Coincidental Indicators:** They reach their peaks and troughs at approximately the same in the economy.
 - **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.
- ✓ **Economic Model Building Approach:** In this approach, a precise and clear relationship between dependent and independent variables is determined. GNP model building or sectorial analysis is used in practice through the use of national accounting framework.

Q7Mention the factors affecting Economic Analysis**Answer:**

Some of the economy wide factors are as under:

- (a) Growth Rates of National Income and Related Measures
- (b) Growth Rates of Industrial Sector
- (c) Inflation
- (d) Monsoon

Q8 Mention the factors affecting Industry Analysis**Answer:**

- (a) Product Life-Cycle;
- (b) Demand Supply Gap;
- (c) Barriers to Entry;
- (d) Government Attitude;
- (e) State of Competition in the Industry;
- (f) Cost Conditions and Profitability and
- (g) Technology and Research.

**Q9 Mention the various types of techniques used in company analysis.****Answer:**

- a. **Correlation & Regression Analysis:** Simple regression is used when inter relationship covers two variables. For more than two variables, multiple regression analysis is followed.
- b. **Trend Analysis:** The relationship of one variable is tested over time using regression analysis. It gives an insight to the historical behavior of the variable.
- c. **Decision Tree Analysis:** In decision tree analysis, the decision is taken sequentially with probabilities attached to each sequence. To obtain the probability of final outcome, various sequential decisions are given along with probabilities, then probabilities of each sequence is to be multiplied and then summed up.

Q10 Explain Various types of Charts**Solution:**

(i) Bar Chart : In a bar chart, a vertical line (bar) represents the lowest to the highest price, with a short horizontal line protruding from the bar representing the closing price for the period.

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

(iii) Point and Figure Chart: Point and Figure charts are more complex than line or bar charts. They are used to detect reversals in a trend.

Q11 What is Odd Lot Theory**Solution:**

- ✓ 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.

Q12 Discuss the Buy and Sell Signals provided by the moving averages**Solution:****1. Buy Signal**

- (i) Stock price line rise through the moving average line when graph of the moving average line is flattening out.
- (ii) Stock price line falls below moving average line which is rising.
- (iii) Stock price line which is above moving average line falls but begins to rise again before reaching the moving average line

**2. Sell Signal**

- (i) Stock price line falls through moving average line when graph of the moving average line is flattening out.
- (ii) Stock price line rises above moving average line which is falling.
- (iii) Stock price line which is slow moving average line rises but begins to fall again before reaching the moving average line.

Important Websites

- i) Securities and Exchange Board of India- www.sebi.gov.in
- ii) National Stock Exchange- www.nseindia.com
- iii) Bombay Stock Exchange- www.bseindia.com
- iv) Multi Commodity Exchange of India Ltd. - www.mcxindia.com
- v) Reserve Bank of India- www.rbi.org.in



Small Things, Big Score

1. The first step to score big is the belief that “You can do it.” Self confidence is must, put no place for fear in your mind. Be strong enough to face every obstacle.
2. While practicing questions make sure you practice your writing speed also. You have exactly 1.8 minutes for 1 mark.
3. Make sure you present the paper as if you are presenting it to the Chairman of your company you are finance manager in. It should be the best presentation ever. If you really want different result, make sure your paper is different than rest of the candidates. Writing the correct answer only is no more the criteria for passing, your level of language matters a lot.
4. Try to incorporate maximum number of working notes in your paper for every question and drawings wherever possible are an added advantage. Main answer should be on the top and working notes should follow it.
5. Before three months of the exam make sure you are following a time table strictly. With 5-6% results in CA Final, you really need to do something different from more than 1 lakh students preparing with you for the same exam.
6. Atleast 12 hours of studies on an average is required per day throughout the 3 months before exam. Motivation is the best medicine that will keep you survive throughout three months before the exams. Keep yourself motivated by talking to your mentors, reading to ranker’s interviews on internet, watching inspirational movies, and listening to motivational songs.
7. At exam hall there will be only one thing with you, it’s your brain. Keep it safe and fresh by proper sleep and food. These are indirectly related to your success.



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About the Author

CA Mayank Kothari is an Associate Member of the Institute of Chartered Accountants of India.

He has completed his graduation (BBA) from Nagpur University in 2010. He is teaching SFM at CA Final and FM and CA IPC level.

Achievements

1. Qualified the Chartered Accountancy exam in May 2012 held by ICAI.
2. Secured All India 47th Rank in CA Final and was topper in Nagpur division of ICAI.
3. Also, he received Gold Medal for securing highest, 88 Marks in Indirect Tax paper in Nagpur division.
4. He was felicitated with the Best Student Award from the hands of Vice Chancellor of Nagpur University.
5. He has worked with Deloitte, Haskins and Sells, Pune
6. He has successfully implemented the Lightboard Technology for education in India.

"It's very important for me to love what I do. It was important for me to find a career that I truly enjoy. You can find something that sort of excites you, that's half the battle of life."

"My Job is to not be easy on people; My Job is to make them better."

"Deciding what not to do is as important as deciding what to do."

"The ones who are crazy enough to think that they can change the world are the ones who do."

"If we kept putting great products in front of customers, they would continue to open their wallets."

"Being the richest man on the cemetery doesn't matter to me... Going to bed saying we've done something wonderful... That's what matters to me."



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CA Final SFM