ALL THE VERY BEST FOR YOUR EXAMS

SHORT NOTES FOR

CAIIB

ADVANCED BANK MANAGEMENT

Though we had taken enough care to go through the notes provided here, we shall not be responsible for any loss or damage, resulting from any action taken on the basis of the contents. Creation of these short notes is the efforts of so many persons. First of all we thank all of them for their valuable contribution. We request everyone to go through the Macmillan book and update yourself with the latest information through RBI website and other authenticated sources. In case you find any incorrect/doubtful information, kindly update us also (along with the source link/reference for the correct information).

K Murugan, MCA MBA CAIIB

CAIIB – GENERAL INFORMATION

Consists of 3 papers :

I. Compulsory Paper

1. Advanced Bank Management
2. Bank Financial Management

II. Elective Papers (Candidates to choose any one of their Choice)

1. Corporate Banking
2. Rural Banking
3. International Banking
4. Retail Banking
5. Co-operative Banking
6. Financial Advising
7. Human Resources Management
8. Information Technology
9. Risk Management
10. Central Banking
11. Treasury Management

- Only existing employees of banks and cleared JAIIB can appear for CAIIB Exam.
- CAIIB exams are conducted in on-line mode only.
- The examination will be conducted normally twice a year in May / June and November / December on Sundays.
- The duration of the examination will be of 2 hours.
- **Examination Pattern** : (i) Question Paper will contain 100 objective type multiple choice questions for 100 marks including questions based on case studies. The Institute may however vary the number of questions to be asked for a subject. Generally 60-65% theory based and 35-40% case study / problem solving/Analytical /Logical exposition. There is no negative marking for wrong answers.
- **Passing Criteria** - Minimum 150 in total and minimum 45 in each subject in any single attempt (not required to be the 1st attempt) is considered as pass. Else 50 in each subject. Passed subject gets carried forward to 4 continuous attempts (whether you appear for the exam or not) from the 1st attempt. If not passed in 4 continuous attempts, you need to appear in all 3 papers.
    - **First Class :** 60% or more marks in aggregate and pass in all the subjects in the FIRST PHYSICAL ATTEMPT.
    - **First Class with Distinction :** 70% or more marks in aggregate and 60% or more marks in each subject in the FIRST PHYSICAL ATTEMPT.
    - Candidates who have been granted exemption in the subject/s will be given **"Pass Class"** only.

- **Cut-off Date of Guidelines /Important Developments for Examinations** - The Institute has a practice of asking some questions in each exam about the recent developments/ guidelines issued by the regulator(s) in order to test if the candidates keep themselves abreast of the current developments. But, there could be changes in the developments / guidelines from the date the question papers are prepared and the dates of the actual examinations. In order to address these issues effectively, it has been decided that:

    - In respect of the exams to be conducted by the Institute for the Period from February 2018 to July 2018, instructions/guidelines issued by the regulator(s) and important developments in banking and finance up to 31st December, 2017 will only be considered for the purpose of inclusion in the question papers.

    - In respect of the exams to be conducted by the Institute for the period from August 2018 to January 2019, instructions/guidelines issued by the regulator(s) and important developments in banking and finance up to 30th June, 2018 will only be considered for the purpose of inclusion in the question papers.

- **Exam Fees**

JAIIB
First attempt fee - 2,400*
Second attempt fee - 1,000*
Third attempt fee - 1,000*
Fourth attempt fee - 1,000*

DBF
First attempt fee - 3,200*
Second attempt fee - 1,000*
Third attempt fee - 1,000*
Fourth attempt fee - 1,000*

CAIIB
First attempt fee - 2,700*
Second attempt fee - 1,000*
Third attempt fee - 1,000*
Fourth attempt fee - 1,000*

* Plus convenience charges and Taxes as applicable

SYLLABUS

The details of the prescribed syllabus which is indicative are furnished below. However, keeping in view the professional nature of examinations, all matters falling within the realm of the subject concerned will have to be studied by the candidate as questions can be asked on all relevant matters under the subject. Candidates should particularly prepare themselves for answering questions that may be asked on the latest developments taking place under the various subject/s although those topics may not have been specifically included in the syllabus. Any alterations made will be notified from time to time. Further, questions based on current developments in banking and finance may be asked.

Candidates are advised to refer to financial news papers / periodicals more particularly "IIBF VISION" and "BANK QUEST" published by IIBF.

MODULE - A: Economic Analysis

The fundamentals of Economics : Scarcity and Efficiency - Microeconomics & Macroeconomics in brief - Types of economies - Market, Command and Mixed Economies - Macroeconomics : Business cycles - Money and banking - Unemployment & inflation - Interest rate determination and various types of interest rates.

Indian Economy (a) Overview of the Indian economy including recent reforms (b) Interaction between fiscal, monetary & exchange rate policies in India - Financial Markets (i) Money Market Capital Market (iii) Foreign Exchange Market - globalisation and its impact - Challenges ahead - Banking & Finance - current issues

MODULE - B : Business Mathematics

Concept of time Value of Money - Net Present Value - Discounted Cash Flow - Sampling methods - presentation of data - analysis and interpretation of sample data - hypothesis testing - Time series analysis - mean / standard deviation - co-relation - Regression - covariance and volatility - Probability distribution - Confidence interval analysis - estimating parameters of distribution - Bond valuation - duration - modified duration.

Linear programming - decision making-simulation - Statistical analysis using spreadsheets. Features of Spread sheet - Macros, pivot table, statistical and mathematical formulae.

MODULE - C : HRM in banks

Fundamentals of HRM, development of HRM in India, Relationship between HRM and HRD, Structure and functions of HRD, Role of HR professional, Human implications of organizations; training and development, attitude and soft skills development, role and impact of training, career path planning and counseling, employee behaviour, theories of motivation and their practical implications, role concepts and analysis, self development., Performance Management and appraisal systems; Reward / punishment and compensation systems., HRM and Information Technology, information and data management, knowledge management.

MODULE - D : Credit Management

Principles of Credit Management Credit Appraisal Analyzing Financial Performance - Relationship between items in Balance Sheet and Profit and Loss Account. Trend Analysis, Comparative Statement - Common size Statement, Preparation of projected Financial Statements. - Ratio analysis - Interpretation and analysis of different Ratios, Limitation of the use of ratios. Statement of Sources and Applications of Funds.

Structuring a Credit Proposal - Working Capital Concept and Management Appraisal techniques for different constituents - trade cycle - credit rating - Technical and economic feasibility studies - Credit Rating - Rating Methodology - Objectives and benefits of rating - Term Lending - Debt Service Coverage Ratio - Cash Flow Analysis - Cash Budget - Bill Finance - Deferred Payment Guarantee - Credit Scoring - Credit Delivery System - Documentation - Post sanction supervision, Control and monitoring of credit - Consortium finance, Multiple banking, Syndication of loans. Infrastructure financing.

Dealing with credit defaults, Stressed assets, Corporate Debt restructuring, SARFAESI, NPAs, recovery options, write-off. Disclosure of the list of defaulters: objectives and procedure. Appraisal methodology for different type of clients / products.

MODULE - A - ECONOMIC ANALYSIS

UNIT - 1 - Fundamentals of Economics, Microeconomics & Macro Economics and Types of Economies

1) Economics is "The science which studies human behavior as a relationship between ends and scarce means which have alternative uses. "
2) The essence of Economics is to acknowledge the reality of scarcity and then figure out how to organize society in a way which produces the most efficient use of resources.
3) **Adam Smith** is the Father of Modern Economics.
4) **An Enquiry into the Nature and Causes of the Wealth of Nations (published in 1776)** is written by Adam Smith.
5) Economics is the study of **how wealth is produced and consumed.**
6) **Smith's** definition is known as **Wealth Definition**. It gave more importance to wealth than to man for whose use wealth is produced.
7) Welfare Definition is coined by **Prof. Alfred Marshal**. He described Economics as **a science of human welfare.**
8) **Scarcity Definition** is coined by **Prof. Lionel Robbins.**
9) Prof. Lionel Robbins defines Economics as study of **"means" and "Ends".**
   a. Man has **unlimited wants**
   b. The means to satisfy human **wants are limited**
   c. Resources are not only **limited but have alternative uses**
   d. Man has to make a choice.
10) **Adam Smith** is considered to be the **Founder of the field Micro Economics.**
11) **Micro Economics** is concerned with the behaviour of individual entities such as markets, firms, and households.
12) **Macro Economics** is a branch of Economics that deals with the performance, structure and behaviour of a national or regional economy as a whole and concerned with the overall performance of the Economy.
13) Founder of the field of **Macro Economics is John Maynard Kenes.**
14) John Maynard Kenes wrote the book **"General Theory of Employment, Interest and Money".**
15) **An analysis of causes of Business cycles** is developed **by Mr. Kenes.**
16) **A market Economy/ Capitalistic Economy** is one in which individuals and private firms make the major decisions about production and consumption. E.g.: United Kingdom.
17) **A Command Economy/Socialistic Economy** is one in which the government makes all important decisions about production and distribution.
18) **Mixed Economy** is where public sector, private sector and joint sector coexist and complement each other. E.g.: India
19) **Laissez – faire Economy** is the extreme case of a Market Economy.

Unit – 2 : SUPPLY & DEMAND

1) Theory of Supply and Demand shows how consumer preferences determine consumer demand for commodities, while business costs determine the supply of commodities.
2) The relationship that exists between price and quantity bought is called as **the Demand Schedule or the Demand Curve.** The quantity demanded **increases** with the **fall in price.**
3) Quantity and Price are **inversely related.**
4) The graphical representation of the demand schedule is called as the **Demand Curve.**
5) **Law of Downward – sloping demand:** When the Price of a commodity is raised (and other things being constant), buyers tend to buy less of the commodity. Similarly, when the price is lowered, other things being constant, quantity demanded increases.
6) Market Demand curve **obey the Law of Downward- Slopping demand**
7) A Down ward slopping Demand Curve relates Quantity Demanded **to Price**
8) Factors influences the Demand Curve
- Average levels of income - The size of market/population
- The prices and availability of related goods - Tastes or Preferences - Special Influences
9) The **Supply Schedule** relates the quantity supplied of a good to its market price, other things being constant.
10) Shifts in Supply Means **when changes in factors other than goods own price affect the quantity supplied.**
11) The Supply Schedule (or Supply Curve) for a commodity shows the relationship between **its market price and the amount of that commodity those producers is willing to produce and sell, other things being constant.**
12) **Forces behind the supply Curve**:
- Cost of Production - Prices of inputs and technological advances - Government Policy
- Prices of related goods - Special Factors like weather influence on farming and agro-industry
13) Supply increases (or Decreases) when the amount supplied increases (or Decreases) at each **market price.**
14) **Supply and demand interacts** to produce equilibrium price and quantity or market equilibrium.
15) **The Market Equilibrium** comes at that price and quantity where the forces of supply and **demand are in balance.**
16) **At the Equilibrium price**, the amount that buyers want to buy is just equal to the amount that sellers want to sell.
17) **A Market equilibrium** comes at the price at which quantity demanded equals quantity supplied.
18) The Equilibrium Price is also called as the **Market Clearing Price.**

...

Unit – 3 : MONEY SUPPLY & INFLATION

1) **Money** is anything which performs the following four functions:
- Medium of Exchange - A measure of value
- A store of value over time - Standard for deferred payments

2) **Medium of Exchange**: Individual goods and services and other physical assets, are "priced" in terms of money and are exchanged using money.

3) **A Measure of Value**: Money is used to measure and record the value of goods or services.

4) **A Store of value over time**: Money can be held over a period of time and used to finance future payments.

5) **Standard for Deferred Payments**: Money is used as an agreed measure of future receipts and payments in contracts.

6) **Money supply** refers to the stock of money in circulation in the economy at a given point of time. This is partly **exogenous (Decided by the Govt and the RBI) and partly endogenous**.

7) There are **four common measures of Money supply**, commonly used in India:
- **Narrow Money (M1)=** Currency with Public Demand Deposits with Banking System + 'Other" Deposits with the RBI
- **M2** = M1+ Savings deposits of Post Office Savings Banks
- **M3** = M1+ Time Deposits with the Banking System
- **M4** = M3+ All Deposits with post office savings banks (Excluding NSCs)

8) **Currency with Public = Currency in circulation - Cash held by banks.**

9) **Demand Deposits** = All liabilities which are payable on demand and they include current Deposits, demand liabilities portion of saving Banks Deposits, margins held Against LC/BG, Balance in OD FDs, Cash Certificates and Cumulative/RDs etc.

10) "**Time Deposits"=** which are payable otherwise than on demand and they include fixed Deposits, Cash Certificates, Cumulative and recurring Deposits, time Liabilities portion of savings bank deposits, etc.

11) **The concept of Inflation refers** to a sustained rise in the general level of prices of goods and services in an economy over a period of time.

12) Inflation leads to fall in **purchasing power.**

13) **Causes of Inflation:**
- Demand-pull inflation
- **Cost – Push Inflation**

14) Demand – pull Inflation is a rise in general prices caused by increasing aggregate demand for goods and services.

15) **Cost- Push Inflation** is a type of inflation caused by substantial increases in the cost of production of important goods of services, where no suitable alternative is available.

16) Measure of Inflation: - Calculating inflation with Price Indexes

17) Inflation = (Price Index in Current Year–Price index in Base Year) X 100/Price index in Base Year

18) There are 4 Important Price Indexes
- **Wholesale Price Index (WPI)**
- **Food Inflation Index (FII)**
- **Consumer Price Index (CPI)**
- **GDP Deflator**

19) Wholesale Price Index: The WPI reflects the change in the level of prices of a basket of goods at the wholesale level. WPI focuses on the price of goods traded between corporations at the wholesale stage, rather than goods bought by consumers.

20) In India **WPI (Headline Inflation)** is the official inflation index used for policy decisions.

21) **WPI** announced in Monthly frequency.

22) The different components along with their weightage in **Wholesale Price Index (WPI).**

Primary Articles	
Food Articles	15.4025
Non Food Articles	6.1381
Minerals	0.4847
Sub Total	**22.0253**
Fuel, Power, Light & Lubricants	
Coal Mining	1.7529
Mineral Oils	6.9896
Electricity	5.4837
Sub Total	**14.2262**
Manufactured Products	

Food Products	11.5378
Beverages, Tobacco and Tobacco Products	1.3391
Textiles	9.7999
Wood and Wood Products	0.1731
Paper and Paper Products	2.0440
Leather and Leather Products	1.0193
Rubber and Plastic Products	2.3882
Chemicals and Chemical Products	11.9312
Non-Metallic Mineral Products	2.5159
Machinery and Machine Tools	8.3633
Transport Equipment and Parts	4.2948
Basic Metals and Alloys	8.3419
Sub Total	**63.7485**
Grand Total	**100.00**

23) The Base year for **WPI is 1993-94.**

24) From August 2010 onwards, **Base Year for WPI is changed to 2004-05**. And the weightage are as follows: (Source: Business Line 15-09-10)

25) The Indices for the Food Group and fuel group will be announced on **weekly basis.**

26) **Consumer Price Index (CPI**): The CPI reflects the change in the level of prices of a basket of Goods and services purchased/consumed by the households.

27) CPI is **the cost of living index popularly known as Core Inflation.**

28) There are four measures of CPI,
- **The CPI for Industrial Workers (IW) has a broader coverage than the others**
- **The CPIs for Agricultural Labourers (AL),**
- **Rural Labourers (RL)**
- **And Urban Non-Manual Employees (UNME).**

29) In the organized sector, CPI-IW is **used as a cost of living index.**

30) Among the four measures of CPI, the CPI **for Industrial Workers (IW) has a broader coverage than the others.**

31) Why do the WPI and the CPIs differ?

They differ in terms of their weighting pattern. First, food has a larger weight in CPIs - ranging from 46 per cent in CPI-IW to 69 per cent in CPI-AL, whereas it has a weight of only 27 per cent in the WPI. The CPIs are, therefore, more sensitive to changes in prices of food items.

32) CPI in India is released by **Labour Bureau, Ministry of Labour and Employment, Government of India.**

33) **Since 1943 the Central Government** took upon itself the job of compilation and maintenance of Consumer Price Index Numbers in pursuance of the recommendations of the **Rau Court of Enquiry.**

34) The Consumer Price Index Numbers for Industrial Workers (CPI-IW) for 50 centers and All-India weighted index on base 1960=100 was started on the basis of the **Weighting Diagram drawn by conducting the Family Living Survey (FLS) in 1958-59.**

35) The **current series (1982=100)** replaced the old (1960=100) series with effect **from October, 88.**

36) **GDP Deflator:** it is measure of the level of prices of all new, domestically produced, final Goods and services in an economy.

37) GDP deflator is not **based in a fixed basket of Goods and services**

..

Unit – 4 : Theories of Interest

1) **Interest** is a payment made by a borrower for the use of a sum of money for a period of time.

2) **Three elements can be distinguished in interest:**
- **Payment for the risk involved in making the loan**
- **Payment for the trouble involved**
- **Pure interest, i.e. a payment for the use of money.**

3) J M Keynes in his book **"The General Theory of Employment, Interest and Money"** views that the rate of interest is purely **monetary phenomenon and is determined by Demand for money and supply of money.**

4) J M Keynes theory is known as **"Liquidity Preference Theory"**

5) Rate of interest and bond prices are **inversely related.**

6) Money Demand curve follows from above that quantity of **money demanded increases with the fall in the rate of interest or with the increase in level of nominal income**.

7) The rate of interest is determined **by demand for money (Liquidity Preference) and supply of money – JM Kenes.**

8) The position of money demand curve depends upon two factors: **1) The level of nominal income and 2) the expectation about the changes in bond prices in the future which implies change in rate of interest in future.**

9) IS and LM curves Theory promulgated by **Sir Hon Richard Hicks and Alvin Hansen.**

10) The IS curve and the LM curve relate the two variables **a) Income and b) the rate of interest. The intersection point of the two curves is the equilibrium rate of interest.**

11) LM= **Liquidity preference and Money supply equilibrium**. LM curve is derived from **Kenes Liquidity preference theory of interest.**

12) IS = **Classical Theory**

..

Unit – 5 : Business Cycles

1) The term Business cycle **refers to economy-wide fluctuations in production or economic activity over several months or years.**

2) Business Cycle is also known as **Economic Cycle.**

3) Business Cycle simply means **the whole course of business activity which passes through the phases of prosperity and depression.**

4) A business Cycle is **not a regular, predictable, or repetitive phenomenon** like the swing of the pendulum of a clock. Its timing is random and, to a large degree, unpredictable.

5) Characteristics **of a Business Cycle**:

i. A business cycle is synchronic ii. A business cycle show a wave like movement
iii. Cyclical fluctuations are recurring in nature
iv. There can be no indefinite depression or eternal boom period
v. Business cycles are pervasive in their effects. vi. The up and down movements are not symmetrical

6) Phases of Business Cycle:
Boom **Recession** **Depression** **Recovery**

7) **Boom:**
- During the Boom phase production capacity is fully utilized and also products fetch an above normal price which gives higher profit.
- In Boom period, consumption will be decreased as prices are going up.
- The Demand is more or less stagnant or it even decreases.

8) **Recession:**
- A downward tendency in demand is observed. The supply exceeds demand
- Desire for liquidity increases all around.
- Producers are compelled to reduce price so that they can find money to meet their obligations.
- This Phase of the business cycle is known as the Crisis.

9) **Depression:**
- Underemployment of both men and materials is a characteristic of this phase. General Demand falls faster than production
- Volume of Production will be reduced.
- The demand for the bank credit is at its lowest which results in idle funds.
- The interest rates are decline regime.

10) **Recovery:**
- Depression phase done not continue indefinitely.
- Wages will be paid low.
- Prices are at the lowest, the consumers, who postponed their consumption expecting a still further fall in price, now start consuming.
- As demand increases, the stocks of goods become insufficient.

Unit – 6 : Indian Economy and Various Sectors of the Economy

1) The average growth rate of the Indian Economy over a period of 25 Years since 1980-81 was **about 6.00%.**

2) During 2000-01 to 2007-08, the growth rate is 7.20% when compared with 2003-04 to 2007-08.

3) **Various sectors of Indian economy**:
i. Agriculture ii. Industry
iii. Micro and Small Enterprises (MSEs) iv. Services

4) The average growth rate of the Indian Economy over a period of 25 Years since 1980-81 was **about 6.00%.**

5) **Agriculture Sector** is one of the most important sectors of Indian economy.

6) Agriculture Sector accounted for **17%** of GDP in **2008-09.**

7) **Industry Sector** accounts for **19% of GDP in 2008-09**. About **1/3rd** of the industrial labour force is engaged in simple household manufacturing only.

8) Central Statistical Organisation (CSO) classifies the **industrial sector into 3 segments**
i. Mining and Quarrying ii. Manufacturing and Electricity iii. Gas and Water Supply.

9) The Sector of **MSME** is accounted for around **39 % of total industrial production**, **34% of the exports** in the industrial sector and around **35%** if total Employment among units engaged in manufacturing and services.

10) The MSMED Act, 2006 classifies enterprises broadly **into two categories**
i. **Manufacturing enterprises ii) Service Enterprises**.

11) These broad categories are further classified into **Micro Enterprises, Small Enterprises and medium enterprises, depending up on the level of investment in plant and machinery** and equipment as the case may be.

12) The Service Sector accounts for about **2/3rd of India's GDP** i.**e. 64% in 2008-09.**

13) Service Sector is also called as **Tertiary Sector.**

..

Unit – 7 : Economic Reforms

1) The economic Reforms started **in 1991**.

2) Real Sector Policy measures mainly focused on **the manufacturing sector in the early stages of reform process.**

3) MRTP Act **Monopolies and Restrictive Trade Practices Act, 1969**

4) APMC Act **(Agricultural Produce Market Committee Act)**

5) The primary objective of The APMC Act in each state of India requires all agricultural products to be sold only in government - regulated markets. This was amended and permitting the farmers to bypass the mandatory requirement of regulated market.

6) Essential Commodities Act, **1955**

7) Financial Sector reforms have been arrived out in accordance with the recommendations made by basically three committees:
i. **Narasimham Committee** report on **financial sector Reforms (1992)**
ii. **Narasimham Committee** report on **Banking sector Reforms (1998)**
iii. S H Khan Report (1998) of the working group for harmonize the role and **operations of Development Financial Institutions and Banks reforms in financial Sector**

8) IRS- **Interest Rate Swaps**

9) FRA - **Forward Rate Agreements**

10) **Collateralized Borrowings and Lending Obligation** – CBLO

11) **CDs (Certificate of Deposits)** are short-term borrowings in the form of Usance Promissory Notes having a maturity of not less than 15 days up to a maximum of one year.

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

13) **Who can issue Commercial Paper (CP)?**
a. Highly rated corporate borrowers, primary dealers (PDs) and satellite dealers (SDs) and all-India financial institutions (FIs)

14) **Futures and options** represent two of the most common form of "Derivatives".

15) **Derivatives** are financial instruments that derive their value from an 'underlying'. The underlying can be **a stock issued by a company, a currency, Gold etc.**

16) The derivative instrument can be **traded independently of the underlying asset.**

17) The value of the derivative **instrument changes according to the changes in the value of the underlying.**

18) **Derivatives are of two types –**
i. Exchange traded and
ii. Over the counter.

19) **Exchange traded derivatives,** as the name signifies are traded through organized exchanges around the world. These instruments can be bought and sold through these exchanges, just like the stock market.

20) Some of the common exchange traded derivative instruments are futures and options.

21) **Over the counter (popularly known as OTC)** derivatives are not traded through the exchanges. They are not standardized and have varied features.

22) Some of the popular OTC instruments are **forwards, swaps, swaptions etc.**

23) **Futures**

24) A 'Future' **is a contract to buy or sell the underlying asset for a specific price at a predetermined time**. If you buy a futures contract, it means that you promise to pay the price of the asset at a specified time. If you sell a future, you effectively make a promise to transfer the asset to the buyer of the future at a specified price at a particular time. Every futures contract has the following features:
- Buyer - Seller - Price - Expiry

25) Some of the most popular assets on which futures contracts are available are equity stocks, indices, commodities and currency.

26) The difference between the price of the underlying asset in the spot market and the futures market is **called 'Basis'. (As 'spot market' is a market for immediate delivery)**

27) **Options**
Options contracts are instruments that give the holder of the instrument the right to buy or sell the underlying asset at a predetermined price.

28) An option can be a **'call' option or a 'put' option.**

29) A call option gives the buyer, the **right to buy the asset at a given price**. This 'given price' is **called 'strike price'**. It should be noted that while the holder of the **call option** has a right to **demand sale of asset from the seller**, the **seller has only the obligation and not the right.** For e.g.: if the buyer wants to buy the asset, the seller has to sell it. He does not have a right.

30) **A 'put' option** gives the buyer a right to sell the asset at **the 'strike price' to the buyer**. Here **the buyer has the right to sell and the seller has the obligation to buy.**

31) **The Payment and Settlement Systems Act, 2007** empowering the RBI to regulate and supervise payments and settlement system.

32) **Cheque Truncation System(CTS)**has been introduced in cheque clearing **July 08** in **New Delhi.**

33) G Sec is market auction related instruments and they are paid by **Ways and Means Advances, automatic monetization.**

34) Foreign investment is of two kinds – **(i) Foreign Direct Investment (FDI) and (ii) Foreign Portfolio Investment.**

35) 'FDI' means investment **by non-resident entity/person resident outside India in the** capital of the Indian company under **Schedule 1 of FEM** (Transfer or Issue of Security by a Person Resident outside India) Regulations 2000.

36) Portfolio investment in both **primary and secondary market by FII was opened up in 1992**

37) **ECB:**
i. Source of funds for corporate from abroad with advantage of
ii. lower rates of interest prevailing in the international financial markets
iii. longer maturity period
iv. for financing expansion of existing capacity as well as for fresh investment

38) **ECB** is Defined as to include commercial loans [in the form of bank loans, buyers' credit, suppliers' credit, securitized instruments (e.g. floating rate notes and fixed rate bonds, CP)] **availed from non-resident lenders with minimum average maturity of 3 years**

39) Poverty is measured by **Gini Coefficient**, a standard measure of Income/Expenditure in equality

40) The Gini coefficient, invented by the Italian statistician Corado Gini, is **a number between zero and one that measures the degree of inequality in the distribution of income in a given society**. The coefficient would register zero (0.0 = minimum inequality) for a society in which each member received exactly the same income and it would register a coefficient of one (1.0= maximum inequality) if one member got all the income and the rest got nothing

41) **Human Development Index (HDI)** a widely used indicator of Socio- Economic Conditions has place India at 132 out of 189 countries in the world in the year 2006.

42) **The Human Development Index (HDI) is a comparative measure of life expectancy, literacy, education and standards of living for countries worldwide**. It is a standard means of measuring well-being, especially child welfare. It is used to distinguish whether the country is a developed, a developing or an under-developed country, and also to measure the impact of economic policies on quality of life. **The index was developed in 1990 by Pakistani economist Mahbub ul Haq and Indian economist Amartya Sen.**

..

Unit – 8 : Monetary Policy and Fiscal Policy

1) Monetary Policy is the process by which the Government, Central Bank controls
i. The money supply ii. Availability of money and iii. Cost of money or rate of interest
In order to attain a set of objective oriented towards the growth and stability of the economy.

2) **Monetary policy** is referred to as either being **expansionary policy** or a **contractionary policy.**

3) An **expansionary policy increases** the total supply of money in the economy. This is used to combat **unemployment in a recession by lowering interest rates.**

4) A **contractionary policy** decreases the total money supply. This is used to combat **inflation by raising the interest rates.**

5) **Tools of Monetary policy:**
i. Bank Rate ii. Cash Reserve Ratio iii. Statutory Liquidity Ratio
iv. Market Stabilization Scheme v. Repo Rate vi. Reverse Repo Rate

vii. Open Market Operations

6) **Bank Rate**: It is also referred as Discount rate, is the rate of interest which a central bank charges on the loans and advances that it extends to commercial banks and other financial intermediaries.

7) Changes in the Bank Rate are often used by Central bank to **control the money supply.**

8) The **structure of interest rates** is administered by RBI.

9) **Cash Reserve Ratio (CRR):** The present banking system is called a **"Fractional Reserve Banking System,** as the banks are required to keep only a fraction of their deposit liabilities in the form of liquid cash with the central bank for ensuring Safety and liquidity of deposits.

10) **CRR was introduced in 1950** primarily as a measure to ensure safety and liquidity of bank deposits.

11) **Statutory Liquidity Ration (SLR)**: SLR refers to the amount that all banks requires maintaining in cash or in the form of Gold or approved securities.

12) Approved securities mean **dated securities, government bonds, and share of different companies.**

13) The SLR is determined as % of **Total Demand and Time Liabilities**

14) **Demand Liabilities**
Demand Liabilities' include all liabilities which are payable on demand and they include current deposits, demand liabilities portion of savings bank deposits, margins held against letters of credit/guarantees, balances in overdue fixed deposits, cash certificates and cumulative/recurring deposits, outstanding Telegraphic Transfers (TTs), Mail Transfer (MTs), Demand Drafts (DDs), unclaimed deposits, credit balances in the Cash Credit account and deposits held as security for advances which are payable on demand. Money at Call and Short Notice from outside the Banking System should be shown against liability to others.

15) **Time Liabilities.**
Time Liabilities are those which are payable otherwise than on demand and they include fixed deposits, cash certificates, cumulative and recurring deposits, time liabilities portion of savings bank deposits, staff security deposits, margin held against letters of credit if not payable on demand, deposits held as securities for advances which are not payable on demand and Gold Deposits.

16) **Market Stabilization Scheme:**
RBI introduced Market Stabilization Scheme after consulting GOI for mopping up liquidity of a more enduring nature. Under this scheme, the GOI issue existing instrument, such as Treasury Bills/ and or dated securities by way of auctions under the MSS, in addition to the normal borrowing requirements, for absorbing liquidity form the system.

17) **Repo Rate :**
Repo (Repurchase) rate is the rate at which RBI lends short-term money to the banks. Bank lending rates are determined by the movement of Repo Rate.

18) **Reverse Repo Rate :**
Reverse Repo Rate is the rate at which banks park their short term excess liquidity with the RBI. The RBI uses this tool when it feels there is too much money floating in the Banking System.

19) An Increase **in Reverse Repo means that the RBI will borrow money from the Banks at a higher rate of interest**, so banks would prefer to keep their money with the RBI.

20) **Open Market Operations :**
Under this, RBI buys or sells government bonds in the secondary market.

21) By absorbing bonds, it drives up bond **yields and injects money into the market. When it sells the bonds, it done so to such the money out of the system.**

22) **RBI's monetary policy 's objectives:**
- Monitor the global and domestic economic conditions and respond swiftly as required.
- Ensure higher bank credit expansion to achieve higher growth but at the same time protect the credit quality
- Maintain price stability and financial stability
- Give thrust on Interest Rate Management, Inflation Management and Liquidity Management.

23) **Fiscal Policy :**
Fiscal Policy is the use of government spending and revenue collection the economy.
Fiscal Policy refers to the overall effect of the budget outcome on economic activity.

24) FRMB Act : **Fiscal Responsibility and Budget Management Act – 2003**

25) **Dr E A S Sharma Committee January, 2000** recommended draft legislation on fiscal responsibility.

26) **FRBM requirements are**

- The Government to place before Parliament 3 statement each year along with Budgets, Covering Medium Term Fiscal Policy, Fiscal Policy Strategy and Macroeconomic Framework
- Center to reduce the fiscal deficit (Generally 3% of GDP) and more categorically to "Eliminate revenue deficit' by 31-03-2008. Government to set a ceiling on guarantee (0.5% o GDP)
- Act prohibits the Center form borrowing from the RBI, i.e. it bans 'Deficit financing' through money creation. The RBI is also barred from subscribing to primary issues of Central Government Securities.
- The Finance Minister is required to keep Parliament informed through quarterly review on the implementation, and to take corrective measure.
- The main theme of the FRBM Act is to reduce the dependence of the Government on borrowings and help to reduce the fiscal deficit in a phased manner.

..

Unit – 9 : GDP Concepts

1) **Gross Domestic Product (GDP):** It is the total market value of all the final goods and services produced within the territorial boundary of a country, using domestic resources, during a given period of time, usually 1 year.

2) **Gross national Income at Market Price =** GDP at Market Price + Taxes less subsidies on production and imports (net receivable from abroad + Compensation of Employees (Net Receivables from abroad) + Property income (Net receivables from abroad)

3) **Gross National Product (GNP) =** GDP + Total Capital gains from overseas investment (-) income earned by foreign nationals domestically

4) According to the National Income Accounting, there are **three ways to complete GDP:**
i. Expenditure wise ii. Income wise iii. Product wise

5) **Expenditure Method : GDP= Consumption + Gross Investment + Government Spending + (Exports- Imports) GDP = C+I+G+(X-M)**
a. Consumption : This included personal expenditures pertaining to food, households, medical expenses, rent, etc
b. Gross Investment : Business Investment as capital which includes construction of a new mine, purchase of machinery and equipments for a factory, purchase of software, expenditure on new houses, buying goods and services but investments on financial products is not included as it falls under savings.

c. Government spending: It is the sum of government expenditures on final goods and services.
d. Exports: This includes all goods and services produced for overseas consumptions.
e. Imports: This includes any goods or services imported for consumption and it should be deducted to prevent from calculating foreign supply as domestic supply.

6) **Income Approach** : GDP from the income is the sum of the following major components:
i. Compensation of employees ii. Property income iii. Production taxes and depreciation on capital

7) **Compensation of Employees**: It represents wages, salaries and other employee supplements

8) **Property Income:** It constitutes corporate profits, proprietor's income, interests and rents

9) GDP at market price measures the value of output at market prices after adjusting for the effect of indirect taxes and subsidies on the prices.

10) Market price is the economic price for **which a good or service is offered in the market place.**

11) **G**DP at factor cost measures the value of **output in terms of the price of factors used in its production.**

12) GDP at factor cost = **GDP at Market Price – (Indirect taxes – Subsidies)**

13) Product Approach
In India we have getting **GDP product wise belongs to 8 sectors.**

14) **Real GDP or GDP at constant price**: It means the value of today's output at yesterday price. Real GDP is calculated by tracking the volume or quantity of production after removing the influence of changing prices or inflation.

15) **Normal GDP or GDP at Current prices**: It represents the total money value of final goods and services produced in a given year, where the values are expressed in terms of the market prices of each year.

16) **Factors of production are** : Land, Labour, Capital and Entrepreneur

……

Unit – 10 : Union Budget

1) **Net Tax Revenue** = Gross Tax Revenue (-) NCCD transferred to the National Calamity Contingency fund (-) States' share

2) **Total Revenue Receipts** = Net Tax Revenue + Total Non- Tax revenue

3) **Capital Receipts** = Non- debt receipts + Debt Receipts

4) **Total Receipts** = Total Revenue Receipts + Capital Receipts+ Drawdown of Cash Balance

5) **Financing of Fiscal Deficit** : Debt Receipts + Draw-down of cash balance

6) **Non- Plan Expenditure** = Revenue Non- Plan Expenditure + Capital Non-plan Expenditure

7) **Plan Expenditure** = Revenue Expenditure + Capital Expenditure

8) **Total Expenditure** = Total Non-plan Expenditure + Total Plan Expenditure

9) **Revenue Deficit** = Revenue expenditure (-) Revenue receipts

10) **Gross Fiscal Deficit** is the excess of total expenditure including loans, net of recoveries over revenue receipts (including external grants) and non- debt receipts

11) **Net Fiscal deficit** = The gross fiscal deficit (-) interest payments

12) **Net Primary deficit** = Net fiscal deficit (–) net interest payments

13) **NCCD:** National Council on Crime and Delinquency.

Unit – 11 : Challenges Facing Indian Economy

1) Unique features of Indian Economy:

a. India's growth is driven by domestic demand – both consumption and investment.
b. Twin Deficit – Fiscal & Current Account
c. Supply constrained economy

MODULE - B - BUSINESS MATHEMATICS

Unit – 12 : Time Value of Money

Present Value

Present value describes how much a future sum of money is worth today. Three most influential components of present value are : time, expected rate of return, and the size of the future cash flow. The concept of *present value* is one of the most fundamental and pervasive in the world of finance. It is the basis for stock pricing, bond pricing, financial modeling, banking, insurance, pension fund valuation. It accounts for the fact that money we receive today can be invested today to earn a return. In other words, present value accounts for the time value of money.

The formula for present value is:
PV = CF/(1+r)n

Where:
CF = cash flow in future period
r = the periodic rate of return or interest (also called the discount rate or the required rate of return)
n = number of periods

Example :

Assume that you would like to put money in an account today to make sure your child has enough money in 10 years to buy a car. If you would like to give your child 10,00,000 in 10 years, and you know you can get 5% interest per year from a savings account during that time, how much should you put in the account now?

PV = 10,00,000/ (1 + .05)10 = 6,13,913/-

Thus, 6,13,913 will be worth 10,00,000 in 10 years if you can earn 5% each year. In other words, the present value of 10,00,000 in this scenario is 6,13,913.

………

Future Value

The value of an asset or cash at a specified date in the future that is equivalent in value to a specified sum today. It refers to a method of calculating how much the present value (PV) of an asset or cash will be worth at a specific time in the future. There are two ways to calculate FV:

1) For an asset with simple annual interest: = Original Investment x (1+(interest rate*number of years))

2) For an asset with interest compounded annually: = Original Investment x ((1+interest rate)^number of years)

Example:

1) 10,000 invested for 5 years with simple annual interest of 10% would have a future value of

FV = 10000(1+(0.10*5))
= 10000(1+0.50)
= 10000*1.5
= 15000

2) 10,000 invested for 5 years at 10%, compounded annually has a future value of :

FV = 10000(1+0.10)^5)
= 10000(1.10)^5
= 10000*1.61051
= 16105.10

………

Annuities

Annuities are essentially a series of fixed payments required from you or paid to you at a specified frequency over the course of a fixed time period. The most common payment frequencies are yearly, semi-annually (twice a year), quarterly and monthly. There are two basic types of annuities: ordinary annuities and annuities due.

Ordinary Annuity: Payments are required at the end of each period. For example, straight bonds usually pay coupon payments at the end of every six months until the bond's maturity date.

Annuity Due: Payments are required at the beginning of each period. Rent is an example of annuity due. You are usually required to pay rent when you first move in at the beginning of the month, and then on the first of each month thereafter.

……………………………………………………………………………………………………

Present Value of an Annuity

The present value an annuity is the sum of the periodic payments each discounted at the given rate of interest to reflect the time value of money.

PV of an Ordinary Annuity = R (1 − (1 + i)^-n)/i

PV of an Annuity Due = R (1 − (1 + i)^-n)/i × (1 + i)

Where,
i is the interest rate per compounding period;
n are the number of compounding periods; and
R is the fixed periodic payment.

Example :

1. Calculate the present value on Jan 1, 2015 of an annuity of 5,000 paid at the end of each month of the calendar year 2015. The annual interest rate is 12%.

Solution

We have,
Periodic Payment R = 5,000
Number of Periods n = 12
Interest Rate i = 12%/12 = 1%
Present Value
PV = 5000 × (1-(1+1%)^(-12))/1%
= 5000 × (1-1.01^-12)/1%
= 5000 × (1-0.88745)/1%
= 5000 × 0.11255/1%
= 5000 × 11.255
= 56,275.40

2. A certain amount was invested on Jan 1, 2015 such that it generated a periodic payment of 10,000 at the beginning of each month of the calendar year 2015. The interest rate on the investment was 13.2%. Calculate the original investment and the interest earned.

Solution

Periodic Payment R = 10,000
Number of Periods n = 12
Interest Rate i = 13.2%/12 = 1.1%
Original Investment = PV of annuity due on Jan 1, 2015
= 10,000 × (1-(1+1.1%)^(-12))/1.1% × (1+1.1%)

= 10,000 × (1-1.011^-12)/0.011 × 1.011
= 10,000 × (1-0.876973)/0.011 × 1.011
= 10,000 × 0.123027/0.011 × 1.011
= 10,000 × 11.184289 × 1.011
= 1,13,073.20

Interest Earned = 10,000 × 12 − 1,13,073.20
= 1,20,000 – 1,13,073.20
= 6926.80

………………………………………………………………………………………………………

Net Present Value

Net present value is the difference between the present value of cash inflows and the present value of cash outflows that occur as a result of undertaking an investment project. It may be positive, zero or negative. These three possibilities of net present value are briefly explained below:

Positive NPV:

If present value of cash inflows is greater than the present value of the cash outflows, the net present value is said to be positive and the investment proposal is considered to be acceptable.

Zero NPV:

If present value of cash inflow is equal to present value of cash outflow, the net present value is said to be zero and the investment proposal is considered to be acceptable.

Negative NPV:

If present value of cash inflow is less than present value of cash outflow, the net present value is said to be negative and the investment proposal is rejected.

Net present value method (also known as **discounted cash flow method**) is a popular capital budgeting technique that takes into account the time value of money. It uses net present value of the investment project as the base to accept or reject a proposed investment in projects like purchase of new equipment, purchase of inventory, expansion or addition of existing plant assets and the installation of new plants etc.

To be at Net Present Value you also need to subtract money that went out (the money you invested or spent):

Add the Present Values you receive

Subtract the Present Values you pay

1. Company A is considering a new piece of equipment. It will cost Rs. 6,000 and will produce a cash flow of Rs. 1,000 every year for the next 12 years (the first cash flow will be exactly one year from today).
(a) What is the NPV if the appropriate discount rate is 10%?
You can either discount each individual cash flow or recognise that the Rs. 1,000 cash flows are just a twelve year annuity. So,

PV = a/i[l -1/(1 +i)n]
PV= 1,000/0.1 [1 - 1/(1.1)12]
PV = Rs. 6,814

Adding this to the original investment gives an NPV of
NPV = Rs. 6,814 - Rs. 6,000
NPV =Rs. 814

(b) What is the NPV if the appropriate discount rate is 12%?

PV= 1,000/0.12 [1 -1/(1.12)12]
PV = Rs. 6,194
Adding this to the original investment gives an NPV of
NPV = Rs. 6,194-Rs. 6,000
NPV=Rs. 194

(c) What is the NPV if the appropriate discount rate is 15%?

PV= 1,000/0.15 [1-1/(1.15)12]
PV = Rs. 5,421
Adding this to the original investment gives an NPV of
NPV = Rs. 5,421-Rs. 6,000

Unit -13 : Sampling Methods

Sampling

A process used in statistical analysis in which a predetermined number of observations will be taken from a larger population. When taking a sample from a larger population, it is important to consider how the sample will be drawn. To get a representative sample, the sample must be drawn randomly and encompass the entire population.

For example, a lottery system could be used to determine the average age of students in a University by sampling 10% of the student body, taking an equal number of students from each faculty.

There are three types of sampling:

1. Probability sampling: it is the one in which each sample has the same probability of being chosen.

2. Purposive sampling: it is the one in which the person who is selecting the sample is who tries to make the sample representative, depending on his opinion or purpose, thus being the representation subjective.

3. No-rule sampling: we take a sample without any rule, being the sample representative if the population is homogeneous and we have no selection bias.

We will always make probability sampling, because in case we choose the appropriate technique, it assures us that the sample is representative and we can estimate the errors for the sampling. There are different types of probability sampling:

- Random sampling with and without replacement.
- Systematic sampling.
- Stratified sampling.
- Cluster sampling.
- Other types of sampling techniques

Random sampling with and without replacement

When a certain element is selected and we have measured the variables needed in a certain study and it can be selected again, we say that we make sampling with replacement. This sampling technique is usually called simple random sampling.

In the case that the element cannot be selected again after being selected once, we say that we have obtained the sample through a random sampling without replacement.

Systematic Sampling

In systematic sampling, elements are selected from the population at a uniform level that is measured in time, order, or space. If we wanted to interview every twentieth student on a college campus, we would choose a random starting point in the first twenty names in the student directory and then pick every twentieth name thereafter.

Stratified Sampling

To use stratified sampling, we divide the population into relatively homogenous groups, called strata. Then we use one of two approaches. Either we select at random from each stratum a specified number of elements corresponding to the proportion of that stratum in the population as a whole or we draw an equal number of elements from each stratum and give weight to the results according to the stratum's proportion of total population.

Cluster Sampling

In cluster sampling, we divide the population into groups or clusters and then select a random sample of these clusters. We assume that these individual clusters are representative of the population as a whole. If a market Research team is attempting to determine by sampling the average number of television sets per household in a large city, they could use a city map and divide the territory into blocks and then choose a certain number of blocks (clusters) for interviewing. Every household in each of these blocks would be interviewed. A well designed cluster sampling procedure can produce a more precise sample at considerably less cost than that of simple random sampling.

Sampling distribution

Sampling distribution is the distribution of all possible values of a statistic from all possible samples of a particular size drawn from the population.

Standard Error

Standard deviation of the distribution of the sample means is called the standard error of the mean.

....

Numerical on Sampling

A jar contains 3 red marbles, 7 green marbles and 10 white marbles. If a marble is drawn at random, what is the probability that marble drawn is white?

a. 2/5
b. 1/2
c. 3/8
d. 10/13

Ans – b

Solution :

Here Red = 3
Green = 7
White = 10
Hence total sample space is (3+7+10)= 20
Out of 20 one ball is drawn n(S) = {c(20,a.} = 20

To find the probability of occurrence of one White marble out of 10 white ball
n(R)={c(10,a.} = 10

Hence P(R) = n(R)/n(S)
= 10/20 = 1/2
....

A sack contains 4 black balls 5 red balls. What is probability to draw 1 black ball and 2 red balls in one draw?

a. 12/21
b. 9/20
c. 10/21
d. 11/20

Ans – c

Solution :

Out of 9, 3 (1 black & 2 red) are expected to be drawn)

Hence sample space

n(S) = 9c3
= 9!/(6!×3!)
= 362880/4320
= 84

Now out of 4 black ball 1 is expected to be drawn hence
n(B) = 4c1
= 4

Same way out of 5 red balls 2 are expected be drawn hence
n(R) = 5c2
= 5!/(3!×2!)
= 120/12
= 10

Then P(B U R) = n(B)×n(R)/n(S)
i.e 4×10/84 = 10/21

………………………………………………………………………………

Unit - 14 : Correlation and Regression

Correlation - Regression :

- Regression and correlation analyses show us how to determine both the nature and strength of the relationship between the two variables. Through this method we will learn to predict, with some accuracy, the value of the unknown variable based on past observation and other factors.
- Correlation analysis is the statistical tool to describe the degree to which one variable is linearly related to other.

Correlation is a **relationship** or dependency that exists **between two variables**.

If a correlation exists, it is said that the variables are correlated or there is a correlation between them.

The **linear correlation coefficient** is the **ratio** between the **covariance** and the **product of standard deviations** of both variables.

The **linear correlation coefficient** is denoted by the letter **r**.

$$r = \frac{\text{cov}(X,Y)}{\sigma_x \sigma_y}$$

The regression line is the line that best fits or represents the data on the scatter plot.

Line of Regression of Y on X

The regression line of y on x is used to estimate the values of y from x.

The slope of the line is the quotient between the **covariance** and **variance** of the variable X.

Unit - 15 : Time Series

Time Series:

- **4 Types of variation in Time series:**
  - **Secular Trend – Over a long period of time - Consumer price Index**
  - **Cyclical Fluctuation – Business cycle**
  - **Seasonal variation – Doctor – Seasons (changes within a year)**
  - **Irregular variation – Unpredictable, Earth Quake, war etc.**

Unit - 16 : Estimation

Estimation refers to the process by which one makes inferences about a population, based on information obtained from a sample.

Point Estimate vs. Interval Estimate

Statisticians use sample statistics to estimate population parameters. For example, sample means are used to estimate population means; sample proportions, to estimate population proportions.

An estimate of a population parameter may be expressed in two ways:

- **Point estimate**. A point estimate of a population parameter is a single value of a statistic. For example, the sample mean x is a point estimate of the population mean μ. Similarly, the sample proportion *p* is a point estimate of the population proportion *P*.
- **Interval estimate**. An interval estimate is defined by two numbers, between which a population parameter is said to lie. For example, $a < x < b$ is an interval estimate of the population mean μ. It indicates that the population mean is greater than *a* but less than *b*.

Confidence Intervals

Statisticians use a **confidence interval** to express the precision and uncertainty associated with a particular sampling method. A confidence interval consists of three parts.

- A confidence level.
- A statistic.
- A margin of error.

The confidence level describes the uncertainty of a sampling method. The statistic and the margin of error define an interval estimate that describes the precision of the method. The interval estimate of a confidence interval is defined by the *sample statistic* ± *margin of error*.

For example, suppose we compute an interval estimate of a population parameter. We might describe this interval estimate as a 95% confidence interval. This means that if we used the same sampling method to select different samples and compute different interval estimates, the true population parameter would fall within a range defined by the *sample statistic* ± *margin of error* 95% of the time.

Confidence intervals are preferred to point estimates, because confidence intervals indicate (a) the precision of the estimate and (b) the uncertainty of the estimate.

Confidence Level

The probability part of a confidence interval is called a **confidence level**. The confidence level describes the likelihood that a particular sampling method will produce a confidence interval that includes the true population parameter.

Here is how to interpret a confidence level. Suppose we collected all possible samples from a given population, and computed confidence intervals for each sample. Some confidence intervals would include the true population parameter; others would not. A 95% confidence level means that 95% of the intervals contain the true population parameter; a 90% confidence level means that 90% of the intervals contain the population parameter; and so on.

Margin of Error

In a confidence interval, the range of values above and below the sample statistic is called the **margin of error**.

For example, suppose the local newspaper conducts an election survey and reports that the independent candidate will receive 30% of the vote. The newspaper states that the survey had a 5% margin of error and a confidence level of 95%. These findings result in the following confidence interval: We are 95% confident that the independent candidate will receive between 25% and 35% of the vote.

Note: Many public opinion surveys report interval estimates, but not confidence intervals. They provide the margin of error, but not the confidence level. To clearly interpret survey results you need to know both! We are much more likely to accept survey findings if the confidence level is high (say, 95%) than if it is low (say, 50%).

Consider the following results of 10 tosses of a coin: H, T, T, T, T, H, T, H, T, T a) Estimate the probability of head (H) for this coin. b) Estimate the standard error of your estimate.

Let X denote the toss of a single coin. Further, let X = 1 if a head results, and X = 0 if a tail results. This X is a Bernoulli (p) random variable, where p denotes the probability of head. Let pˆ denote the estimator of p.

a) The estimated value of p is $\hat{p} = (1 + 0 + 0 + \ldots + 1 + 0 + 0)/10 = 0.3$.
b) The estimated standard error of $\hat{p}$ is $\sqrt{\hat{p}(1 - \hat{p})/n} = \sqrt{0.3(0.7)/10} = 0.14$.

Suppose the following data shows the number of the problems from the Practice Problems Set attempted in the past week by 10 randomly selected students: 2, 4, 0, 7, 1, 2, 0, 3, 2, 1.

a) Find the sample mean.
b) Find the sample variance.
c) Estimate the mean number of practice problems attempted by a student in the past week.
d) Estimate the standard error of the estimated mean.

a) X = Pn i=1 Xi/n = (2 + 4 + . . . + 2 + 1)/10 = 2.2
b) S^2=∑n i=1(Xi − X)^2/(n − 1) = (2 − 2.2)^2 + (4 − 2.2)^2 + . . . + (2 − 2.2)^2 + (1 − 2.2)^2/(10−1) = 4.4
c) The estimate is X = 2.2
d) Estimated standard error of X is S/√ n = √ 4.4/10 = 0.66

……

Unit - 17 : Bond Investment

Debt

DEBT means a sum of money due by certain and expresses agreement. In a less technical sense, it means a claim for money. Loans from banks or financial institutions are one of the popular forms of debt.

Bonds

Debt capital consists of mainly bonds and debentures. The holder of debt capital does not receive a share of ownership of the company when they provide funds to the firm. Rather, when a company first issues debt capital, the providers of debt capital purchase a debenture, which involves lending money to the firm. In return for loaning this money, bond holders have a right to certain guaranteed payments during the life of the bond.

For example : a company issued a bond of a face value of Rs. 100 carrying a coupon rate of 10 per cent for ten years. This entitles the bondholder to receive Rs. 10 (10 per cent of Rs. 100) for ten years as interest. At the end of tenth year, the bondholder is also entitled to receive back the invested amount of Rs. 100. Irrespective of the level of profits or losses, which company makes during that period of ten years, the bondholder is entitled to receive the coupon interest during that period.

Face Value: Also known as the par value and stated on the face of the bond. It represents the amount borrowed by the firm, which it promises to repay after a specified period.

Coupon rate: A bond carries a specific rate of interest, which is also called as the coupon rate.

Maturity: A bond is issued for a specified period. It is to be repaid on maturity.

Redemption Value: The value, which the bondholder gets on maturity, is called the redemption value. A bond is generally issued at a discount (less than par value) and redeemed at par.

Market Value: A bond may be traded on a stock exchange. Market value is the price at which the bond is usually bought or sold in the market.

……………………………………………………………………………………………………

Bond Value

A bond, whose par value is Rs. 1,000, bears a coupon rate of 12 per cent and has a maturity period of 3 years. The required rate of return on the bond is 10 per cent. What is the value of this bond?

Solution

Annual interest payable = 1,000 * 12% = 120
Principal repayment at the end of 3 years = Rs. 1,000
The value of the bond
= 120 (PVIFA 10%, 3 yrs) + Rs. 1,000 (PVIF 10%, 3 yrs)
= 120 (2.487)+1,000 (0.751)
= 298.44 + 751
= Rs. 1,049.44

……………………………………………………………………………………………………

A bond, whose par value is Rs. 1000, bears a coupon rate of 12 per cent payable semi-annually and has a maturity period of 3 years. The required rate of return on bond is 10 per cent. What is the value of this bond?

Solution

Semi-annual interest payable = 1,000 x 12 per cent/2= 60
Principal repayment at the end of 3 years = Rs. 1,000

The value of the bond
= 60 (PVIFA 10%/2, 6 pds) + Rs. 1,000 (PVIF 10%/2, 6 pds) =
60 (5.0746) + 1,000 (0.746) = 304.48 + 746 = 1,050.48

The face value of the bond is Rs. 1,000, coupon rate is 11 per cent, years to maturity is seven years. The required rate of return is 13 per cent, and then the present value of the bond is

110 x PVIFA (13 per cent, 7) + 1,000 (PVIF 13 per cent, 7)
110(4.423)+1,000 (0.425) = 911.53

One year from now, when the maturity period will be six years, the present value of the bond will be

110 x PVIFA (13 per cent, 6) + 1,000 (PVIF 13 per cent, 6)
110 (3.998) + 1,000 (0.480) = 919.78

Similarly, when maturity period is 5, 4, 3, 2, 1 the Bond value will become 929.87, 940.14, 952.71, 966.48, 982.35, respectively.

CURRENT YIELD ON BOND

It measures the rate of return earned on a bond, if it is purchased at its current market price and if the coupon interest is received.

Current yield = Coupon interest/current market price

If a bond of face value Rs. 1,000, carrying a coupon interest rate of 8 per cent, is quoted in the market at Rs. 800, then the
Current yield of the bond is = 8 per cent * 1,000/800 = 10 per cent

YIELD-TO-MATURITY OF BOND

It is the rate of return earned by an investor, who purchases a bond and holds it until the maturity.

Numerical problems on YTM

Consider a Rs. 1,000 par value bond, whose current market price is Rs. 850/-. The bond carries a coupon rate of 8 per cent and has the maturity period of nine years. What would be the rate of return that an investor earns if he purchases the bond and holds until maturity?

Solution

If kd is the yield to maturity then,
850 = 80 (PVIFA kd per cent, 9 yrs) + 1,000 (PVIF kd, 9 yrs)

To calculate the value of kd, we have to try several values:

= 80 (PVIFA 12 per cent, 9) + 1,000 (PVIF 12 per cent, 9)
= 80x 5.328+ 1,000 x (0.361)
= 426.24 + 361 =787.24

Since, the above value is less than 850, we have to try with value less than 12 per cent. Let us try with

kd =10 per cent
= 80 (PVIFA 10 per cent, 9) + 1,000 (PVIF 10 per cent, 9) = 80
x 5.759 + 1.000 * 0.424 = 884.72

From the above it is clear that kd lies between 10% and 12%. Now we have to use linear interpolation in the range of 10% and 12%. Using it, we find that kd is equal to the following:

(884.72-850) / (884.72-787.24)
34.72 / 97.48 = 10%.+
.71=10.71%
Therefore, the yield to maturity is 10.71%

………

Unit - 18 : Linear Programming

<u>Linear Programming – Decision Making</u>:

- This can be solved either 'graphical' or 'simplex' method.
- Linear Programming refers to several related mathematical techniques that are used to allocate limited resources among completing demands in an optimum way.
- Some examples of resource and marketing constraints:
  - Bank may stipulate certain working capital requirements.
  - Market may not absorb the whole output
  - Capacity constraints
  - Labor availability
  - Raw Material availability

………

Unit - 19 : Simulation

- Simulation is a way of studying effects of changes in the real system through models. We manipulate a model of the system so that we came to know the end results, without having to go through the problems in reality.
- Queuing problems have been extensively studied through simulation.
- Simulation is useful in training managers and workers in how the real system operates, in demonstrating the effects of changes in system variables and real time control.

MODULE - C – Human Resource Management

Unit - 20 : Fundamentals of Human Resource Management

The Perspective

An organisation is primarily a ramification of the fact that there is an interdependency implied in the satisfaction of needs of individuals alongside with the achievement of organisational objectives

•Formal or Informal
•Two streams of thoughts:
  - How to organise the activities most systematically and analytically so that specificity in the work processes and operations can be brought about
  - How to understand an individual's relation to a given activity now recognised as 'work'

•Robert Owen (1771-1858): Advocate of better working conditions for 'vital machines'
•Charles Babbage (1792-1871): Division of labour
•Frederick Taylor (1856-1915): Scientific Management Approach
  - Conducted 'Division of Labour' and 'Time and Motion' studies

•Elton Mayo: Howthorne Studies 1924-33
  - Pointed to various dimensions of human behaviour that were not considered to be of any significance in the restricted approach taken earlier

•Followed by Human relations movement that replaced 'rational-economic man' by 'social man' perspective

•Later researchers like Chris Argyris, Abraham Maslow, Douglas McGregor and Frederick Herzberg pointed out that individuals are motivated by other than monetary factors too
•Line managers are the delivery points

Development of People Management Functions

•A distinct managerial function since end of nineteenth century
- Few organisations had the post of welfare secretary(also referred to as social secretaries)

•Experiment on group behaviour by Prof A K Rice in Ahmedabad Rice Mills in 1952
•The term personnel officer was perhaps first used in the chemical and pharmaceutical industries in 1960s
•The concern for human element did not occur until the socio-psychological upheavels in the late 1920s and early 1930s
•Two major traditions or trends:
- Hard headed, profit minded approach to utilisation of human resources
- Social welfare viewpoint

RELATIONSHIP BETWEEN HRM & HRD AND THEIR STRUCTURES AND FUNCTIONS

Labour and Welfare Department
Personnel Department
HR Department

Classification of HRM Activities

Administration and Maintenance (Personnel)
- Conventional component of people management
- Administration
- Systems related to acquisition, promotion & evaluation, administration, salary and long term benefits
- Maintenance Systems
- Traditional labour management, grievances and discipline management activities

Human Resource Development
- Developmental systems such as induction and socialisation of the individuals, development and growth, performance appraisal and counseling, career planning
- Organisational interventions for climate development, employee and organisational development

ROLE OF HR PROFESSIONALS

Supportive Role

- Developing systems that deal with people, their problems and organisational dynamics

Systems Development and Research

- Planning Future manpower, Recruiting, Utilizing by placement, Motivating, Retaining, Integrating people and their role, Performance and potential assessment, Planning growth of individuals etc

Managerial Role

- Technical, managerial, helping, coping and processing competence

Developing Competence

- Creating necessary culture and values in the organisation, diagnosing the problem at organisational level and taking corrective steps

Process Role

- Creating necessary culture and values in the organisation, diagnosing the problem at organisational level and taking corrective steps

Critical Attributes

Technical

Knowledge of -

- Performance Appraisal Systems and their functioning
- Potential appraisal and mechanism of developing a system
- Various tests and measurements of behaviour
- Personnel and management
- Behavioural Sciences
- Career planning processes and practices
- Counselling
- Behavioural research techniques
- Ability to design and coordinate training programmes at worker, supervisor and managerial levels
- Understanding of overall organisational culture
- Counselling skills

Managerial

- Organizing Ability
- Systems Development Skills

Personality

- Initiative
- Faith in human beings and their capabilities
- Positive attitude to others
- Imagination and creativity
- Concern for excellence
- Concern for people and their development
- Friendly, sociable and affable
- Attitude for research and development work
- Interest in learning new things
- Ability to work as a team member

Competencies for HR Heads

Behavioural

- Communication
- Initiative
- Drive
- Creativity
- Self-confidence
- Teamwork
- Influencing Ability
- Problem Solving
- Inter Personal Skills

Functional

- Business Knowledge
- Change Management
- Diversity Management
- Service Orientation
- Execution Excellence
- Financial perspective
- Building expertise
- Personal credibility

- Relationship management
- Strategic Thinking and Alignment

Strategic Role in the Future

- To become a partner with senior and line managers in strategy execution, helping to move planning from conference room to the market place
- To become an expert in the way work is organized and executed, delivering administrative efficiency to ensure that costs are reduced while quality is maintained
- To become a champion for employees, vigorously representing their concerns to senior management and at the same time, working to increase employee contribution
- To become an agent of continuous transformation, shaping processes and a culture that together improve an organisation's capacity for change

Development of HR functions in India

- During the British raj, the ripples of whatever happened were felt in India
- Labour Welfare Officers under the Factories Act
- By 1950s the provisions of the Industrial Disputes Act, 1947 began to percolate down
- By 1960s demand for personnel professionals with specific knowledge about people management systems and laws rose
- Institutes were setup:
  - Indian Institute of Personnel Management (IIPM), 1947
  - National Institute of Labour Management
  - National Institute of personnel Management (NIPM), 1982: Formed upon merger of the above two institutes
  - Indian Society for Training and Development , 1970
- MNCs gave more attention to personnel issues based on home country experience
- In India TISCO took proactive measures in the field
- Govt. enacted legislations related to employment and employee welfare:
  - Article 16(1) of the Indian Constitution: Equal opportunity for employment
  - Apprentices Act, 1961: Training linked to employment
  - Child Labour Act, 1986
  - Bonded Labour System Act, 1976
  - Interstate Migrant Workmen Act, 1979
- Next major transformation in 1980s with the onset of the HRD era
- Establishment of National HRD network in 1985

Unit - 21 : Development of Human Resources

HRD and its subsystems

- Organized learning experience in a definite time period to increase the possibility of improving job performance growth
- A process by which employees of an organisation are helped in a continuous and planned way to:
  - Acquire or sharpen capabilities required to perform various functions associated with their present or expected future jobs
  - Develop their general capabilities as individuals and discover and exploit their own inner potential for their own and/or organisational development purpose
  - Develop an organisational culture in which supervisor-subordinate relationships, teamwork and collaboration among subunits are strong and contribute to the professional well-being, motivation and pride of employees

Goals of HRD

To develop:

- Capabilities of each employee as an individual
- Capabilities of each individual in relation to his or her present role
- Capabilities of each employee in relation to his or her expected future role(s)
- Dyadic relationship between each employee and his/her supervisor
- Team spirit and functioning in every organisational unit (department, group etc)
- Collaboration among different units of the organisation
- Organisation's overall health and self-renewing capabilities, which, in turn increase the enabling capabilities of individuals, dyad teams, and the entire organisation

Job/Role Analysis

Job Description

- List of requirements: Skills, Qualifications etc. for performing the job

Job Specifications

- Used to compare two jobs within an organisation or between organisations or even an industry

Job Evaluation

- Used to compare two jobs within an organisation or between organisations or even an industry

Task

- Complex system of tasks
- Requires a person to achieve an overall product
- The relationship is irrelevant

Job

- Puts an individual in a hierarchical position

Position

- Emphasises on the pattern of mutual expectations

Role

- Goes a step further to encompass socio-psychological relationship

Work

- Goes a step further to encompass socio-psychological relationship

Training and Development – Role and Impact of Training

Involves:

- Identification of Training Needs
- Conducting the training
- Evaluation of Training
- Selection and development of trainers

Purpose of Training and Development

Training

- Improved performance of individual on his present job
- Learning related to present job

Education

- His preparation for an identified job in a not too distant future
- Learning to prepare the individual for a different but identified job
- General Learning

Development

- His general growth (development) not related to any specific job
- Learning for growth of the individual not related to a specific present or future job
- Futuristic Learning

Importance of clarity of purpose

- Purpose will determine the choice as shown earlier
- It will make the expected outcomes clear to both the parties
- Helps in identifying who is responsible for what activity

Imperatives of Adult Learning

- Andragogy – Adult learning process. Analogous to pedagogy

- A cooperative venture in non-authoritarian, informal learning, the chief purpose of which is to discover the meaning of experience, a quest of mind which digs down to the roots of the preconceptions which formulate our conduct; a technique of learning for adults which makes education coterminous with life and hence elevates living itself to the level of adventurous experiment.

Learning Theories

Mechanistic (or Behaviorist) Theories

- Hold that learner is passive in the learning process
- Every input/stimulus will get a predetermined response
- Learning occurs when a learner is conditioned to give the 'right' response to a given stimulus
- Mechanistic (or Behaviorist) Theories

Cognitive Theories

- Equate man with his brain – humans are capable of critical thinking and problem solving
- Purpose of learning is to teach the brain to engage in such critical thinking and problem solving

Cognitive Theories

- Organismic (or Humanistic) Theories
- Learning occurs when learners have 'freedom to learn' what is particularly relevant to their personal life situation
- Purpose of learning is to encourage each individual to develop his or her full, unique potential

Variables associated with actual Teaching-Learning situation

- Learning is enhanced when learner is motivated
- Learning requires feedback
- Reinforcement increases the likelihood that a learned behaviour will be repeated
- Practice increases a learner's performance
- Learning must be transferable to the job

Systematic Approach to Learning (SAT)

- Will the training be done internally or externally?
- How much and what kind of training will be done externally and is this also an essential part?
- Who are the functionaries responsible for administering the training system?

SAT – The process

- Training Need Analysis(TNA) and Identification of Training Needs
  - Preparation of a Training Plan
    - Conduct of the Training
      (including designing the programme)
      - Evaluation of the Training Programme and the plan
        (Reaction Level, Learning Level, Behaviour Level and Functioning Level)
        - Selection and Development of Trainers

Support systems for Training and Development

- Performance Appraisal System
- Human Resource Information System
- Organisational Culture

Attitude Development

- Persistent tendency to feel and behave in a particular way towards some object
- Characteristics:
  - Tends to persist unless something is done to change it
  - Can fall anywhere in the continuum from very favourable to very unfavourable or positive to negative
  - Directed towards some object about which a person has perception, feelings and beliefs, which may result in emotionally charged opinion and prejudices

Components of Attitudes

Emotional Component

- Person's feelings or their effect – positive, neutral or negative – about an object

- Expression of emotions, whether positive or negative, is important to work behaviour

Information Component
- Beliefs and information that an individual has about an object
- Usually founded on insufficient observations or opinions which may not be empirically correct

Behavioural Component
- Person's tendency to behave in a particular way towards the object

Significance of Attitude at Workplace

Adjustment Function
- Help people adjust to their work environment

Ego-defensive Function
- Help people defend their self-image

Value-Expression Function
- Provide people a basis for expressing their values
- Helps to subscribe to the ethics

Knowledge Function
- Help supply standards and frames of reference that allow people to organise and explain the world around them
- Regardless of how accurate a person's view of reality is, attitudes toward people, event and objects impact the sense the individual makes out of what is going on.

Changing Attitudes

Barriers to attitude change:
- Prior commitment to a particular thing
- Insufficient information

Overcoming the Barriers to attitude change:
- Use of Fear
- Provide New Information
- Resolving discrepancies between attitude and behaviour
- Influence of peers, friends and opinion leaders Co-Opting – Getting the dissatisfied people involved in improvement process

Career Path Planning

The idea behind Career Path Planning

- Individuals desire and expect change at certain stages in life
- There is a (predictable) pattern in these changes
- There is a feeling of frustration if things do not happen as desired or expected

Life (Adulthood) Stages

Adolescence

- Individual's development is to achieve an ego identity
- A reconciliation process of what he perceives himself to be, what he thinks others perceive him to be and make an adjusted assessment to form his identity

Young Adulthood

- Starts developing relationship with individuals, groups (interest group or work group) or occupation.

Adulthood

- Guiding the next generation
- Passing on the knowledge, values or sponsoring the younger colleagues

Maturity

- Person attempts to achieve ego integrity by examining whether life has been meaningful or satisfying

Career Roles

Apprentice

- Beginning of the career
- Does routine work under the supervision of the mentor
- Needs to accommodate himself to a certain level of dependency

Colleague

- Beginning of making independent contribution
- Less dependence on superiors for advice and direction

Mentors

- Beginning of complex functions

- Individual develops ideas, manages others and must learn to assume responsibility for subordinates' work

Sponsors

- Needs to broaden perspective and think long term
- Needs to define the direction in which the entire organisation or atleast a major segment would develop
- Needs to develop the capability to choose the right people in the organisation who can support the process of influencing

Career Concepts

Linear Career Concept

- Plan for upward movement within the same profession using organisational hierarchy

Steady State Career

- Individuals choose a profession, acquire higher skills, but do not choose to go higher up in the hierarchy

Transitory Pattern

- Individuals shift from one job to another not necessarily related to the previous one

Spiral Career

- Individuals take on a new job, work hard, perform well, move up in the status and rank, then move on to another type of work and follow the same pattern of development and performance

Plateau Career

- Reaching a level higher than where one started but then continuing on the same level

Career Path

- When these movements are predetermined in a logical sequence to enable an individual to have knowledge of all activities of the organisation (horizontal movement), different perspectives of management (field and controlling) and different levels of management (heirarchial) it could be said that the organisation has developed a **career path**

- With an established Career Path Planning Subsystem the organisation can have a continuous supply of individuals with required capabilities for future roles

Components of Career Anchors

- Self perception of talents and abilities based on one's performance
- Self perceived motives and needs based on self diagnosis and feedback
- Self perceived attitudes and values based on interactions with the norms and values implicit in the organisation

Schein's Career Anchors

Technical/Functional Competence

- 'in love' with a particular field or function

Managerial Competence

- Early experiences indicate an individual will be able to rise in the management hierarchy

Security

- Secure work environment and career

Creativity

- Desire to create something new

Autonomy

- Some find organisational life unpleasant or difficult. Prefer to maintain their freedom

Career Path Planning System

Main responsibilities of the organisation while developing and implementing a career plan are:

- The policy of career planning is made explicit. It lays down the benchmarks for performance at critical stages which the employees must attain
- It is made clear that the career path is a facility for growth and not a right for advancement
- The career path – a sequence of job assignments, training requirements and promotion to higher level – is made known to the employees from the time of entry. Performance feedback is a part of the career path
- The career path is followed uniformly for all employees without any bias/prejudices
- It should be flexible to accommodate variations which may be needed to deal with the given circumstances

Career Path Planning Process

- Define the career stages (Role) in relation to the organisational levels
- Identify the core jobs at each level

- Define and spell out the criteria for each successive level
- Placement in the next career role

Multiple Careers in one organisation

- In flatter organisations hierarchy is neither desired, nor available
- What is needed is to develop expertise in different areas
- The concept of spiral careers is becoming an ideal one in this situation

……

Self Development

Self development essentially refers to developing a mature personality who can handle different tasks and situations with comparative ease. Process of discovering and utilising the tremendous potential within one's individual personality

Patent Self

- External self comprising individual's identity and physical features

Inner Self

- Signifies the behavior patterns, values and other psychological factors including strengths and weaknesses

Aspects of Self Development in relation to an organisation Individual Level

Individual Level

- Motivational Pattern
- Locus of Control
- Power Bases

Interpersonal Level

- Interpersonal Needs
- Transactional Analysis

Group Level

- Being effective member in the work group

Locus of Control

- Belief of an individual about who is responsible for what happens in life
- Types:
  - External: Believe that events are determined by external forces like other influential persons in society, luck, destiny and so on
  - Internal: Believe individuals can determine events
- Motivation has to come from within for real growth. Internal locus of control ensures growth

Power Bases

- Power: A person's potential to get others to do what he or she wants them to do, as well as avoid being forced to do what he or she does not want to do
- Types:
  - Coercive Bases: Organisational position, punishment, charisma, personal relationship, closeness to a source of power, withholding information on resources
  - Persuasive Bases: Expertise, competence and modelling

Interpersonal interactions: Dyadic relationship

- In organisations most of the situations imply interacting with and influencing others
- Dyad: Two individuals maintaining a sociologically significant relationship - Interpersonal relationship
- Underlying concepts:
  - Interpersonal Needs
  - Interpersonal Interactions (Transactional Analysis)

Interpersonal Needs

Need for Inclusion

- To establish and maintain a satisfactory relationship with people with respect to interaction and association

Need to Control

- To establish and maintain satisfactory relationship including:
- Psychologically comfortable relationship in controlling all behaviour of other people
- Eliciting behaviour from them which controls one's own behaviour

Need for Affection

Transactional Analysis (TA)

- Ego states: 'consistent pattern of feeling and experience directly related to a corresponding consistent pattern of behaviour'

Parent

- Regulates behaviour and nurtures it
- Ethical, conscientious behaviour
- Influenced by preaching's from parents and elders

Adult

- Collects information and processes it
- Analytical, rational and practical orientation

Child

- Concerned with creativity, curiosity, reactions to others and adjusting behaviour (Little Professor)
- Instinctive behaviour with motive of enjoyment

TA - Types of Transactions

- Complementary (Most Desirable)
- Crossed (Not Desirable)
- Angular
- Duplex

TA - Life Positions

- I AM OK YOU ARE OK (Ideal Situation)
- I AM OK YOU ARE NOT OK
- I AM NOT OK YOU ARE OK
- I AM NOT OK YOU ARE NOT OK
- I AM OK YOU ARE OK THEY ARE NOT OK

Working in Teams

- Team: A group of people with high degree of interdependence geared towards the achievement of a goal or the completion of task
- Group Dynamics:
  - Internal nature of groups
  - How they form
  - Their structure and processes
  - How they function and affect individuals and organisation

Stages in Group Formation and Behaviour

- Forming (Awareness) Members with varied awareness get acquainted, understand the team's goal and its role
- Storming (Conflict) Conflict among the members helps the team in defining itself

- Norming (Cooperation) How the task will be accomplished? Rules and regulations of the team?
- Conforming (Adjustment) Adjusting one with the team expectations and norms
- Performing (Productivity) Members behave in mature fashion and focus on accomplishing their goal. Full energy dedicated to work.

Self-Awareness

- Understanding self helps in the process of self-development
- Johari Window by Luft and Ingham
- The more one knows oneself, the better equipped he is to face challenges

	KNOWN TO SELF	NOT KNOWN TO SELF
KNOWN TO OTHERS	ARENA	BLIND
NOT KNOWN TO OTHERS	CLOSED	DARK

Emotional Intelligence

- Abilities such as being able to motivate oneself and persist in the face of frustration, to control impulse and delay gratification, to regulate one's moods and keep away distress from swamping the ability to think, to empathise and to hope.
- Unlike IQ, EQ grows throughout adulthood

Five components of Emotional Intelligence

Self Awareness

- Ability to recognize, understand one's mood, emotions and drives, as well as their effects on others

Self-Regulation

- Ability to control or redirect disruptive impulses and moods and propensity to suspend judgement – to think before acting

Self-Motivation

- Passion to work for reasons that go beyond money or status and propensity to pursue goals with energy and persistence

Empathy

- Ability to understand the emotional make up of others and skill to treat people according to their emotional reactions

Social Skills

- Proficiency in managing relationships and building networks and ability to find common ground and build rapport

Morale

- The morale denotes a spirit as of dedication to a common goal that unites a group
- Displays the emotional or mental condition w.r.t. cheerfulness, confidence, zeal etc
- High morale translates into positive motivation, increased productivity, exceeding expectations for performance and happy employees

Employee Morale Boosters

- Welcome Ideas
- Keep Score
- Inspect Thank You Notes
- Huddle
- Open Up
- Have Fun
- Show Charity
- Add Perks
- Fire Staff
- Measure It

……………………………………………………………………………………………………

Unit - 22 : Human Implications of Organizations

HUMAN BEHAVIOUR AND INDIVIDUAL DIFFERENCES

The behaviour of an individual is influenced by several factors. These can be grouped under the following heads:

1. Environmental Factors: (a) Economic, (b) Social (norms and cultural values), and (c) Political;
2. Personal Factors: (a) Age, (b) Sex, (c) Education, (d) Abilities, (e) Marital Status, (f) No. of dependants;
3. Organizational Factors: (a) Physical Facilities, (b) Organization Structure and Design,

(c) Leadership, (d) Compensation and Reward System; and
4. Psychological Factors: (a) Personality, (b) Perception, (c) Attitudes, (d) Values. (e) Learning.

EMPLOYEES BEHAVIOUR AT WORK

There are some basic assumptions about human behaviour at work:

1. There are differences between individuals.
2. Concept of a whole person.
3. Behaviour of an individual is caused.
4. An individual has dignity.
5. Organizations are social systems.
6. There is mutuality of interest among organizational members.
7. Organization behaviour is holistic.

While the first four concepts centred around people, the next two are concerned with organizations. The last one is a combination of the first six assumptions.

Persons differ and again, there are certain 'commonalities' in the persons. Every person is, in certain respects,

1. like all other persons,
2. like some other persons, and
3. like no other person.

By understanding certain dimensions of personality and behaviour, managers can, to a great extent, predict the likely behaviour in terms of actions and outcomes of actions in respect of employees. There are several theories to explain the concept of personality. One dimension of personality which is getting attention both from organizational as well as medical researchers is the Type A and Type B behaviour profiles.

A person exhibiting Type A behaviour is generally restless, impatient with a desire for quick achievement and perfectionism.
Type 'B' personality people are much more easy going, relaxed about time pressure, less competitive and more philosophical in nature.

Friedman, Meyer and Ray Roseman have mentioned the following characteristics of Type A personality:

1. Restless by nature, so that he always moves, walks and eats rapidly.

2. Is impatient with the pace of things, dislikes waiting and is impatient with those who are not impatient.
3. Multitasker – does several things at once.
4. Tries to schedule more and more in less and less time, irrespective of whether everything is done or not.
5. Usually does not complete one thing before starting on another.
6. Often displays nervous gestures such as clenched fist and banging on a table.
7. Does not have time to relax and enjoy life.

Type B personality exhibits just the opposite characteristics and is more relaxed, sociable and has a balanced outlook on life.

Erikson has identified eight developmental stages in explaining the personality. These stages which are based on a person's state of mind at a given point of time are mentioned below:

Stage 1: Trust versus Mistrust
Stage 2: Autonomy versus Shame and Doubt
Stage 3: Initiative versus Guilt
Stale 4: Industry versus Inferiority
Stage 5: Identity versus Role Diffusion
Stage 6: Intimacy versus Isolation
Stage 7: Growth versus Stagnation
Stage 8: Integrity versus Despair

THEORIES OF MOTIVATION AND THEIR PRACTICAL IMPLICATIONS

What is Motivation?

Motivation in an organizational context is referred as 'the extent of willingness of an employee to respond to the organizational requirements'. Motivation is generally directed, consciously or unconsciously, towards satisfaction of needs (motives). Motivation as a behavioural concept is of great interest to the executives and managers in organizations today.

Theories of Motivation

The various theories of motivation are:
1. Scientific Management or Rational Economic View
2. Human Relations Model
3. Abraham Maslow's Need Hierarchy Theory

4. Frederick Herzberg's Two-Factor Theory
5. Clayton Alderfer's ERG Theory
6. Achievement Motivation Theory
7. Victor H Vroom's Expectancy Model
8. James Stacy Adams' Equity Theory
9. Lyman W. Porter and Edward E Lawler - Performance Satisfaction Model.
10. Reinforcement Theory

(Go through all the 10 theories)

Motivation and Behaviour

Behaviour of an individual is generally motivated by a desire to achieve some goal. Behaviour is either an 'activity' or, 'a series of activities'. Each activity is supported by motivation. Individuals differ not only in their ability to do but also in their will to do, or motivation. Motives are sometimes defined as needs, wants, drives, or impulses within the individual. These are directed towards goals, which may be conscious or subconscious. Goals are outside an individual. Goals are sometimes referred to as 'hoped for' rewards towards which motives are directed.

Motivation to Work

Manager should also know specific ways and techniques to motivate employees in the work situation. Most of these techniques are practical in nature and can be adopted by him in the normal course. Some of the frequently used common incentives in organizations are :

Money, appreciation, job enlargement, job enrichment, job rotation, participative management, and quality of work.

Factors contribute to the quality of work life:

1. Adequate and fair compensation.
2. A safe and healthy environment.
3. Jobs aimed at developing and using employee's skills and abilities.
4. Growth and security; jobs aimed at expanding employees' capabilities rather than leading to their obsolescence.
5. An environment in which employees develop self-esteem and a sense of identity.
6. Protection and respect for employee's rights to privacy, dissent, equity. etc.
7. A sensible integration of job career and family life and leisure time.

Role Set Conflicts

The role set consists of important persons who have different expectations from the role that an individual occupies. The conflicts arise due to incompatibility among the expectations of significant others and the individual himself. These role set conflicts take the following forms:

1. Role ambiguity
2. Role Expectation Conflict
3. Role Overload
4. Role Erosion
5. Resource Inadequacy
6. Personal Inadequacy
7. Role Isolation

Unit - 23 : Employees' Feedback and Reward System

Feedback Through Climate Surveys

Organizations used to measuring employees' perceptions of the prevailing climate in an organization are called climate surveys. The coverage of a typical survey can be as follows:

1. Structure: The feeling that employees have about the constraints on the groups, rules, regulations, procedures, communications channels (layers in decision making), delegation and authority, etc.
2. Responsibility: The feeling of being your own boss, clarity of role and responsibility vis-a-vis superior, subordinates and peers, etc.
3. Reward: The feeling of being rewarded for a job done well, perception about reward and punishment system, perception about pay and promotion, etc.
4. Risk: The sense of riskiness and challenge in the job and in the organization, and any emphasis on taking calculated risk (risk taking is encouraged and bona fide errors are protected) or playing safe is encouraged and accepted.
5. Warmth: The general feeling of fellowship that prevails in the workgroup atmosphere, the prevalence of informal supporting culture and social groups.
6. Support: The perception about helpfulness of managers and other employees in the group, emphasis on mutual support from above and below in the heirarchy.

7. Standards: The perceived importance of implicit and explicit goals and performance standards, the emphasis on doing a good job, the challenge represented in personal and group goals.
8. Conflict: The feeling that the managers and other workers want to hear different opinions, the process of conflict resolution, opportunity to express the views, etc.
9. Identity: The feeling of belonging to the organization and perceived value in the organization and work group, etc.

REWARD AND COMPENSATION SYSTEM

The wages in the form of compensation is viewed as the main attraction to join or change a job. The compensation should not be so meager that employees do not feel motivated to put in their best. the compensation should be such that it continually attracts talent, it is a major source of retention of the existing manpower and has an edge which motivates them to give their best.

Types of Compensations

Compensation is expressed in terms of money. It would thus include: wages or salary, bonus, cash allowances and benefits such as accident, health insurance cover, employer's contribution to the retirement funds, provision of accommodation, etc. The jobs are broadly classified in four groups and the compensation for them is commonly referred to as shown below:

1. Managerial (top, middle, junior) ... remuneration
2. Supervisory ... salary
3. Clerical or Administrative ... salary
4. Unskilled, semi-skilled, skilled and highly skilled ... wages

Compensation Base

Compensation policy is an important element in personnel management. What is the basis or factors on which compensation gets decided? It could be:

1. Company objectives
2. Market situation or prevailing market rate
3. Internal and external pressures.

A good compensation package should cover factors like adequacy, societal considerations, supply and demand position, fairness, equal pay for equal work and job evaluation.

The administration is bound to protect the workforce from irrationally low wages. Taking this as the prime objective the Indian Government has enacted:

1. The Payment of Wages Act, 1936,
2. The Minimum Wages Act, 1948
3. The Payment of Bonus Act, 1965, and
4. The Equal Remuneration Act, 1976.

Unit - 24 : Performance Management - Part 1

performance appraisal is an important tool by which the organizations review employee performance, take corrective steps through training, interventions or placement decisions, reward good performance and attempt to take the employee performance to a higher level.

Objectives of Performance Appraisal System

1. Judgemental - for salary increases, transfers and promotions;
2. Developmental - telling an employee how is he doing and suggesting changes in his skills, attitudes, behaviour;
3. Counseling by superior - for giving feedback and understanding problems for poor performance.

Uses of Performance Appraisal

1. It rates all the employees in a unified manner by using the same rating scales and thus making them comparable on a common footing.
2. It provides information which could be critical while deciding on promotion, pay increases, transfers, training, etc.
3. It provides information about the areas of weaknesses of the employee to enable initiation of corrective steps.
4. It improves the quality of supervision as the supervisor becomes a keen observer.
5. The system, if implemented with openness and trust, ensures better interpersonal relations between the employee and his supervisor.

Performance Appraisal Methods

Traditional Methods

1. Free Form Essay Method
2. Straight Ranking Method
3. Comparison Method
4. Grading Method
5. Graphic or Linear Rating Scales
6. Forced Choice Description Method
7. Forced Distribution Method
8. Group Appraisal Method

Modern Methods

1. Assessment Centre Workshops
2. Management by Objectives
3. Human Asset Accounting Method
4. Behaviourally Anchored Rating Scales
5. 360 Degree Appraisal Method

Performance Appraisal versus Confidential Report

In a large number of organizations the annual performance appraisal exercise is carried out as a confidential activity. In fact, the form in which the performance of the employee is evaluated and reported is called confidential report.

Merits and Demerits of performance appraisal system

The merits are:

1. It reveals a concern for performance and creates an atmosphere of openness and trust in the organization.
2. Gives feedback to the employee and ensures that corrective steps are taken in time.
3. It raises the general motivation level of the employees if implemented properly.

The demerits are:

1. The halo effect — a tendency to allow one trait or characteristic of an employee to influence the assessment. The halo is to rate an employee consistently high or low.
2. The leniency or strictness tendency of the superior interferes with the appraisal and accordingly the assessment gets influenced. The superior is unable to come out of these tendencies.

3. The central tendency problem refers to assigning average ratings to all the employees without properly evaluating each aspect of appraisal carefully and fearlessly.
4. Similar error is the tendency of comparing the employee with oneself on various traits and parameters. Those who show the similar characteristics are normally rated high.

Unit - 24 : Performance Management - Part 2

DO's and DON'Ts of the appraisal interview and giving of feedback can be easily summarized:

Do's

1. allow the employee to do the maximum talking,
2. encourage him to describe his success and failure,
3. create an atmosphere where he will open up.
4. praise him for his achievements.
5. tell him honestly what you think where he could have done well,
6. ask him what kind of help he expects from you.
7. extend to him all that you can do for him.

Don'ts

1. arrange a meeting when you are unable to devote time undisturbed.
2. allow any kind of disturbance once the meeting starts,
3. adopt judgmental role,
4. criticize him for his failures.

Counselling skills:

1. It is essential to follow the stages mentioned earlier in respect of appraisal interview and feedback session. It helps in creating conducive atmosphere. The appraiser should realize that it is a common human tendency to react negatively to the feedback process, and particularly to the counselling process.
2. The process should start by communicating the purpose of the counselling.
3. The appraiser should be specific and descriptive when he is evaluating the performance.
4. Appraiser should avoid commenting on the person and centre his discussion on the issues related to performance.
5. His intention should be to assist the employee to overcome his problems. With this prime objective, even when he is criticizing the behaviour (and not the person) he should do it carefully. Criticizing without crippling should be the motto.

6. He should listen to the employee and try to help him.
7. He should offer workable solutions and act where the appraises can initiate improvement.
8. Appraiser should not have any prejudice about the employee and try to evaluate the employee's version objectively.
9. Successful counselling is effective listening.

....

Unit - 25 : HRM and Information Technology

Globalisation has removed all the physical, and national boundaries by linking organizations from all parts of the world, by use of IT. HRM as a function has dual responsibility to respond to the developments having taken place in the area of information technology (IT), for transformation of the mind set of all individuals across the organization and also use of IT in day to day decision process.

The banking sector has absorbed maximum technology for their operations. IT has offered a variety of delivery channels to support customers' needs in an efficient and effective manner.

Role of IT in HRM

There is lot of scope for use of IT in whole range of HRM functions i.e. recruitment, training, placement, appraisal and reward system, organizational development initiatives etc. The need for use of IT can be seen through the following: i. Basic information about employee used within the organization. New dimensions have been added to employee data such as training, competencies, skills, expectations etc. Updation of employees data HRD decisions are data-based now and IT provides that data. Adherence to statutory requirements. As per Nadler: i. Massive influx of technology into workplace presents great challenge in keeping the workforce's v.-crk and knowledge base current and avoid workforce obsolescence New tools disrupt traditional work patterns and can have demoralizing effect. HRD effort must align to the corporate planning. HRD efforts would be examined in terms of contributing to high performance work unit and demonstrating results.

HR Information and Database Management

Computer based data can enhance the quality of decision making. A typical HR information system includes the following types of data: The need for use of IT can be seen through the following: i. Bio-data, Educational qualification, Professional qualification Organisational history (entry level, promotion, placements, training, performance appraisal, competencies, Salary & allowances.

The above type of data, requires few changes over a time period. But the data base provides lot of information as input for decision making.

HR Research : Research in HRM can be undertaken to understand: trends of existing systems like recruitment, promotion, training, appraisal system etc. to understand the workforce in terms of motivation, commitment, expectation, frustration etc. to remain sensitive to internal environment, regular opinion surveys, benchmarking, climate studies etc. can be conducted.

KnowledgeManagement (KM) : KM refers to process of (a) creating, (b) storing (c) distributing and (d) pooling the knowledge (as per Wilcox-1997).The people in a system are the sources of creating knowledge while storing and distributing the information is the responsibility of the information technology machinery of the organization. Hence management of 'knowledge worker' is very critical issue and cannot be done by traditional, bureaucratic process. Knowledge management has gained prominence in the light of the uncertainty that the employee who has created the knowledge, will continue with the organization or not, particularly where the attritions le77els are higher.

Use of technology in training : The technology offers an opportunity in designing training interventions to suit the individual learners. Important features are :

a. Mass learning user friendly material can be produces at low cost.
b. Trainers and trainees can be physically separated.
c. Trainee has the option to choose time and date and place and convenience form for learning.

Technology based training methods help in distance learning.

Advantages of E-Learning :
a. Trainee can choose his own time and place to learn.
b. Trainee can learn at his own pace.
c. Trainee can check his understanding It is highly cost effective.

Disadvantages of E-Learning :
a. Inflexible as program is pre-produced.
b. It needs greater self discipline.
c. It can produce a sense of isolation If turnover is low.
d. It can prove expensive due to high cost of hardware and software

MODULE - D

Unit - 26 : Overview of Credit Management

Bank's loan policies, and other aspects of credit management, are influenced to a great extent by these unwritten principles, which are as under:

1. safety of funds
2. purpose
4. liquidity
3. profitability
5. security
6. risk spread

A borrower can be:

1. An individual
2. Sole proprietary firm
3. Partnership firm and joint ventures
4. Hindu undivided family
5. Companies
6. Statutory corporations
7. Trusts and co-operative Societies

The laws applicable to all these different kinds of borrowers are different.

Type of Borrower	**-**	**Applicable Law**
Individuals	-	Indian Contract Act
Partnership firms	-	Indian Partnership Act
Hindu undivided family	-	Customary laws pertaining to Hindus
Companies	-	Companies Act
Statutory corporations	-	Acts that created them
Trusts	-	Indian Trusts Act, Public Trusts Act, Religious and Charitable Endowments Act, Wakf Act
Co-operative Societies	-	Co-operative Societies Act or Societies Registration Act.

Types of Credit

Fund Based	Non-Fund Based
Actual transfer of money from the bank to the borrower	there is no transfer of money, but the commitment by the bank on behalf of the client, may result in future transfer of money to the beneficiary of such a commitment
Can be divided into short term credit or long term credit	Example - bank guarantee, letters of credit, co-acceptance of bills, forward contracts, and derivatives

Working Capital, Project Finance, Export Finance, Crop Loan

BUSINESS SEGMENTS

- Treasury
- Corporate/wholesale banking
- Retail banking
- Other banking business

Components of Credit Management

Loan Policy of the Bank

- Influenced by market conditions, policies of other banks, own SWOT analysis, RBI guidelines
- Exposure limits-single borrower/group
- Exposure limits for sectors
- Discretionary powers

Credit Appraisal

- Five Cs - Character, Capacity, Capital, Conditions and Collaterals
- Credit delivery-documentation, creation of charges
- Control and Monitoring
- Rehabilitation and Recovery
- Risk management-identification,
- Measurement & Evaluation

Delivery
Control and Monitoring
Rehabilitation and Recovery
Credit Risk Management
Refinance

RBI Guidelines

- End use of funds
- Priority sector 40%(agr 18%),weaker sector 10% foreign banks 32%, small enterprises 10%, export credit 12% of ANBC/off balance sheet expo, whichever is higher. Agr, MSE, housing(20 lacs), Education(10 lacs/20 lacs abroad), Export credit, SHG, KVI, Retail
- Weaker sec. –small/marginal farmers, artisans, SGSY, SC/ST, DRI, SJSRY, SLRS, SHG
- Micro, small and medium enterprises
- Mfg sec: Micro upto 25 lacs, Small 25 lacs to 5 crs, Medium 5 crs to 10 crs
- Service : Rs 10 lacs, 10-2 crs, 2-5 crs

Credit Exposure Norms –

- For individuals/groups : 15/40 of capital funds- addl 5/10 for infra.
- NBFC/NBFC-AFC 10/15%- 15/20% on lent infra

Base Rate System

- Wef 1/7/2010 replaced BPLR
- Banks may determine actual roi
- Transparent, applicable to all except DRI, bank's own employees, against deposits, qtrly review of BR
- Existing loans with BPLR to continue, switch over option to be given

Credit Restrictions

- Adv against bank's own shares
- Relatives of directors/sr officers
- Industries consuming ozone depleting substances
- Sensitive commodities
- FDRs of other banks/CD
- Buy back of shares

Credit Assessment/Delivery

- MPBF method
- For SME upto 5 crs limits turnover method
- Working capital above 10 crs , loan component 80%
- For seasonal/cyclical industrial bank may exempt with approval of board.

Fair practices code

Pertains to

- Loan application, processing
- Appraisal, terms and conditions

- Disbursement
- Post sanction supervision
- Discrimination, harassment in recovery, takeover of accounts

---

Unit 27 – Analysis of Financial Statements

Financial statements

- Balance-sheet
- P&l a/c / income & expenditure a/c
- Auditors report
- Fund flow statement/cash flow - AS 3 std makes compulsory for listed/to above 50 cr cos. As-17 – segmentwise reporting. Banking co – formats of b/s and p&l prescribed by BR Act /Co Act for companies (no p&l prescribed)

Basic Concepts Used in Preparation of Financial Statements

1. Entity Concept
2. Money Measurement Concept
3. Stable Monetary Unit Concept
4. Going Concern Concept
5. Cost Concept
6. Conservatism Concept
7. Dual Aspect Concept
8. Accounting Period Concept
9. Accrual Concept
10. Realization Concept
11. Matching Concept

Horizontal form of B/S

Liabilities	Assets
Share capital	Fixed assets
Res/surplus	investments
Secured loans	current assets
Unsec. loans	loans & adv
Current liabilities	misc exp./losses
Provisions	

Vertical Form of B/S

Sources of Funds

1. Shareholder's funds
    (a) Share capital
    (b) Res. & surplus
2. Loan funds
    (a) Secured loans
    (b) Unsecured loans

Application of Funds

1. Fixed assets
2. Investments
3. Current assets/loans & advances
   less: current liabilities/provisions
   Net current assets
4. Misc exp/losses

As per IT act, B/S FY is Apr-Mar. But Co's act does not prescribe. But max 15 months duration, 18 months with permission of ROC.

Profit & Loss Account

1. Gross and Net sales
2. Cost of goods sold
3. Gross profit
4. Operating expenses
5. Operating profit
6. Non-operating surplus/deficit
7. Profit before interest and tax
8. Interest
9. Profit before tax
10. Tax
11. Profit after tax (Net Profit)

Analysis of financial statements

- Asstt of fin position/performance
- Projections of future performance

- Warning signals
- Credit requirement assessment
- Exam fund flow
- Cross checking
- Fund flow analysis : diversionidle funds
- Trend analysis : trends/op.efficiency
- Ratio analysis : profitability, liquidity, capital structure(der), ability to service debt/int, inventory/debtor turnover

Bankers mostly use three methods for analysis of financial statements.

(a) Funds Flow Analysis
(b) Trend Analysis
(c) Ratio Analysis

While different users of financial statements are interested in different ratios, the ratios which interest a banker most, are the following:

(a) Profitability Ratios
(b) Liquidity Ratios
(c) Capital Structure Ratios
(d) Ratio Indicating Ability to Service Interest and Instalments
(e) Turnover Ratios
   (1) Inventory Turnover Ratio
   (2) Debtors' Turnover Ratio

……………………………………………………………………………………………………

Unit 28 – Working Capital Finance

Working Capital

The amount of raw materials, work in progress, finished goods, and receivables is called the working capital.

Working Capital Cycle

The normal operations of a business enterprise consist of purchase of raw materials, processing and conversion of raw materials into finished goods, selling these goods on cash/ credit basis, receive cash on sale or end of credit period and again purchase raw materials. This is called working capital cycle.

Method of Assessment of Bank Finance

1. Deciding on the level of Turnover of the Enterprise
2. Assessment of Gross or Total Working Capital : This is the sum total of the assessment of various components of the working capital.
   (a) Inventory
   (b) Receivables and Bills
   (c) Other Current Assets

Sources for Meeting Working Capital Requirement:

(a) Own Sources (N W C)
(b) Suppliers' Credit
(C) Other Current Liabilities like salaries payable, advances from customers, etc.
(d) Bank Finance

Calculation of Bank Finance

Though banks are now free to formulate their own policies, the methods of lending, mentioned there, still find place in the calculations followed by the banks. The methods are;

(a) First Method of Lending: Under this, the enterprise was required to bring in at least 25 per cent of the working capital gap (total current assets minus total current liabilities excluding bank finance)

(b) Second Method of Lending: Under this, the enterprise was required to bring in at least 25 per cent of the total current assets.

(b) Third Method of Lending: Under this, the enterprise was required to bring in 100 per cent of those current assets which are considered 'core assets' and at least 25 per cent of the remaining current assets.

Bills / Receivables Finance by the Banks

Receivables are part of the current assets of a business enterprise. These arise due to sales on credit basis to the customers. The bank provides finance against these in a fashion similar to that for inventory.

Another method of sales is through Bills of exchange drawn by the seller on the purchaser in the following manner;

(a) If no credit is to be provided to the customer, a demand bill is drawn.

(b) If the credit is to be provided on the sales, a bill of exchange, called usance bill, mentioning the period of payment, is drawn on the purchaser and is accepted by him The outstanding amount is shown in the accounts as 'bills receivables'.

The terms used in bills finance are purchase, discount and negotiation. Normally, 'purchase' is used in case of demand bills, 'discount' in case of usance bills and 'negotiation' in case of bills which are drawn under letters of credit opened by the purchaser's bank.

Guidelines of RBI for Discounting / Rediscounting of Bills by Banks

(a) Banks may sanction working capital limits, as also bills limit, to borrowers after proper appraisal of their credit needs and in accordance with the loan policy as approved by their Board of Directors.

(b) Banks should open letters of credit (L Cs) and purchase / discount / negotiate bills under L Cs only in respect of genuine commercial and trade transactions of their borrower constituents who have been sanctioned regular credit facilities by the banks.

(c) If a beneficiary of the LC wants to discount the bills with the LC issuing bank itself, banks may discount bills drawn by beneficiary only if the bank has sanctioned regular fund-based credit facilities to the beneficiary.

(d) Bills purchased/discounted/negotiated under LC will be treated as an exposure on the LC issuing bank and not on the borrower.

(e) While purchasing / discounting / negotiating bills under LCs or otherwise, banks should establish genuineness of underlying transactions/documents.

(f) The practice of drawing bills of exchange claused 'without recourse' and issuing letters of credit bearing the legend 'without recourse' should be discouraged because such notations deprive the negotiating bank of the right of recourse it has against the drawer under the NI Act.

(g) Accommodation bills should not be purchased/discounted/negotiated by banks.

(h) Banks should be circumspect while discounting bills drawn by front finance companies set up by large industrial groups on other group companies.

(i) Bills rediscounts should be restricted to usance bills held by other banks.

(j) Banks may exercise their commercial judgment in discounting of bills of the services sector.

Non-Fund-Based Working Capital Limits

- Guarantees
- Co-acceptance of Bills
- Letters of Credit

Commercial Paper (CP)

- Unsecured money market instrument
- Issued in the form of a promissory note
- Introduced in India in
- Cost of borrowing through CP is normally lower compared to other sources of short term finances

Factoring

- Method of financing the receivables of a business enterprise.
- The financier is called 'Factor' and can be a financial institution.
- Banks are not permitted to do this business themselves but they can promote subsidiaries to do this. Under factoring, the factor not only purchases the book debts/receivables of the client, but may also control the credit given to the buyers and administer the sales ledger.
- The purchase of book debts/receivables can be with recourse or without recourse to the client.
- If without recourse, the client is not liable to pay to the factor in case of failure of the buyer to pay.

Forfaiting

- This is similar to factoring but is used only in case of exports and where the sale is supported by bills of exchange/promissory notes.
- The financier discounts the bills and collects the amount of the bill from the buyer on due dates. Forfaiting is always without recourse to the client. Therefore, the exporter does not carry the risk of default by the buyer.

Unit – 29 Term Loans

1. Banks provide term loans normally for acquiring the fixed assets like land, building, plant and machinery, infrastructure etc., (personal loans, consumption loans, educational loans etc. being exceptions)

2. In exceptional cases, banks provide term loans for current assets also. This is called Working Capital Term Loan (WCTL)

3. Working capital loans are normally sanctioned for one year but are payable on demand. Term loans are payable as per the agreed repayment schedule, which is stipulated in the terms of the sanction. Therefore, for the purpose of matching assets and liabilities of the bank, term loans are considered long term assets while working capital loans are considered as short term assets.

4. As a term loan is expected to be repaid out of the future cash flows of the borrower, the D S C R assumes great importance while considering term loans, while for working capital loans, the liquidity ratios assume greater importance.

5. There is no uniform repayment schedule for all term loans. Each term loan has its own peculiar repayment schedule depending upon the cash surplus of the borrower.

Deferred Payment Guarantees (DPGs)

When the purchaser of a fixed asset does not pay to the supplier immediately, but pays according to an agreed repayment schedule, and the bank guarantees this repayment, the guarantee is called DPG. This is a Non-fund based method for financing purchase of fixed assets.

Project appraisal

Project appraisal can be broadly taken in the following steps:

(1) Appraisal of Managerial Aspects
(2) Technical Appraisal
(3) Economic Appraisal

Types of Financing of infrastructure projects by Banks

(a) Take-out Financing
(b) Inter-institutional
(c) Financing Promoter's Equity

Appraisal

For fixed assets, WCTL, longer period, future cash flows
Deferred payment guarantees
Project appraisal : all fin requirements are considered, for term loan appraisal : TEV/IRR/DSCR is taken into a/c
Appraisal of managerial aspects : credentials, financial stake, business module, form of organisation

Prudential Requirements

(1) Prudential Credit Exposure Limits
(2) Assignment of Risk Weight for Capital Adequacy Purposes
(3) Asset Liability Management
(4) Administrative arrangements

Take-out Financing or Liquidity Support

(1) Take-out Financing or Liquidity Support
(2) Liquidity support from I D F C

………

Unit 30 – Credit Delivery

- Documentation:
- Proper stamping, dated, authority, with free will, duly filled in, roc charge, sub registrar, CERSAI, third party guarantee
- Charges : Mortgage, hyp, pledge, lien, assignment
- Disbursement of w/c and term loan, promoter's contribution

Consortium/Syndication

- Two or more banks get into a formal arrangement
- Exchange of information
- Joint documentation/DP allocation
- For syndication mandate to one bank is given for arranging entire loan

………

Unit 31 – Credit Control and Monitoring

Credit control and monitoring, often referred as Loan Review Mechanism (L R M), plays an important role in the following aspects:

(1) To ensure that the funds provided by the bank are put to the intended use and continue to be used properly.
(2) To ascertain that the business continues to run on the projected lines.
(3) If the deterioration of the business continues despite appropriate action, the bank should decide if any harsh action like, recalling the advance or seizing the security, etc. is necessary.

Credit Monitoring

Ensure end use, performance, warning signals and action to be taken

Available Tools for Credit Monitoring / L R M

(1) Conduct of the Accounts with the Bank
(2) Periodic Information Submitted as per the Terms of the Advance
(3) Audit of Stocks and Receivables Conducted by the Bank
(4) Financial Statements of the Business, Auditors' Report
(5) Periodic Visits and Inspection
(6) Interaction
(7) Periodic Scrutiny
(8) Market Reports about the, Borrower and the Business Segment
(9) Appointing Bank's Nominee on Company's Board
(10) Credit Audit

Unit 32 – Risk Management and Credit Rating

Credit Risk Monitoring

- Operational risk : frauds/disruption of business due to natural calamities
- Market risk : adverse market movement of interest rates, exchange rates
- Credit risk : unwilling /inability to repay

- External factors : exchange/intt rate changes, govt policies, political risks
- Internal factors : overexposure to sector, low quality appraisal, monitoring,
- Lack of efficient recovery machinery

Risk mitigation

- Macro level : review/fixing internal limits for commitments, loan/compr/ rehab policies
- Micro level : appraisal standards, sanctioning powers, credit ratings, scores,
- Credit rating : risk measured : decision to lend, pricing, portfolio evaluation
- Credit rating : management, securities available, financial aspects, business/project risks
- Credit default : inability/unwillingness to meet commitments of repayment of interest /principal, BG/LC, trading settlements
- NPAs : Sub-standard, Doubtful, Loss

Wilful Default

- Default even though the borrower has capacity to repay
- Diversion of funds / siphoning of funds
- Disposal of securities
- Options available for stressed assets:
- Exit, rescheduling/restructuring, rehabilitation, compromise, legal action, write off

CDR Mechanism

- CDR Mechanism: for consortium/multiple banking, outstanding more than Rs.10 cr
- CDR standing forum: formulates policy
- CDR core group carved out of forum to assist standing forum in decisions relating to policy
- CDR empowered group decides the cases

Unit 33 – Rehabilitation and Recovery

Credit Default

Credit Default means the inability or the unwillingness of a customer or counterparty to meet commitments in relation to lending, trading or any financial transactions.

Stressed Assets

Stressed Assets are those assets in which the default has either already occurred or which are facing a reasonably certain prospect of default. Stressed Assets are defined as an account where principal and/or interest remains overdue for more than 30 days.

Non Performing Assets (NPAs)

A Non-performing asset (NPA) is defined as a credit facility in respect of which the interest and/or installment of Bond finance principal has remained 'past due' for a specified period of time. NPA is used by financial institutions that refer to loans that are in jeopardy of default. Once the borrower has failed to make interest or principle payments for 90 days the loan is considered to be a non-performing asset. NPAs are further classified into :

a. Sub-standard
b. Doubtful
c. Loss Assets

Wilful Defaulters

A 'wilful default' would be deemed to have occurred if any of the following events is noted:

a. The unit has defaulted in meeting its payment/repayment obligations to the lender even when it has the capacity to honour the said obligations.
b. The unit has defaulted in meeting its payment/repayment obligations to the lender and has not utilised the finance from the lender for the specific purposes for which finance was availed of but has diverted the funds for other purposes.
c. The unit has defaulted in meeting its payment/repayment obligations to the lender and has siphoned off the funds so that the funds have not been utilised for the specific purpose for which finance was availed of, nor are the funds available with the unit in the form of other assets.
d. The unit has defaulted in meeting its payment/repayment obligations to the lender and has also disposed off or removed the movable fixed assets or immovable property given for the purpose of securing a term loan without the knowledge of the bank/lender.

Options available to Banks for stressed Assets

a. Exit from the account
b. Rescheduling/Restructuring

c. Rehabilitation
d. Compromise
e. Legal action
f. Write Off

Corporate Debt Restructuring (CDR) Mechanism

Objectives of the CDR mechanism

The objective of the Corporate Debt Restructuring (CDR) framework is to act as a timely and transparent mechanism for restructuring the corporate debts of viable entities facing problems, and is outside the purview of BIFR, DRT and other legal proceedings.

Reference to CDR Mechanism may be triggered by:

Any or more of the creditors having minimum 20% share in either working capital or term finance, or By the concerned corporate, if supported by a bank/FI having minimum 20% share as above.

Structure of CDR System

a. CDR Standing Forum
b. CDR Empowered Group
c. CDR Cell

CDR Standing Forum

The CDR Standing Forum, the top tier of the CDR Mechanism in India, is a representative general body of all Financial Institutions and Banks participating in CDR system. The Forum comprises Chief Executives of All-India Financial institutions and Scheduled Banks and excludes Regional Rural Banks, co-operative banks, and Non-Banking Finance Companies.

It is a self-empowered body which lays down policies and guidelines to be followed by the CDR Empowered Group and CDR Cell for debt restructuring and ensures their smooth functioning and adherence to the prescribed time schedules for debt restructuring.

It provides an official platform for both creditors and borrowers (by consultation) to amicably and collectively evolve policies and guidelines for working out debt restructuring plans in the interest of all concerned.

The Standing Forum monitors the progress of the CDR Mechanism. It can also review individual decisions of the CDR Empowered Group and CDR Cell. The Forum can also formulate guidelines for dispensing special treatment to cases which are complicated and are likely to be delayed beyond the time frame prescribed for processing. The Forum meets at least once every six months.

CDR Empowered Group

The individual cases of corporate debt restructuring are decided by the CDR Empowered Group (EG), which is the second tier of the structure of CDR Mechanism in India. The EG in respect of individual cases comprises Executive Director (ED) level representatives of Industrial Development Bank of India Ltd., ICICI Bank Ltd., State Bank of India as standing members, in addition to ED level representatives of financial institutions (FIs) and banks which have an exposure to the concerned company.

While the Standing Members of EG facilitate the conduct of the Group's meetings, voting is in proportion to the exposure and number of the concerned lenders only.

The EG considers the preliminary Flash Report of all cases of requests of restructuring, submitted to it by the CDR Cell. After the EG decides that restructuring of a company's debts is prima facie feasible and the concerned enterprise is potentially viable in terms of the policies and guidelines evolved by Standing Forum, the detailed restructuring package is worked out by the referring institution in conjunction with the CDR Cell.

The EG is mandated to look into each case of debt restructuring, examine the viability and rehabilitation potential of the company and approve the restructuring package within a specified time frame of 90 days, or at best within 180 days of reference to the EG. The EG decides on the acceptable viability benchmark levels on the following illustrative parameters, which are applied on a case-to-case basis, depending on the merits of each case:

a. Debt Service Coverage Ratio
b. Break-even Point(Operating & Cash)
c. Return on Capital Employed
d. Internal Rate of Return
e. Cost of Capital
f. Loan Life Ratio
g. Extent of Sacrifice

The EG meets on two occasions to discuss (Flash and Final Report) in respect of each borrower account. This provides an opportunity to the participating members to seek proper authorization from their CEO/ED, in case of need.

Sanction and Implementation of Approved Packages

Once the final restructuring plan is approved and confirmed by the Empowered Group, CDR Cell issues a Letter of Approval (LOA) for the Restructuring package to all the concerned lenders. The individual lenders are required to sanction the restructuring package within 45 days from the date of issue of LOA and thereafter fully implement it in the next 45 days.

CDR Cell

The CDR Cell, the third tier of the CDR Mechanism in India, is mandated to assist the CDR Standing Forum and the CDR Empowered Group (EG) in all their functions.

All references for corporate debt restructuring by lenders/borrowers are made to the CDR Cell. It is the responsibility of the lead institution/major stakeholder to the corporate to work out a preliminary restructuring plan in consultation with other stakeholders and submit to CDR Cell. The CDR Cell makes initial scrutiny of the proposals received from the lenders/borrowers, in terms of the general policies and guidelines approved by the CDR Standing Forum, by calling for details of the proposed restructuring plan and other information and place for consideration of the CDR EG within 30 days to decide whether restructuring is prima facie feasible. If found feasible, the referring institution/bank takes up the work of preparing the detailed restructuring plan with the help of other lenders, in conjunction with CDR Cell and, if necessary, experts engaged from outside. If not found prima facie feasible, the lenders may start action for recovery of their dues.

The EG can approve or suggest modifications to the restructuring plan, but ensure that a final decision is taken within a total period of 90 days. The period can be extended up to a maximum period of 180 days from the date of reference to the CDR Cell, if there are genuine reasons.

SME Debt Restructuring Mechanism

Units in Small and Medium Enterprises (SME) Sector will include all units in tiny and Small Scale industrial (SSI) sector and also those industrial units whose investment in plant and machinery is up to Rs. 10 Crore.

Eligibility

The following entities, which are viable or potentially viable, are eligible

a. All non-corporate SMEs banking with us irrespective of the level of dues.
b. All corporate SMEs, which are enjoying banking facilities only from our bank, irrespective of the level of the dues to the Bank.

c. All corporate SMEs, which have funded and non-funded outstanding up to INR 100 million under multiple/consortium banking arrangement.
d. In respect of BIFR cases, branches will ensure completion of all formalities in seeking approval from BIFR before implementing the package.

Exclusions

a. Accounts involving willful default, fraud and malfeasance will not be eligible for restructuring under these guidelines. The identification of accounts involving willful default and fraud should be on the basis of guidelines issued by RBI.
b. Accounts classified by our Bank as "Loss Assets" will not be eligible for restructuring.

Credit Information Bureau (India) Limited (CIBIL)

Credit Information Bureau (India) Limited or CIBIL is a Credit Information Company (CIC) founded in August 2000. Post Inception, it has come to play a critical role in India's financial system. Whether it is to help loan providers manage their business or help consumers secure credit faster and at better terms, the use of CIBIL's products have led to a massive change in the way the credit life cycle is managed by both loan providers and consumers.

CIBIL collects and maintains records of an individual's payments pertaining to loans and credit cards. These records are submitted to CIBIL by banks and other lenders, on a monthly basis. This information is then used to create Credit Information Reports (CIR) and credit scores which are provided to lenders in order to help evaluate and approve loan applications.

Share holders of CIBIL

a. Trans Union International Inc
b. India Infoline Finance Limited
c. ICICI Bank Ltd
d. Bank of Baroda
e. Bank of India
f. Union Bank of India
g. Indian Overseas Bank
h. State Bank of India
i. Aditya Birla Trustee Company Private. Ltd
j. India Alternatives Private Equity Fund

Important Formulas

Some of these Formulas may not be applicable for ABM, but I request all of you to go through all of them to understand the concepts clear for both ABM and BFM.

1. Raw material Turnover Ratio = Cost of RM used / Average stock of R M

2. SIP Turnover = Cost of Goods manufactured / Average stock of SIP

3. Debt Collection period = No. days or months or Weeks in a year/Debt Turnover Ratio.

4. Average Payment Period = No. days or months or Weeks in a year/Creditors Turnover Ratio.

5. Inventory Turnover Ratio = Cost of Goods Sold / Average Inventory.

6. Debtors Turnover Ratio = Net Credit Sales / Average Debtors.

7. Creditors Turnover Ratio = Net Credit Purchases / Average Credits.

8. Defensive Interval Ratio = Liquid Assets / Projected Daily Cash Requirement

9. Projected daily cash requirement = Projected operating cash expenses / 365.

10. Debt Equity Ratio = Long Term Debt / Equity.

11. Debt Equity Ratio = Total outside Liability / Tangible Net Worth.

12. Debt to Total Capital Ratio = Total Debts or Total Assets/(Permanent Capital + Current Liabilities)

13. Interest Coverage Ratio = EBIT / Interest.

14. Dividend Coverage Ratio = N. P. after Interest & Tax / Preferential dividend

15. Gross Profit Margin = Gross Profit / Net Sales * 100

16. Net Profit Margin = Net Profit / Net Sales * 100

17. Cost of Goods Sold Ratio = Cost of Goods Sold / Net Sales * 100.

18. Operating Profit Ratio = Earnings Before Interest Tax / Net Sales * 100

19. Expenses Ratio or Operating Ratio = Expenses / Net Sales * 100

20. Net Profit Ratio = Net Profit After interest and Tax / Net Sales * 100

21. Operating Expenses Ratio = (Administrative + Selling expenses) / Net Sales * 100

22. Administrative Expenses Ratio =(Administrative Expenses / Net Sales) * 100

23. Selling Expenses Ratio =(Selling Expenses / Net Sales) * 100

24. Financial Expenses Ratio = (Financial Expenses / Net Sales) * 100

25. Return on Assets = Net Profit After Tax / Total Assets.

26. Total Assets = Net Fixed Assets + Net Working Capital.

27. Net Fixed Assets = Total Fixed Assets – Accumulated Depreciation.

28. Net Working Capital = (CA –CL) – (Intangible Assets + Fictitious Assets + Idle Stock + Bad Debts)

29. Return on Capital Employed = Net Profit Before Interest and Tax / Average Capital Employed.

30. Average Capital employed = Equity Capital + Long Term Funds provided by Owners & Creditors at the beginning & at the end of the accounting period divided by two.

31. Return on Ordinary Share Holders Equity = (NPAT – Preferential Dividends) / Average Ordinary Share Holders Equity or Net Worth.

32. Earnings Per Share = Net Profit After Taxes and Preferential dividends / Number of Equity Share.

33. Dividend per Share = Net Profit After Taxes and distributable dividend / Number of Equity Shares.

34. Dividend Pay Out Ratio = Dividend per Equity Share / Earnings per Equity Share.

35. Dividend Pay Out Ratio = Dividend paid to Equity Share holders / Net Profit available for Equity Share Holders.

36. Price Earning Ratio = Market Price per equity Share / Earning per Share.

37. Total Asset Turnover = Cost of Goods Sold / Average Total Assets.

38. Fixed Asset Turnover = Cost of Goods Sold / Average Fixed Assets.

39. Capital Turnover = Cost of Goods Sold / Average Capital employed.

40. Current Asset Turnover = Cost of Goods Sold / Average Current Assets.

41. Working Capital Turnover = Cost of Goods Sold / Net Working Capital.

42. Return on Net Worth = (Net Profit / Net Worth) * 100

43. DSCR = Profit after Tax & Depreciation + Int. on T L & Differed Credit + Lease Rentals if any divided by Repayment of Interest & Installments on T L & Differed Credits + Lease Rentals if any.

44. Factory Cost = Prime cost + Production Overheads.

45. Cost of Goods Sold = Factory Cost + Selling, distribution & administrative overheads

46. Contribution = Sales – Marginal Costs.

47. Percentage of contribution to sales = (Contribution / Sales) * 100

48. Break Even Analysis = F / (1 – VC / S)
F = Fixed costs, VC = Total variable operating costs & S = Total sales revenue

49. Break Even Margin or Margin of Safety = Sales – Break Even Point / Sales.

50. Cash Break Even = F – N / P – R or F – N / 1 – (VC / S)

51. BEP = Fixed Costs / Contribution per unit.

52. Sales volume requires = Fixed cost + Required profit / Contribution per unit.

53. BEP in Sales = (Fixed Costs / Contribution per unit) * Price per unit.

54. Contribution Sales Ratio = (Contribution per unit / Sale price per unit) * 100

55. Level of sales to result in target profit after Tax = (Target Profit) / (1 – Tax rate / Contribution per unit)

56. Level of sales to result in target profit = (Fixed Cost + Target profit) * sales price per unit Contribution per unit.

57. Net Present Value = - Co + C1 / (1 + r)

58. Future expected value of a present cash flow = Cash Flow (1 + r) ^ t

59. Present value of a simple future cash flow = Cash Flow / (1 + r) ^ t

60. The Discount Factor = 1 / (1 + r) ^ t

61. Notation used internationally for PV of an annuity is PV (A, r, n)

62. Notation used internationally for FV of an annuity is FV (A, r, n)

63. The effective annual rate = (1 + r) ^ t – 1 or (1 + (r / N)) – 1)
N = Number of times compounding in a year

64. PV of end of period Annuity = A { (1- (1 / (1+r) ^ n) / r

65. CR = CA : CL

66. Net Worth = CA - CL

67. DER = TL/TNW or debt/equity or TL/equity

68. Price Elasticity of Supply = (% change in quantity supplied/(% change in price)

69. PV = P / R * [(1+R)^T - 1]/(1+R)^T

70. PV = P / (1+R)^T

71. FV = P * (1 + R)^T

72. FV = P*(1-R)^T

73. FV = P / R * [(1+R)^T - 1]

74. FV = P / R * [(1+R)^T - 1] * (1+R)

75. EMI = P * R * [(1+R)^T/(1+R)^T-1)]

76. FV of annuity = A/r ×{(1+r)^n-1}

77. Bond Price = (1/(1+R)^t)((coupon*((1+R)^t-1)/R)+Face Value)

....

ALL THE VERY BEST FOR YOUR EXAMS

SHORT NOTES FOR

CAIIB

ADVANCED BANK MANAGEMENT

Though we had taken enough care to go through the notes provided here, we shall not be responsible for any loss or damage, resulting from any action taken on the basis of the contents. Creation of these short notes is the efforts of so many persons. First of all we thank all of them for their valuable contribution. We request everyone to go through the Macmillan book and update yourself with the latest information through RBI website and other authenticated sources. In case you find any incorrect/doubtful information, kindly update us also (along with the source link/reference for the correct information).

K Murugan, MCA MBA CAIIB